PALMDALE

a place to call home

CITY COUNCIL MEETING
CITY COUNCIL CHAMBERS
38300 SIERRA HIGHWAY
SUITE B
PALMDALE, CA 93550
WEDNESDAY, AUGUST 17, 2022
5:00 PM
7:00 PM
www.cityofpalmdale.org

WELCOME

The Council Chamber is open for in-person public comment and seating. The Mayor and/or one or more members of the City Council may participate virtually in this meeting.

How to observe the meeting virtually:

1. Spectrum local access Channel 27
2. Online live webcast at www.cityofpalmdale.org.

How to Submit Public Comments:

VERBAL PUBLIC COMMENT DURING THE MEETING – ZOOM Number: US: +1 669 444 9171 Webinar ID: 846 5608 9590 Passcode: 507411

Webinar attendee link https://us06web.zoom.us/j/84656089590?pwd=b3ZCNzVDalIrUWhnZ1lUdURHWVVvdz09

Verbal comments must be limited to three (3) minutes. Public comments submitted will become part of the official meeting record.

The safety and well-being of employees and the public remains the City's top priority. The City of Palmdale appreciates your patience and understanding during these challenging times.

The City Council is making every effort to follow the spirit and intent of the Brown Act and

other applicable laws regulating the conduct of public meetings in order to maximize transparency and public access.

In accordance with the Americans with Disabilities Act of 1990, if you require a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (661) 267-5151 at least 72 hours prior to the meeting.

If you require oral Spanish translation, please contact the City Clerk's Office at (661) 267-5151 at least 72 hours prior to the meeting.

Your courtesy is requested to help our meetings run smoothly. If you'll be kind enough to follow these simple rules, we can make the best possible use of your time and ours:

- Please refrain from public displays or outbursts, such as unsolicited applause, comments, cheering, foul language or obscenities.
- Any disruptive activities that substantially interfere with the ability of the City Council to carry out its meeting will not be permitted and offenders will be asked to leave the meeting.
- Please turn off/mute your cell phones and mobile devices.

5:00 P.M.

1. **MAYOR TO CALL MEETINGS TO ORDER**

2. **ROLL CALL**
   MAYOR HOFBAUER, MAYOR PRO TEM LOA,
   COUNCILMEMBERS CARRILLO, BISHOP, BETTENCOURT

3. **PUBLIC COMMENTS ON CLOSED SESSION ITEMS**
   The public is invited to comment on any closed session item listed below. Please submit a Speaker's Form to the City Clerk **BEFORE** this portion of the meeting begins. Each person addressing the Council is customarily given up to three minutes to speak (with double the time allotted to non-English speakers using a translator). The amount of time authorized may be adjusted by the chair. If you wish to provide information to the Council, please present the City Clerk with 7 copies. Otherwise, your materials will simply be added to the administrative record. If you are attending the meeting by phone, please press *9 to "raise your hand." If attending by personal computer, please click the "raise your hand" button. Press *6 to un-mute yourself, state your name and begin speaking.

4. **PRESENTATION BY CITY ATTORNEY**

4.1 CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION
Government Code Section 54956.9(d)(1).
Name of case: John J. Murphy v. City of Palmdale;
Los Angeles County Superior Court Case Number: 22STCV22544
Related City Claim Number: 2022-007

4.2 CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
Shanae Smith, Patricia Nevarez and Michael "Mike" Behen vs. City of Palmdale, et al.
Los Angeles County Superior Court
Case No. 22STCV18219
This closed session is being held pursuant to the authority of California Government Code Section 54956.9(d)(1).

4.3 CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION
Ricci v. City of Palmdale, et al.
Los Angeles County Superior Court
Case No. 22STCV01269
This closed session is being held pursuant to the authority of California Government Code Section 54956.9(d)(1).

4.4 CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
Leona Valley Town Council vs. City of Palmdale, et al.
Los Angeles County Superior Court
Case No. 22STCP01932
This closed session is being held pursuant to the authority of California Government Code Section 54956.9(d)(1)

5. **ANNOUNCEMENT BY CITY ATTORNEY**

6. **ADJOURN CLOSED SESSION MEETING**

7:00 P.M.

7. **PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE IN HONOR OF OUR TROOPS**

8. **PRESENTATION**

8.1 Presentation by Mayor and Council of Certificates of Recognition to the District 51

Palmdale Little League, District Champions.

9. **WAIVER OF FULL READING OF RESOLUTION(S) and ORDINANCE(S)**
Staff Recommendation: Move to waive full reading of the Resolution (s) and/or Ordinance(s) to be considered and voted on at this meeting. (Voice Vote - Requires a majority to waive.)

10. **PUBLIC COMMENTS ON LISTED AGENDA ITEMS (EXCLUDING PUBLIC HEARINGS)**
You may address the Council once per meeting during Public Comments. This portion of the public comment is on any item listed on the agenda, excluding public hearings (if any). Public comment on public hearing items (if any) will be heard when that matter is considered. To address the Council regarding an item on the agenda, please fill out a Speaker's Form and submit it to the City Clerk **BEFORE** the Mayor announces the item. Each person addressing the Council is customarily given up to three minutes to speak (with double the time allotted to non-English speakers using a translator). The amount of time authorized may be adjusted by the chair. If you wish to provide information to the Council, please present the City Clerk with 7 copies. Otherwise, your materials will simply be added to the administrative record. If you are attending the meeting by phone, please press *9 to "raise your hand." If attending by personal computer, please click the "raise your hand" button. Press *6 to un-mute yourself, state your name and begin speaking.

11. **CONSENT CALENDAR**
All matters listed under the Consent Calendar will be enacted by one motion unless an item(s) is pulled by Council, in which case the item(s) will be removed from the Calendar and will be considered separately following this portion of the Agenda.

11.1 Approve agreement with Parsons Transportation Group for environmental and design services for PN 852, Avenue P (Rancho Vista Boulevard) @ Sierra Highway Railroad Crossing Improvement Project, in the amount of $540,170. (Staff Reference: Director of Public Works Heffernan - Presented by Deputy Director of Public Works Glidden)
Staff_Report_A-7992_Parsons_Agreement.docx
Parsons Transportation Group - Agreement 7992.pdf

11.2 Adopt Resolution No. CC 2022-088, a Resolution of the City Council of the City of Palmdale Making Legally Required Findings for Extending Remote Teleconference Participation for Meetings of the City Council and its Related and/or Subordinate Legislative Bodies. (Staff Reference: Acting City Attorney Porter)
SR_-_RESO_Authorizing_Remote_Meetings_081722.docx
RESO_-088Continuing_Remote_Meeting_authorization_-_For_Aug_17_2022.docx

12. **PUBLIC HEARING**

12.1 Public Hearing and Review of Proposed Resolution No. CC 2022-086, Regarding the Palmdale East Avenue Q Complete Streets Study. (Director of Economic and Community Development Garibay - Presented by Associate Planner Alvarado)

ADOPT RESOLUTION NO. CC 2022-086, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING THE PALMDALE EAST AVENUE Q COMPLETE STREETS STUDY.

CC_SR_-_Ave_Q_Study.docx
Avenue_Q_Corridor_Study_CC_Resolution__1_.doc
Exhibit II - Palmdale Ave Q Complete Streets_Final April 2022.pdf
Exhibit II - Appendices_FINAL April 2022.pdf
Avenue Q Complete Streets Study_CC Presentation.pptx

12.2 Public Hearing and Review of Proposed Ordinance No. 1588, an ordinance levying special taxes within the City. (Staff Reference: Director of Public Works Heffernan)

ORDINANCE NO. 1588, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE LEVYING SPECIAL TAXES WITHIN CITY OF PALMDALE COMMUNITY FACILITIES DISTRICT NO. 2022-1 (CITYWIDE MAINTENANCE AND SERVICES)

Ord 1588 Public Hearing Staff Report_final.doc
Ordinance 1588 LevyingSpTx.docx

12.3 Public Hearing and Review of Proposed Ordinance No. 1594 for adoption. (Staff Reference: Director of Economic and Community Development Garibay - Presented by Senior Planner Magana)

ORDINANCE NO. 1594, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING ZONING ORDINANCE AMENDMENT 21-006 AMENDING PALMDALE MUNICIPAL CODE CHAPTERS 17.42 (MEDIUM RESIDENTIAL, R-2), 17.43 (MULTIPLE RESIDENTIAL, R-3), 17.44 (HIGH DENSITY RESIDENTIAL, R-4), and 17.73 (MIXED-USE OVERLAY, MX) TO REQUIRE CONFORMANCE WITH THE DRAFT MULTI-FAMILY AND MIXED-USE DESIGN STANDARDS.

ZOA_21-006.docx
ZOA 21-006_CC Ordinance No. 1594.doc

12.4 Public Hearing and Review of Proposed Ordinance No. 1593 for Adoption. (Staff Reference: Interim City Manager Perez - Presented by City Council Chief of Staff Zayas).

ORDINANCE NO. 1593, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE ADDING CHAPTER 9 (UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER PROHIBITED) OF TITLE 10 (VEHICLES AND TRAFFIC) OF THE PALMDALE MUNICIPAL CODE ESTABLISHING REGULATIONS PROHIBITING THE UNLAWFUL POSSESSION OF CATALYTIC CONVERTERS IN THE CITY.

SR_Catalytic_Converter_Ordinance_v2.docx
Catalytic Converter Ordinance.doc

12.5 Public Hearing and Review of Proposed Resolution CC 2022-091 for adoption. (Staff Reference: Interim City Manager Perez - Presented by City Council Chief of Staff Zayas).

RESOLUTION NO. CC 2022-091, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING ADOPTION OF ADMINISTRATIVE CITATIONS: UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER

SR_Admin_Cites_Reso_CC_2022-091(1).docx
Reso_CC_2022-091(1).doc

13. NEW BUSINESS

13.1 Award Measure AV Grant Program Funding, totaling $1,306,810, to grantees in Exhibit A and authorize Interim City Manager to enter into agreements ranging from $2,000 to $250,000. (Staff Reference: Interim City Manager Perez, Deputy Director of Parks and Recreation Dombrowski and Management Analyst Kelley)

Staff Report-Award Measure AV Grant Funding 08172022 FINAL.docx
Final Awardee List 2022 - Exhibit A.pdf

14. PUBLIC COMMENTS ON NON-AGENDA ITEMS

This portion of the Agenda allows an individual the opportunity to address the Council on any subject within the City's subject matter jurisdiction not on the Agenda. Under state legislation, in general, no action can be taken on items not specifically referenced on the Agenda, but may offer suggestions on how your concerns may best be resolved. To address the Council regarding a non-agenda item, please fill out a Speaker's Form and submit it to the City Clerk **BEFORE** the Mayor announces the item. Each person addressing the Council is customarily given up to three minutes to speak (with double the time allotted to non-English speakers using a translator). The amount of time authorized may be adjusted by the chair. If you wish to provide information to the Council, please present the City Clerk with 7 copies. Otherwise, your materials will simply be added to the

administrative record. If you are attending the meeting by phone, please press *9 to "raise your hand." If attending by personal computer, please click the "raise your hand" button. Press *6 to un-mute yourself, state your name and begin speaking.

15. **ADJOURN**

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS DEPARTMENT**
CAPITAL IMPROVEMENT PROGRAM DIVISION

DISTRICT: **1**

SUBJECT: **APPROVE AGREEMENT WITH PARSONS TRANSPORATION GROUP FOR ENVIRONMENTAL AND DESIGN SERVICES FOR PN 852, AVENUE P (RANCHO VISTA BOULEVARD) AT SIERRA HIGHWAY, RAILROAD CROSSING IMPROVEMENT PROJECT, IN THE AMOUNT OF $540,170**

ISSUE

Approve Agreement with Parsons Transportation Group for Environmental and Design Services for PN 852, Avenue P (Rancho Vista Boulevard) at Sierra Highway, Railroad Crossing Improvement Project, in the amount of $540,170

RECOMMENDATION

Staff recommends that the City Council:

1. Approve Agreement with Parsons Transportation Group for Environmental and Design Services for PN 852, Avenue P (Rancho Vista Boulevard) at Sierra Highway, Railroad Crossing Improvement Project, in the amount of $540,170.

2. Authorize the Interim City Manager or her designee to execute Agreement No. A-7992 with Parsons Transportation Group, including making minimal and/or non-substantive changes.

BACKGROUND

This project will provide for the upgrade of the existing railway system at the intersection of Rancho Vista Boulevard and Sierra Highway. The California Public Utilities Commissions (CPUC) Rail Crossings and Engineering Branch has proposed safety improvements to the existing railway system that will be funded under the Railroad-Highway Grade Crossing Program (RHGCP), Section 130 funds. The improvements will be contracted by both railroad agencies, Union Pacific Railroad (UPRR) and Southern California Regional Rail Authority (SCRRA/Metrolink) along with the City of Palmdale and will be managed by the Caltrans Division of Local Assistance.

DISCUSSION

The City released a Request for Qualifications and Proposal to provide for environmental and engineering design services for this project in accordance with the city's municipal code and purchasing policies. Notification of this package was sent electronically to 52 registered vendors in the City's PlanetBids vendor database.

Two (2) responses were received from Parsons Transportation Group and JMD. Staff evaluated the packages and determined that Parsons Transportation Group was the most responsive proposal based on the following criteria:

Category	Maximum Value	Parsons	JMD
Project Understanding and Approach	35	33	30
Relevant Consultant Experience	30	30	28
Familiarity with State and Railroad procedures	20	20	18
Quality of Consultant Staff	10	10	10
General Conformance to RFP	5	5	5
Total Earned Value	**0-100**	**98**	**91**

Parsons Transportation Group has extensive knowledge and background of Avenue P/Rancho Vista Boulevard and Sierra Highway. They have been under contract for design services for both the Rancho Vista Boulevard Grade Separation project and for the widening of Rancho Vista Blvd. from 3rd East to 8th East.

FISCAL IMPACT

This project is funded with California Public Utilities Commission Funds which have been allocated in Account No. S0075240-724525, with a current balance of $4,000,000.

SCOPE OF WORK		COST
A-7992 Parsons Transportation Design		$540,170
Account Number	**Starting Balance**	**Remaining Balance**
S0075240-724525	4,000,000	$3,459,830

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Chuck Heffernan, P.E., Public Works Director
Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Agreement No. A-7992

AGREEMENT NO. A-7992
CONTRACT FOR DESIGN PROFESSIONAL SERVICES
BETWEEN THE CITY OF PALMDALE AND PARSONS TRANSPORTATION GROUP

THIS CONTRACT FOR DESIGN PROFESSIONAL SERVICES ("Contract" herein) is made and entered into this 3rd day of August, 2022 by and between the City of Palmdale a public body corporate and politic, (hereinafter called "CITY") and PARSONS TRANSPORTATION GROUP (hereinafter called "PROJECT DESIGNER").

RECITALS

WHEREAS, City desires to engage PROJECT DESIGNER to perform certain technical and professional services, as provided herein, in connection with that certain project identified as PN 852, Avenue P (Rancho Vista Boulevard) @ Sierra Highway Railroad Crossing Improvement Project.

WHEREAS, PROJECT DESIGNER represents that PROJECT DESIGNER has the expertise and is qualified to perform the services described in this Contract and is duly registered under the laws of the State of California.

WHEREAS, PROJECT DESIGNER desires to accept such engagement.

NOW, THEREFORE, the parties agree as follows:

1 DESCRIPTION OF WORK

1.1 The City hereby engages PROJECT DESIGNER, and PROJECT DESIGNER accepts such engagement, to perform the following design professional services in a manner satisfactory to CITY:

Consultant will provide environmental and engineering design services as stated below as shown in Exhibit A

1.2 Project deliverables shall be reviewed and approved by CITY to determine acceptable completion. CITY shall have the right to review and inspect the work during the course of its performance at such times as may be specified by CITY.

1.3 PROJECT DESIGNER shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

1.4 CITY shall provide to PROJECT DESIGNER, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

2 CITY PROJECT MANAGER

To provide the design professional services required by this Contract, PROJECT DESIGNER shall act under the authority and approval of a Project Manager appointed by the Director of Public Works/designee. The City Project Manager will oversee the work under this Contract, assist PROJECT DESIGNER with any necessary information, audit billings, and approve payments. PROJECT DESIGNER shall channel reports, deliverables and special requests through the City Project Manager.

3 PROJECT DESIGNER'S KEY PERSONNEL

PROJECT DESIGNER's Team and Key Personnel are as follows:

Nicole Depuy, Project Manager
Matt Brash, QA/QC Manager
Danie Kachi, Railraod Design/Coordination
Greta Aiken, Traffic and Electrical Design
Anne Kochaon, Environmental
Eric Adelman, Roadway Design
Brian Echevarria, Utility Design/Coordination
Kevin Castro, Signing & Striping
Jeff Sparks, Stage Construction
Paragon Partners - Right of Way
Wagner Engineering & Survey - Survey

This Design Professional Services Contract has been awarded to PROJECT DESIGNER based on its representation that those personnel and subcontractors listed above will perform the portions of the work listed above. PROJECT DESIGNER shall not deviate nor substitute any of these team members without prior written approval by CITY.

4 COMMENCEMENT AND COMPLETION OF WORK

The execution of this Contract by the parties does not constitute an authorization to proceed. The services of PROJECT DESIGNER shall commence when CITY, acting by and through its Project Manager, has issued an Authorization to Proceed. PROJECT DESIGNER shall complete all the work described in Section 1 and submit final deliverables within twenty (20) months days following PROJECT DESIGNER's receipt of Authorization to Proceed. PROJECT DESIGNER shall have no claim for compensation for any services or work, which has not been authorized by CITY's Authorization to Proceed.

5 TAXES

5.1 PROJECT DESIGNER shall pay all sales, consumer, use, and other similar taxes required to be paid by PROJECT DESIGNER in accordance with state and local laws.

5.2 PROJECT DESIGNER is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by PROJECT DESIGNER or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

5.3 PROJECT DESIGNER shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

6 PATENT FEES AND ROYALTIES

PROJECT DESIGNER shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified by CITY for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. PROJECT DESIGNER shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, product or device not specified by CITY, and shall defend all such claims in connection with any alleged infringement of such rights.

7 STANDARDS OF PERFORMANCE

7.1 PROJECT DESIGNER shall be responsible for the completeness and accuracy of its services and work and documents resulting there from, and CITY shall not be responsible for discovering deficiencies therein. PROJECT DESIGNER shall correct any such deficiencies or errors without additional compensation and without cost to CITY, except to the extent any such deficiency is directly attributable to deficiencies in CITY-furnished information.

7.2 PROJECT DESIGNER shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations. PROJECT DESIGNER shall ensure there are no conflicts among the Contract Documents including, but not limited to, the CITY's Standard Specifications and Special Provisions for Construction Contracts, the plans and specifications prepared by PROJECT DESIGNER, any

standard details or specifications incorporated therein by reference, and the Construction Contract.

8 PROJECT DESIGNER'S PERSONNEL

8.1 All services required under this Contract shall be performed by PROJECT DESIGNER, or under PROJECT DESIGNER's direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

8.2 PROJECT DESIGNER shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

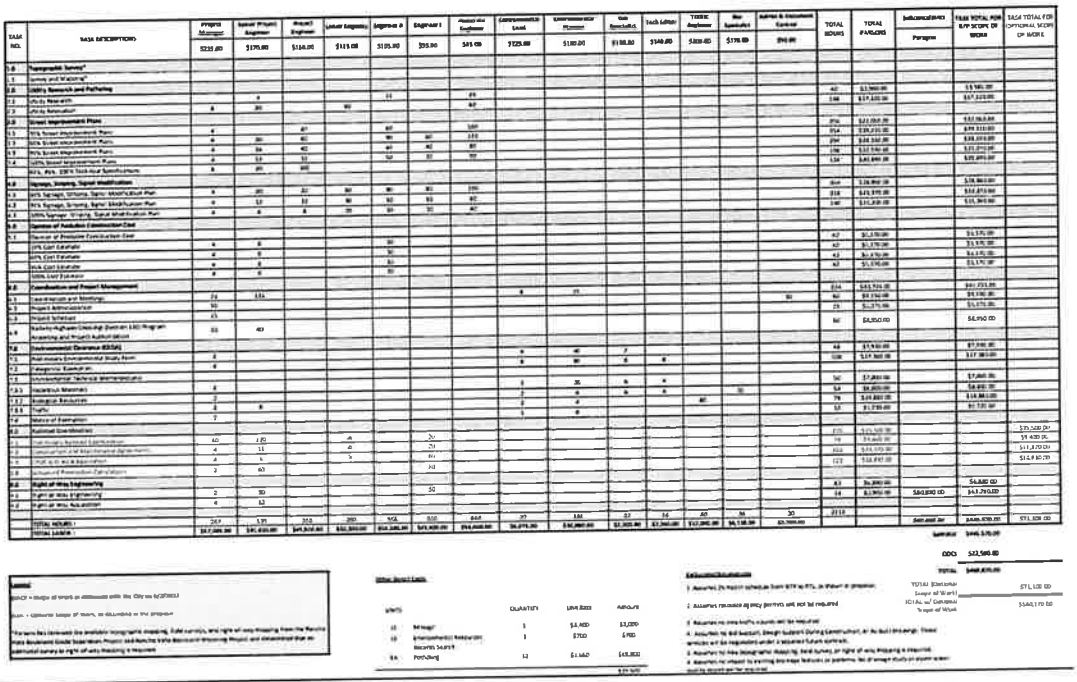
8.3 PROJECT DESIGNER shall be responsible for payment of all PROJECT DESIGNER's employees' and subcontractor's wages and benefits and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

8.4 PROJECT DESIGNER shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from PROJECT DESIGNER's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

8.5 PROJECT DESIGNER shall pay, if required by applicable law, not less than the general prevailing hourly wage rates, as determined by the Director of the Department of Industrial Relations pursuant to the California Labor Code, for each craft, classification, or type of worker needed to perform the Contract. Copies of the prevailing rate of per diem wages are on file in the office of the Director of Public Works.

9 COMPENSATION

9.1 For all of work and services including the various phases of tasks as described in Section 1, Scope of Services, CITY shall pay to PROJECT DESIGNER an amount not to exceed the sum of five hundred forty thousand one hundred seventy dollars ($540170.00), as follows:



PROJECT DESIGNER shall perform no work in excess of the total contract price without prior approval of CITY. Total contract price includes expenses related to travel to and from CITY to meet with City and to appear before City Council or any other board or commission of CITY.

9.2 An application and certification for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting hours being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within the project; any/all backup documentation supporting the above items. Work schedule updates must also be included in the monthly progress payment requests.

9.3 PROJECT DESIGNER shall maintain adequate records and shall permit inspection and audit by CITY of PROJECT DESIGNER's charges under this Contract. PROJECT DESIGNER shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by PROJECT DESIGNER for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event PROJECT DESIGNER shall retain its records for the time required by such laws.

9.4 No payment made hereunder by CITY to PROJECT DESIGNER, shall be construed as an acceptance by CITY of any work or materials, nor as evidence of

satisfactory performance by PROJECT DESIGNER of its obligations under this Contract.

10 INDEMNIFICATION

PROJECT DESIGNER agrees to indemnify, defend and hold harmless CITY, and its respective officers, agents and employees, from and against all claims, losses, obligations, or liabilities which arise out of, pertain to, or relate to PROJECT DESIGNER'S negligence, recklessness, or willful misconduct under this Contract.

11 INSURANCE

11.1 PROJECT DESIGNER, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 11.8, must be reviewed, and accepted by the City Attorney**.

11.1.1 Workers' Compensation and Employer's Liability
- Workers' Compensation -- coverage as required by the State of California
- Employer's Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

11.1.2 Professional Liability (Errors & Omissions) Insurance*
- $1,000,000 limit on a per occurrence basis

11.1.3 Commercial General Liability
- $1,000,000.00 limit on per occurrence basis
- $2,000,000.00 general aggregate limit

11.1.4 Commercial Automobile Liability
- $1,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

11.2 All of PROJECT DESIGNER's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

11.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, in the same manner as the named insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The Certificate

and endorsements shall state that: "The City of Palmdale, City of Palmdale in its capacity as the Successor Agency to the CRA, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" clause.

11.4 Promptly on execution of this Contract, and prior to commencement of any work, PROJECT DESIGNER shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that PROJECT DESIGNER has the required coverage and showing the required named insureds. Within five (5) days of written request from CITY, PROJECT DESIGNER shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

11.5 The requirements as to the types and limits of insurance to be maintained by PROJECT DESIGNER are not intended to and shall not in any manner limit or qualify PROJECT DESIGNER's liabilities and obligations under this Contract.

11.6 Any policy or policies of insurance that PROJECT DESIGNER elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

11.7 All insurance coverages must be maintained throughout the duration of this Contract.

11.8 Acceptable Proof of Insurance:

11.8.1 ACORD Certificate of Insurance listing all coverages, limits, deductibles and insureds; and endorsements for all applicable coverages if agent has authority to issue it; Additional insured Form CG20101185 or CG20100707 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

11.8.2 Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements listing all insurers must be submitted to the City Attorney.

11.8.3 *When professional (E&O) liability coverage is provided on a "claims made basis", PROJECT DESIGNER will continue to renew the insurance for a period of five (5) years after this Agreement expires or is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover PROJECT DESIGNER, or its officers, employees, or agents during the time this Agreement was in effect.

11.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time PROJECT DESIGNER fails to maintain the

required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

12 TERMINATION WITHOUT CAUSE

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, PROJECT DESIGNER shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and sub-consultants to cease such work. PROJECT DESIGNER shall also surrender to CITY all finished or unfinished documents or programs and other materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the PROJECT DESIGNER shall receive an amount equal to the value of the work completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

13 TERMINATION FOR CAUSE

13.1 If the City determines that the PROJECT DESIGNER has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, the City shall give written notice to the PROJECT DESIGNER specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for the City's dissatisfaction and suggest corrective measures. If, after thirty days, the PROJECT DESIGNER has failed to implement the corrective measures, the City may elect to terminate this Contract, in whole or in part.

13.2 In the event the City terminates this Contract in whole or in part as provided herein above, the City may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

13.3 If this Contract is terminated as provided above, the City may require the PROJECT DESIGNER to provide all finished or unfinished documents, data, studies, software, drawings, maps, photographs, reports, etc., prepared by the PROJECT DESIGNER. Upon such termination, the PROJECT DESIGNER shall be paid an amount equal to the value of the services provided and work performed as of the date of termination. Such payment by the City may take into consideration the costs associated with hiring another PROJECT DESIGNER to complete the services. In the event no new PROJECT DESIGNER is employed, the PROJECT DESIGNER shall be paid an amount equal to the value of the work performed. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents when such are delivered to CITY, and to authorized reimbursement expenses.

The above is in addition to any other remedies available by law or equity to the City.

13.4 If, after notice of termination of the Contract under the provisions of this Section 13, it is determined, for any reason, that the PROJECT DESIGNER was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 12.

14 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and PROJECT DESIGNER arising out of, or relating to this Contract, or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

15 OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, tracings, drawings, plans, specifications, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Contract are to be, and remain the property of, CITY. PROJECT DESIGNER shall furnish CITY, upon its request, originals or reproducible or electronic copies of technical specifications and of all other documents listed above. PROJECT DESIGNER shall endorse, by his professional seal, all plans and data furnished by him.

16 RE-USE OF DOCUMENTS

The parties agree the documents, drawings, specifications, and designs, although the property of CITY, are prepared for a specific project and are not intended nor represented by PROJECT DESIGNER to be suitable for re-use for any other project. Any reuse without written verification or adaptation by PROJECT DESIGNER for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to PROJECT DESIGNER.

17 SUBCONTRACTING, DELEGATION AND ASSIGNMENT

17.1 PROJECT DESIGNER shall not delegate, subcontract or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to PROJECT DESIGNER from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval. Any proposed delegation, assignment or subcontract shall provide a description of the services covered, identification of the proposed assignee, delegee or subcontractor, and an explanation of why and how the same was selected, including the degree of competition involved. Any proposed agreement with an assignee, delegee or subcontractor shall include the following:

A. The amount involved, together with PROJECT DESIGNER's analysis of such cost or price; and

B. A provision requiring that any subsequent modification or amendment shall be subject to the prior written consent of CITY.

C. The requirement to hire only those persons authorized by federal law to work in the United States.

17.2 Any assignment, delegation or subcontract shall be made in the name of PROJECT DESIGNER and shall not bind or purport to bind CITY and shall not release PROJECT DESIGNER from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegees and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to PROJECT DESIGNER under this Contract.

18 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

18.1 In performance of this Contract, PROJECT DESIGNER shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. PROJECT DESIGNER will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, national origin, handicap, or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

18.2 The provisions of subsection 18.1 above shall be included in all solicitations or advertisements placed by or on behalf of PROJECT DESIGNER for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of PROJECT DESIGNER and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

19 FINANCIAL INTEREST CERTIFICATION

19.1 PROJECT DESIGNER warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in PROJECT DESIGNER's firm.

19.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

20 CONFLICT OF INTEREST

20.1 PROJECT DESIGNER stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause PROJECT DESIGNER to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

20.2 PROJECT DESIGNER shall not employ any City official or employee to perform any work required pursuant to this Contract.

20.3 If PROJECT DESIGNER is a registered professional engineer or licensed land surveyor and the scope of work requires PROJECT DESIGNER's recommendation of the actual formula to spread the costs of an assessment district's improvements, then PROJECT DESIGNER shall not participate in making that recommendation if the additional elements set forth in Government Code section 87100.1(c) apply. Those additional elements are: (1) PROJECT DESIGNER has received income of $250 or more for professional services in connection with any parcel included in the benefit assessment district within 12 months prior to the creation of the district; and (2) the district includes other parcels in addition to those parcels for which PROJECT DESIGNER received the income. In the event a conflict of interest does arise in that context, City shall select a different PROJECT DESIGNER to recommend the actual formula to spread the costs of the assessment district's improvements and the costs of such services shall be deducted from the compensation to be paid to PROJECT DESIGNER.

20.4 To the extent required by the City Manager/designee, PROJECT DESIGNER shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

21 COMPLIANCE WITH LAW

21.1 PROJECT DESIGNER shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If PROJECT DESIGNER uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by PROJECT DESIGNER.

21.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

22 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

23 ENTIRE CONTRACT AND AMENDMENTS

23.1 This Contract is the complete agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

23.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by PROJECT DESIGNER hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

23.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

24 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

In Witness Whereof, the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez Date
Interim City Manager

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

APPROVE AS TO FORM:

Scott E. Porter
Acting City Attorney

ATTEST:

Shanae S. Smith
City Clerk

PARSONS TRANSPORTATION GROUP:

7-18-22

Chris A Johnson, PE Date
Vice President

ADDRESS FOR NOTICE:
PARSONS TRANSPORTATION GROUP
525 B Street, Suite 1600
San Diego, CA 92101

ATTEST: If Corporation

Secretary

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1. SCOPE OF SERVICES

1. Topographic Surveying

1.1. Surveying and Mapping

a) Survey limits shall include the intersection of Avenue P (Rancho Vista Boulevard) and Sierra Highway and extend 1,000 feet beyond the intersection lines at Avenue P (Rancho Vista Boulevard), and 1,000 feet beyond the intersection line at Sierra Highway.*

b) Survey points shall be spaced at a maximum of 10 feet within the intersection limits, and a maximum of 50 feet beyond the intersection lines. The surveyed points shall include enough information to design roadway cross-sections, including drainage improvements and slope easements, as necessary.*

c) Survey information shall include non-physical features such as right of way lines, property lines, and roadway center lines, as well as all above ground visible features, such as roadway edge lines, striping, signage, pavements, curbs, gutters, sidewalks, drainage features, manholes, light poles, and both overhead and underground utilities.*

***Parsons has reviewed the available topographic mapping, field surveys, and right-of-way mapping from the Rancho Vista Boulevard Grade Separation Project and Rancho Vista Boulevard Widening Project, as shown in Figure 1, and determined that no additional survey or right-of-way mapping is required.**

2. Utility Research and Potholing

2.1 Utility Research

a) Perform a field review and research available public records for both public and franchise utilities to determine their locations and plot the location of known existing utilities, including but not limited to water, wastewater, storm drain, electric, gas, telecommunication, cable TV and fiber optic cable.*

b) Research relationship between existing right-of-way and utilities to establish prior rights regarding necessary utility relocations.

c) Pothole at location of proposed traffic signal poles to the depth of signal foundation design, as well as at the location of underground utilities at potential conflict locations to determine their horizontal and vertical location for clearance and connection points. Work within right-of-way will require an encroachment permit (no fee), as well as a traffic control plan per the California Manual on Uniform Traffic Control Devices (CA MUTCD).*

***Parsons prepared the existing utility mapping for the Rancho Vista Boulevard projects which can be utilized on this project. Additionally, five (5) potholes performed as part of the Rancho Vista Boulevard Grade Separation Project can be utilized for this project and twelve (12) additional potholes are proposed to positively identify the existing utilities at this location as shown in Figure 2.**

2.2 Utility Relocation

The Parsons team (Project Designer) will send out copies of the existing utility plan to all known utility owners within the project limits, will request verification of the existing facilities shown and request redlined markups of any changes or updates to the existing utility mapping that have been made since Project Designer originally obtained the mapping in 2016. The known utility owners within the project area are:

- Palmdale Water District (PWD)
- Southern California Edison (SCE)
- Southern California Gas Company (SCG)

- Spectrum Charter
- AT&T/Frontier
- Level 3
- Sprint

Project Designer will identify utility conflicts and prepare a utility conflict matrix. Project Designer shall schedule utility coordination meetings to present the proposed project plans to the Utility Owners for their use in developing preliminary relocation concepts. Project Designer shall prepare Relocation Claim Letter for utilities requiring relocation, Notice to Owner, and Report of Investigation.

Project Designer shall coordinate with utility owner to obtain response to Relocation Claim Letters including liability determination, relocation plans, and cost. Project Designer will review relocation plans and provide comments to Utility Owners. It is assumed that the following utilities will require relocation and all other utilities will be protected in place:

- SCE Overhead Transmission Lines and 1 Transmission Utility Pole
- SCG gas line valve

It is assumed that the utility pole will be relocated within City right-of-way and an encroachment agreement with UPRR will not be required.

Project Designer shall prepare Utility Agreements using Caltrans standard clauses from the Right-of-Way Manual and will assist the City in executing the agreements. Project Designer shall work with SCE and SCG to complete and execute the utility agreements. Project Designer will prepare utility certification as part of the right-of-way certification process.

3. Street Improvement Plans

a) Review as-built street improvement plans in the vicinity of the project.
b) Prepare construction documents to show plan, profile, and cross-section of the intersection improvements; median improvement, widening of Avenue P; sidewalk, curb ramps, lighting, fencing, swing gates and other as per agreement with Caltrans.
c) Provide technical specifications for the intersection improvements.

3.1 35% Street Improvement Plans

Project Designer shall prepare 35% design submittal for City, Caltrans, CPUC, SCRRA, and UPRR review. The submittal shall include the following:

- 35% Plan Sheets: Title Sheet, Typical Cross Sections, Key Map and Line Index, Layout Sheet, Profile Sheet, and Utility Plan (Existing)
- Railroad Requirements: Truck Turn Templates, Corner Sight Distance Exhibits, Railroad Crossing Configuration Exhibit

3.2 65% Street Improvement Plans

Project Designer shall incorporate comments received on the 35% design submittal and shall continue to develop the project plans by adding the detail plans and specifications. The submittal shall include the following:

- 65% Plan Sheets: Title Sheet, Typical Cross Sections, Key Map and Line Index, Layout Sheet, Profile Sheet, Construction Detail Sheets, Contour Grading & Existing Drainage Plan, Utility Plan, Stage Construction Plans, Detour Plans
- 65% Technical Specifications

It is assumed that the railroads will require one 55-hour weekend closure for the railroad contractors to construct their portion of the railroad related improvements including replacing the existing concrete panels. Project Designer shall prepare a detour plan for the 55-hour closure.

3.3 95% Street Improvement Plans

Upon receiving comments on the 65% design submittal and after meeting with the stakeholders, Project Designer shall incorporate those comments and revise the plans accordingly. Plan sheets and other deliverable items shall be the same as those in the 65% design submittal.

3.4 100% Final Street Improvement Plans

Upon receiving comments on the 95% design submittal and after meeting with the stakeholders, Project Designer shall incorporate those comments and revise the plans accordingly. Plan sheets and other deliverable items shall be the same as those in the 65% design submittal. Final drawings shall be submitted in AutoCAD format.

4. Signage, Striping, Signal Modification Plan

a) Review existing signage and striping plan in the vicinity of the project.

b) Prepare signage and striping & traffic signal modification plan to extend 500 to 1,000 feet beyond the intersection, or as determined by the design of the roadway improvements.

4.1 65% Signage, Striping, Signal Modification Plan

Project Designer shall prepare 65% Signage, Striping, and Signal Modification plans, including technical specifications.

4.2 95% Signage, Striping, Signal Modification Plan

Upon receiving comments on the 65% design submittal and after meeting with the stakeholders, Project Designer shall incorporate those comments and revise the plans accordingly. Plan sheets and other deliverable items shall be the same as those in the 65% design submittal.

4.3 100% Signage, Striping, Signal Modification Plan

Upon receiving comments on the 95% design submittal and after meeting with the stakeholders, Project Designer shall incorporate those comments and revise the plans accordingly. Plan sheets and other deliverable items shall be the same as those in the 65% design submittal. Final drawings shall be submitted in AutoCAD format. Final traffic signal plan size shall be 24" x 36", ink on mylar and scaled at 1"=20'.

5. Opinion of Probable Construction Cost

5.1 Opinion of Probable Construction Cost

a) Prepare preliminary opinion of probable construction cost at schematic design, 65% design, and 95% design
b) Prepare final opinion of probable construction cost at time of Project Bid.

6. Coordination and Project Management

6.1 Coordination and Meetings

a) Coordinate with City for plan review, submittal, and approval.
b) Coordinate with utility agencies as needed for service, relocation, etc.
c) Correlate project specifications with construction plan notes and material specifications.

Project Designer will attend and facilitate monthly Project Development Team (PDT) Meetings with the City and Caltrans, and invite stakeholders as needed. Project Designer will attend and facilitate a biweekly meeting with City staff to discuss action items, upcoming deliverables, and overall progress of the project.

6.2 Project Administration

Project Designer shall execute and maintain subcontracts with each subconsultant. Prime contract terms and conditions shall be incorporated into the subcontract agreement, as required. The subconsultant agreements shall incorporate specific deliverables and schedules that allow review by Project Designer prior to submittal to the City.

Project Designer shall prepare monthly progress reports and invoices.

6.3 Project Schedule

Project Designer shall prepare a project schedule in Microsoft Project using the critical path method. After the schedule is approved by the City, the schedule shall be updated monthly.

6.4 Railway-Highway Crossings (Section 130) Program Reporting and Project Authorization

Project Designer will support the City and Caltrans in quarterly reports to document the progress of implementing this Section 130 project as required by FHWA. The quarterly updates will include a summary of the overall project status, accomplishments to date, activities under way, risks, issues, planned activities and schedule updates.

Project Designer will support the City in obtaining federal authorization to proceed with each phase of the project; Preliminary Engineering (PE), Right of Way (R/W), Utility Relocation (R/W-UTIL), and Construction (CON). This includes assisting the City with the preparation of the Request for Authorization (RFA) and coordinating with Caltrans to obtain approval (E-76) to move to the next phase.

7. Environmental Clearance (CEQA)

Project Designer will obtain California Environmental Quality Act (CEQA) Clearance. It is assumed that Caltrans will perform the National Environmental Policy Act (NEPA) clearance.

7.1 Preliminary Environmental Study Form

Project Designer will prepare a Preliminary Environmental Study (PES) Form found as Exhibit 6-A of the Caltrans Local Assistance Procedures Manual in support of the CEQA clearance for the project. All required maps, engineering drawings, database search results, and completed visual impact assessment questionnaire will be prepared. Project Designer will prepare the information to complete the PES form so that the City can use this information to support the determination of the CEQA documentation class, and Caltrans will use this information to support the determination of the NEPA document required for this project.

7.2 Categorical Exemption

It is assumed that this project will qualify as a Categorical Exemption (CE). Project Designer will support the City in preparing the required technical studies in support of the completion of the Caltrans CEQA Exemption/NEPA Categorical Exclusion Determination Form for Non-Highway Projects. Per the Request for Qualifications, Caltrans will perform the necessary NEPA clearance.

7.3 Environmental Technical Memorandums

Project Designer anticipates that the following technical studies will be required in support of the CEQA CE; hazardous materials project screening, biological resources study, and construction period traffic study, to document the existing site conditions, potential project-related impacts, and any necessary avoidance and minimize measures. In addition, the CE would be supported by a Screened Undertaking for Cultural Resources to be prepared by the Caltrans Professionally Qualified Staff (PQS). Project Designer will coordinate with the City and Caltrans environmental staff on the scope of any required technical memorandums. In the event the PES recommends additional studies, Project Designer will discuss with the City to obtain approval prior to proceeding with the work.

7.3.1 Hazardous Materials

An assessment of potentially hazardous materials/waste in the project area will be prepared by performing a hazardous materials project screening. Analysis will include review of the Environmental Data Resources (EDR) database, Geotracker database of the State Water Resources Control Board (SWRCB), and Envirostor database of the California Department of Toxic Substances Control (DTSC); review of aerial photographs and topographic maps; and a field survey. The screening will identify potential environmental conditions that may be encountered during construction activities and any necessary standard construction measures to be implemented to minimize potential impacts. Draft and Final Hazardous Materials Memorandum will be prepared to document the above. It is assumed that no environmental borings, testing, or analysis will be required.

7.3.2 Biological Resources

In order to document the biological resources of the project area and identify any potential impacts, Project Designer will perform a general biological survey of the project area and conduct a literature review to identify special-status species known or reported from the project area. The literature review will include Special status species lists from the California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS), Database searches of current versions of the California Natural Diversity Database (CNDDB) and the Online Inventory of the California Native Plant Society (CNPS), and other available biological studies conducted in the vicinity of the project site. The results of the biological field review and analysis along with any avoidance or minimization measures will be documented in a technical memorandum. It is assumed that there would be no impacts to state or federally listed species or any protocol surveys for sensitive species. In addition, it assumed that no jurisdictional delineation will be required. Draft and Final Biological Resources Memorandum will be prepared to document the above.

7.3.3 Traffic

A memorandum documenting the proposed handling of traffic operations within the project area during the construction period will be prepared. The memorandum will identify strategies for maintaining automobile and pedestrian movement through the project site during construction including the proposed 55-hour weekend closure of Rancho Vista Boulevard. Draft and Final Traffic Memorandum will be prepared to document the above.

7.4 Notice of Exemption

Project Designer will prepare a Notice of Exemption for the City to file with the Los Angeles County Clerk's office.

8. Railroad Coordination

8.1 Preliminary Railroad Coordination

Project Designer shall assist the City in executing design agreements with UPRR and SCRRA.

Project Designer shall prepare exhibit showing project improvements along with proposed improvements by others (UPRR and SCRRA), as identified in the California Railroad-Highway Grade Crossing Program Final Crossing Improvement Recommendations Project Scope of Work and distribute the exhibit to all stakeholders for review. Subsequently, Project Designer shall schedule and facilitate Railroad Pre-Diagnostic Meeting and Site Diagnostic Meeting.

Following the 35% Design submittal, Project Designer shall schedule and facilitate a meeting with the Caltrans, CPUC, UPRR, SCRRA, and the City to discuss the proposed at-grade railroad crossing configuration, traffic-rail signal coordination, and staging.

8.2 Construction and Maintenance Agreements

Two construction and maintenance (C&M) agreements shall be required: one between the City and UPRR and the other between the City and SCRRA. In support of the City, Project Designer shall coordinate with UPRR and SCRRA to prepare and negotiate the language for the C&M agreements that shall be agreeable to all parties.

8.3 CPUC G.O.88-B Application

A General Order 88-B (GO 88-B) authorization shall be required to modify the existing grade crossing. Project Designer shall prepare the GO 88-B application, obtain letters of concurrence from UPRR and SCRRA, and submit to CPUC for approval.

8.4 Advanced Preemption Calculations

Project Designer shall prepare advanced preemption calculation forms for review and approval by Caltrans, City, CPUC, UPRR, and SCRRA. It is assumed that pedestrian truncation will be allowed and the total advanced preemption time will be under the 50 second AREMA standard.

UPRR and SCRRA will prepare their own respective design packages for the railroad improvements within their right-of-way as discussed in Section C, State and Railroad Procedures, of this proposal.

9. Right-of-Way

9.1 Right-of-Way (ROW) Engineering

Following receipt of comments on the 65% design submittal, Project Designer shall perform the ROW engineering and subsequently develop the ROW requirement maps to delineate the required easements. It is anticipated that temporary construction easements (TCE) will be required on up to five (5) parcels. Additionally, one (1) aerial easement is anticipated for the relocated SCE overhead line which will cross APN 3022-025-009.

- 3022-024-908 [TCE; City of Palmdale]
- 3022-024-902 [TCE; LA Metro]
- 3022-024-821 [TCE; UPRR]
- 3022-024-900 [TCE; LA Metro]
- 3022-024-809 [TCE; UPRR]
- 3022-025-009 [Aerial Easement; American National Can Co]

9.2 Right-of-Way Acquisition

Project Designer will provide the following scope of work in accordance with the ROW acquisition needs of the project:

- Order and review preliminary title reports for six (6) parcels.
- Prepare plat and legals for six (6) parcels.
- Prepare and review appraisal reports for five (5) parcels. No appraisal report is needed for the City owned parcel.
- Prepare offer packages and related documents.
- Present and negotiate with property owners, as required.
- Coordinate with UPRR staff for application review and deliverables.
- Coordinate with Metro [owner] and SCRRA [operator] staff for application review and deliverables.
- Coordinate with City staff for required documents needed for the City owned parcel.
- Prepare and maintain agent logs for each parcel.
- Record documents with the County.
- Manage opening and closing of escrows.
- Prepare and secure Caltrans ROW Certification approval.
- Prepare project files to submit to client.

Note: Bid Support, Design Support During Construction, and As-Built Drawings were not included in the City's Request for Qualifications and Proposal and it is assumed will be procured through a separate future contract.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 07/14/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER LIC #CA 0C19812 1-816-960-9000 Lockton Companies, LLC-1 Kansas City 444 W. 47th Street, Suite 900 Kansas City, MO 64112-1906	CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: RiskManagement.Parsons@parsons.com
INSURED Parsons Transportation Group Inc. 100 M Street SE, Suite 1200 Washington, DC 20003-3515	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A: NATIONAL UNION FIRE INS CO OF PITTS — 19445 INSURER B: AIU INS CO — 19399 INSURER C: LEXINGTON INS CO — 19437 INSURER D: INSURER E: INSURER F:

COVERAGES **CERTIFICATE NUMBER:** 66129223 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE [X] OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: [X] POLICY [ ] PRO-JECT [ ] LOC OTHER:	X	X	GL17587105	01/01/22	01/01/23	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$ 2,000,000 $ 2,000,000 $ 10,000 $ 2,000,000 $ 4,000,000 $ 4,000,000
A	AUTOMOBILE LIABILITY [X] ANY AUTO [X] OWNED AUTOS ONLY [X] SCHEDULED AUTOS [X] HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	X	X	CA134-1446(AOS)	01/01/22	01/01/23	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$ 1,000,000 $ $ $
	UMBRELLA LIAB [ ] OCCUR EXCESS LIAB [ ] CLAIMS-MADE DED [ ] RETENTION $						EACH OCCURRENCE AGGREGATE	$ $
B	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] N/A If yes, describe under DESCRIPTION OF OPERATIONS below		X	WC012-32-6658(AOS) WC012-32-6660(WI) WC013-75-1697(NY) WC012-32-6657(CA)	01/01/22 01/01/22 01/01/22 01/01/22	01/01/23 01/01/23 01/01/23 01/01/23	[X] PER STATUTE [ ] OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$ 1,000,000 $ 1,000,000 $ 1,000,000
C	ARCHITECTS & ENGINEERS PROFESSIONAL LIABILITY			11665420	01/01/22	01/01/23	PER CLAIM POLICY AGG	5,000,000 5,000,000
A	AUTO LIABILITY	X	X	CA134-1447(NJ)	01/01/22	01/01/23	CSL (EA ACCIDENT)	2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

RE: Job No. TBD; Agreement No. A-7992 - Design Professional Services.
Additional Insureds: The City of Palmdale, City of Palmdale in its capacity as the Successor Agency to the CRA, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers.
See attached endorsements and special clauses.

CERTIFICATE HOLDER

City of Palmdale

38250 Sierra Highway

Palmdale, CA 93550 USA

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

James M Arnelle

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ENDORSEMENT

This endorsement, effective 12:01 A.M. 01/01/2022 forms a part of

Policy No. CA134-1446 (AOS) issued to PARSONS CORPORATION
CA134-1447 (NJ)

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED - WHERE REQUIRED UNDER CONTRACT OR AGREEMENT

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

SCHEDULE

ADDITIONAL INSURED

Any person or organization for whom you are contractually bound to provide Additional Insured status but only to the extent of such person's or organizations liability arising out of the use of a covered "auto".

Section II - Liability Coverage, A. - Coverage, 1. - Who Is An Insured, is amended to add:

d. Any person or organization, shown in the schedule above, to whom you become obligated to include as an additional insured under this policy, as a result of any contract or agreement you enter into which requires you to furnish insurance to that person or organization of the type provided by this policy, but only with respect to liability arising out of use of a covered "auto". However, the insurance provided will not exceed the lesser of:

1. The coverage and/or limits of this policy, or

2. The coverage and/or limits required by said contract or agreement.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ENDORSEMENT

Insurance Primary as to Certain Additional Insureds

This endorsement, effective 12:01 A.M. 01/01/2022 forms a part of

Policy No. CA134-1446 (AOS) issued to: PARSONS CORPORATION
CA134-1447 (NJ)

By: NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

Section IV - Business Auto Conditions, B., General Conditions, 5., Other Insurance, c., is amended by the addition of the following sentence:

> The insurance afforded under this policy to an additional insured will apply as primary insurance for such additional insured where so required under an agreement executed prior to the date of accident. We will not ask any insurer that has issued other insurance to such additional insured to contribute to the settlement of loss arising out of such accident.

All other terms and conditions remain unchanged.

SCHEDULE

Name of Person or Organization

WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT

POLICY NUMBER: CA134-1446 (AOS)
CA134-1447 (NJ)

COMMERCIAL AUTO
CA 04 44 10 13

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US (WAIVER OF SUBROGATION)

This endorsement modifies insurance provided under the following:

AUTO DEALERS COVERAGE FORM
BUSINESS AUTO COVERAGE FORM
MOTOR CARRIER COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Coverage Form apply unless modified by the endorsement.

This endorsement changes the policy effective on the inception date of the policy unless another date is indicated below.

Named Insured:	**Parsons Corporation**
Endorsement Effective Date:	**01/01/2022**

SCHEDULE

Name(s) Of Person(s) Or Organization(s):
Any person or organization for whom the Named Insured is required to provide a waiver
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The **Transfer Of Rights Of Recovery Against Others To Us** condition does not apply to the person(s) or organization(s) shown in the Schedule, but only to the extent that subrogation is waived prior to the "accident" or the "loss" under a contract with that person or organization.

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ENDORSEMENT

This endorsement, effective 12:01 A.M. 01/01/2022 forms a part of

policy No. GL 17587105 issued to PARSONS CORPORATION

by NATIONAL UNION FIRE INSURANCE COMPANY OF PITTSBURGH, PA

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT

PRIMARY COVERAGE FOR SPECIFIED PERSONS OR ORGANIZATIONS NAMED AS ADDITIONAL INSUREDS – ONGOING AND COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE FORM

The following paragraph is added to **SECTION II – WHO IS AN INSURED** and applies only to persons or organizations we have added to your policy as additional insureds by endorsement to comply with insurance requirements of written contracts relative to: a) the performance of your ongoing operations for the additional insured; or b) "your work" performed for the additional insured sans included in the "products-completed hazard" :

This insurance is primary over any similar insurance available to any person or organization we have added to this policy as an additional insured. However, this insurance is primary over any other similar insurance only if the additional insured is designated as a named insured in the Declarations of the similar insurance. We will not require contribution of limits from the other similar insurance if the insurance afforded by this endorsement is primary.

This insurance is excess over any other valid and collectible insurance, whether primary, excess, contingent or on any other basis, if it is not primary as defined in the paragraph above.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.	WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

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C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.	WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. **Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or
2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

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POLICY NUMBER: GL17587105

COMMERCIAL GENERAL LIABILITY
CG 24 04 05 09

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization: WHERE REQUIRED BY WRITTEN CONTRACT OR AGREEMENT.
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

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WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

City of Palmdale

38250 Sierra Highway

Palmdale, CA 93550
USA

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.
(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)
Endorsement Effective 01/01/22 Policy No. WC012-32-6658(AOS) Endorsement No.
Insured: Parsons Transportation Group Inc. Premium $
Company: AIU INS CO Countersigned By

WC 00 03 13
(Ed. 4-84)

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WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT-CALIFORNIA

This endorsement changes the policy to which it is attached effective on inception date of the policy unless a different date is indicated below.

(The following "attaching clause" need be completed only when this endorsement is issued subsequent to preparation of the policy.)

This endorsement, effective 12:01 AM 01/01/22 forms a part of Policy No. WC012-32-6657(CA)

Issued to: Parsons Transportation Group Inc.

By: AIU INS CO

Premium: INCL

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us).

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be 5% of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization

City of Palmdale

38250 Sierra Highway

Palmdale, CA 93550

Job Description

Where required by written contract or agreement.

WC 04 03 06
(Ed. 4-84)

Countersigned by Joseph M Arnold
Authorized Representative

SUPPLEMENT TO CERTIFICATE OF INSURANCE

DATE
07/14/2022

NAME OF INSURED: Parsons Transportation Group Inc.

SPECIAL CLAUSES

Contractual Liability:

General Liability includes Contractual Liability (insurance is available only to the extent provided by the policy).

Severability of Interest:

Except as respects Workers Compensation and Professional Liability, insurance afforded applies separately to each insured against whom claim is made or suit is brought, except with respect to the limit of liability.

Cancellation Notice:

The named insured, Parsons Corporation or its Insurance Broker shall notify the certificate holder of any cancellation, or reduction in coverage or limits, of any insurance within thirty (30) days of receipt of insurers' notification to that effect.

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **CITY ATTORNEY'S OFFICE**

DISTRICT: **ALL**

SUBJECT: **ADOPT RESOLUTION NO. CC 2022-088, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE MAKING LEGALLY REQUIRED FINDINGS AND EXTENDING REMOTE TELECONFERENCE PARTICIPATION FOR MEETINGS OF THE CITY COUNCIL AND/OR ITS RELATED OR SUBORDINATE LEGISLATIVE BODIES**

ISSUE

Adopt Resolution No. CC 2022-088, a Resolution of the City Council of the City of Palmdale authorizing remote teleconference participation for meetings of the City Council and/or its subordinate legislative bodies for an additional 30-day period.

RECOMMENDATION

Staff recommends that the City Council:

1. Approve the resolution to thereby extend, for an additional 30-day period, the authority of the City Council, and all related and/or subordinate legislative bodies, to participate remotely in properly noticed meetings.

BACKGROUND

Since October 1, 2021 and through January 1, 2024, AB 361 has temporarily amended the Ralph M. Brown Act (California Government Code § 54950 *et seq*.) to provide more flexibility regarding participation in public meetings from a remote location. In layman's terms AB 361 allows "zoom" meetings if specified requirements are met.

If the City Council authorizes remote meetings, such authorization must expire no later than 30 days from the initial authorization. The City Council is authorized to thereafter extend the authorization if it makes one of various specified findings.

AB 361 requires several procedural safeguards to protect public participation during a remote meeting, key ones of which are summarized as follows:

1. The public must have the ability to address the legislative body directly and must be given information on how to address the legislative body;
2. The public must be provided with either a call-in or internet-based service option;
3. The legislative body must stop the meeting if the call-in or internet-based option fails;

4. The legislative body cannot require that public comments be submitted in advance (although this option can be provided);
5. Public speakers cannot be required to pre-register for public comment (except as required by an independent call-in or internet platform);
6. Members of the public must be given a reasonable time to register to provide public comment; and
7. Agencies that provide a timed public comment period shall not close the public comment period until that time period has expired.

DISCUSSION

The City Council adopted an initial AB 361 Resolution on June 15, 2022. This resolution has been extended multiple times. The most recent extension is set to expire on September 2, 2022. The question before the City Council is whether to extend this authority for an additional 30-day period. An extension of authority to remotely participate is allowed if (1) the state of emergency continues, and (2) a resolution with required findings has been adopted within the last 30 days.

The proposed resolution would be immediately effective and allow members of legislative bodies to continue to participate remotely for an additional thirty days if the agenda for the meeting has included the legally required participation noticing. The resolution would also allow the City Manager (or designee) to opt to not include such noticing, as there may be instances where it would be impractical, due to staffing considerations, to allow remote participation in meetings.

FISCAL IMPACT

There is no fiscal impact associated with this action.

STRATEGIC PLAN

Goal II: Ensure long-term fiscal health of the City and maintain funding for services.

C. Involve and expand engagement to enhance public oversight and transparency.

Prepared by:	Scott E. Porter, Acting City Attorney
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Proposed Resolution No. CC 2022-088

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2022-088

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE MAKING LEGALLY REQUIRED FINDINGS AND EXTENDING REMOTE TELECONFERENCE PARTICIPATION FOR MEETINGS OF THE CITY COUNCIL AND ITS RELATED AND/OR SUBORDINATE LEGISLATIVE BODIES

WHEREAS, the City of Palmdale is committed to preserving and fostering public access and participation in meetings of the City Council and all its subordinate bodies, consistent with the Ralph M. Brown Act (California Government Code § 54950 *et seq*.); and

WHEREAS, Government Code § 54953(e) expressly allows cities to, during the existence of a state of emergency declared by the Governor pursuant to Government Code § 8625, allow teleconference participation in city meetings;

WHEREAS, on March 4, 2020, the Governor declared a state of emergency and such declaration continues to be in effect;

WHEREAS, state and local officials have imposed or recommended measures to promote social distancing, including requirements to not return to work within specified time frames for people who have tested positive for COVID-19;

WHEREAS, the City Council adopted Resolution No 2022-087 within the last thirty days, authorizing exemption from the requirements of Government Code section 54953(b)(3) from August 3, 2022 until September 2, 2022.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

SECTION 1. The Recitals set forth above are correct and are incorporated by reference.

SECTION 2. The City Council finds that the state of emergency declared by the Governor remains in effect and state officials continue to impose or recommend measures to promote social distancing. Therefore, for agendas which include all the noticing required by Government Code § 54953(e), the City Council and its related and/or subordinate bodies, by this Resolution, shall continue to be exempt from the requirements of Government Code section 54953(b)(3) until the end of the day on

September 16, 2022. The City Council may conduct its meetings in a manner which allows telephonic participation by the members of the legislative body, staff, and the public. Such meetings shall be conducted consistent all requirements applicable to telephonic meetings. The City Clerk is directed to notice all such meetings to allow telephonic participation by the members of such bodies and the public and staff, except as otherwise directed by the City Manager, or the City Manager's designee.

SECTION 3. This Resolution shall take effect immediately upon its adoption and shall remain effective until the end of the day on September 16, 2022, unless the term of this resolution is extended or prematurely terminated.

SECTION 4. The City Clerk shall certify to the adoption of this resolution.

PASSED, APPROVED and **ADOPTED** this 17th day of August, 2022.

_____
Steven D. Hofbauer, Mayor

APPROVED AS TO FORM:

_____
Scott E. Porter
Acting City Attorney

ATTEST:

_____
Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 17th day of August by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ ABSENT: _____

Date: _____ _____
Shanae S. Smith, City Clerk

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

DISTRICT: **DISTRICT 1**

SUBJECT: **ADOPT RESOLUTION NO. CC 2022-086, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING THE PALMDALE EAST AVENUE Q COMPLETE STREETS STUDY**

ISSUE

Adopt Resolution No. CC 2022-086, a Resolution of the City Council of the City of Palmdale approving the Palmdale East Avenue Q Complete Streets Study located on a 1.4-mile segment of East Avenue Q (from Sierra Highway to 20th Street East).

RECOMMENDATION

Staff recommends that the City Council conduct a public hearing and:

1. Adopt Resolution No. CC 2022-086 approving the Palmdale East Avenue Q Complete Streets Study; and,

2. Find that the study is exempt from environmental review.

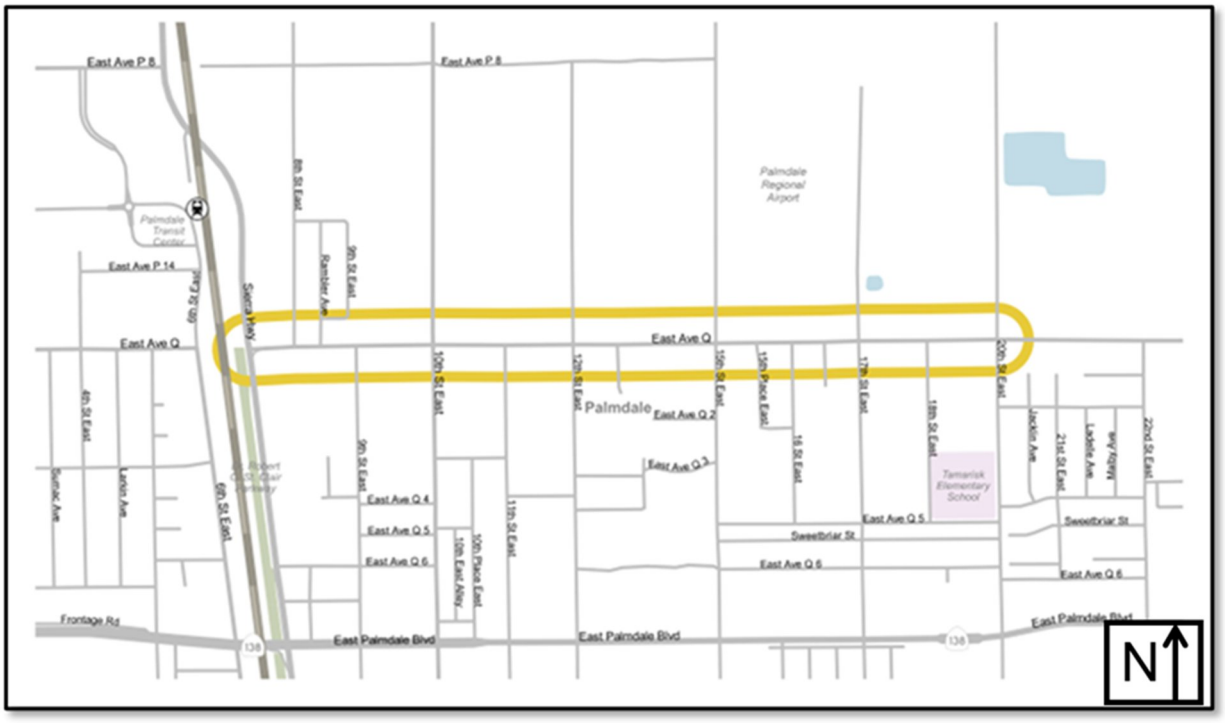
BACKGROUND

The Palmdale East Avenue Q Complete Streets Study is a multimodal corridor plan that provides transportation guidelines for a 1.4-mile segment of East Avenue Q (from Sierra Highway to 20th Street East). The study aims to aid in the creation of a corridor that enhances safety and connectivity to future development and provides for multimodal access to the future high-speed rail station. Future development requirements within the corridor plan align with the City's General Plan Update (Palmdale 2045) and are geared toward improving walking and biking conditions for people of all ages and abilities, while improving the comfort and safety of active transportation in the high desert weather. If the City Council adopts the study, City staff will use it as a guidepost for determining what development requirements and conditions of approval might apply to public and/or private projects.

On July 21, 2022, the Planning Commission adopted Resolution No. PC-2022-028, recommending City Council adoption of the East Avenue Q Complete Streets Study.

Adoption of the study will ensure adherence to the recommended configuration of this segment of East Avenue Q as build out or redevelopment of the corridor occurs over time.

FIGURE 1 – STUDY AREA



DISCUSSION

With consideration of design and safety to the residents of Palmdale in mind, the Palmdale East Avenue Q Complete Streets Study sets forth the following goals:

- Develop a multimodal corridor plan;
- Enhance pedestrian and bicycle activity and safety on East Avenue Q;
- Develop planning-level recommendations to address shade and wind on East Avenue Q;
- Provide a framework for modifying roadway geometry and sidewalk improvements that will promote walking and biking as a viable form of safe and active transportation;
- Develop designs for continuous bike facilities and sidewalks along the entire stretch of the study area; and,
- Ensure the East Avenue Q Complete Streets Study is consistent with and complementary to the City's General Plan Update (2045 General Plan).

Existing Conditions

East Avenue Q provides an opportunity to improve connectivity in Palmdale, as it connects to or is in close proximity to the Palmdale Transportation Center, schools, and the proposed location of the future multimodal high-speed rail station.

The study area includes 134 acres along a 1.4-mile segment of East Avenue Q, which is largely vacant (approximately 55 percent), with the remaining areas utilized as public, industrial, office, commercial, private institutions, multi-family and single-family residences, and warehouse uses. Although East Avenue Q is a major arterial, traffic counts collected at five intersections on March 4, 2021, had relatively low vehicular volumes; however, it is important to note that most volumes were lower than typical across the region due to the COVID-19 pandemic.

The highest directional motor vehicle volumes remained under 500 vehicles per hour, and pedestrian and bicycle volumes were also very low, with less than five per hour. Measured traffic operations show very little delay during AM and PM peak hours, and current on-street parking is underutilized. Currently there are no bicycle facilities and Antelope Valley Transit Authority (AVTA) Line 98 has six stops within the plan area.

Public Outreach

Public input contributed to defining a shared vision for the corridor and a better understanding of future transportation uses and needs. Virtual activities were supplemented with methods designed to reach people without internet or computer access. Engagement activities were promoted via print and digital notification (flyers, posters, mailed postcards, social media, press releases, online advertisements, newsletters and eblasts, electronic billboard advertisements, and Palmdale Minute Videos) and an extended outreach toolkit was provided to 83 stakeholders and technical working group members.

Outreach activities included:

- Plan survey (one, open from March to May 2021)
- Virtual workshops with Q&A sessions (two, held in May and August 2021)
- In-person pop-up events (two, held in August of 2021)
- Youth focus group (one, held in August 2021)

In conjunction with the public outreach, a Technical Working Group (TWG) consisting of 18 members representing local and regional organizations, Los Angeles County staff, and City of Palmdale staff met three times in 2021. The TWG was established to review and

provide feedback on key findings and recommendations throughout the process of the study.

Community Feedback on the Plan and Design Alternatives

The community members who participated in study outreach activities provided broad and detailed information about needs and concerns for the corridor. The general feedback received is that the dangerous driver behavior and current lack of safe pedestrian and bicycle infrastructure on East Avenue Q creates an uncomfortable environment for people walking and biking along the corridor. In addition, feedback received in response to the design alternative included common priorities for safe crossing opportunities, new and wider sidewalks, and improved lighting and landscaping. In addition, sidewalk-level bicycle lanes were preferred to on-street lanes. Additionally, support was received for traffic calming designs and a two-lane configuration, which would encourage slower vehicle speeds within the corridor.

Based on the input from City staff, the TWG, and public feedback, three potential design alternatives were developed. All three configurations included sidewalk-level protected bicycle facilities, ample sidewalks, and varying streetscape which includes landscaping, canopy trees, seating, lighting, and shade.

Plan Recommendations for Transportation and Streetscape

Design alternatives were further refined with City staff and the TWG to develop the final design recommendation for East Avenue Q. This recommendation includes a varied configuration of travel lanes and right-of-way widths that maintain comfortable walking and biking facilities with the incorporation of streetscape. Key elements of the transportation and streetscape recommendation are included in Table 1 below.

Please note that there is no development proposed at this time, and with the adoption of the study, future development will be required to construct improvements along East Avenue Q to be consistent with the final design recommendation.

TABLE 1: FINAL RECOMMENDATION DESIGN DETAILS

Street Segment	Design Recommendation
East Avenue Q between Sierra Highway and 9th Street East	• 114-foot public right-of-way • Four vehicular lanes (two in each direction) • Landscaped median • Sidewalk-level bike facilities on both sides of the street • Sidewalks and landscaping on both sides of the street • Parking on both sides of the street
East Avenue Q between 9th Street and 12th Street East	• 90-foot public right-of-way • Four vehicular lanes (two in each direction) • No median • Sidewalk-level bike facilities on both sides of the street • Sidewalks on both sides of the street • Landscaping on the south side of the street • Parking on the north side of the street
East Avenue Q between 12th Street East and 20th Street East	• 90-foot public right-of-way • Two vehicular lanes (one in each direction) • Landscaped/striped median • Sidewalk level bike facilities on both sides of the street • Sidewalks and landscaping on both sides of the street • Parking on both sides of the street

Concept design including a plan-view and cross-section of two segments of East Avenue Q are included in Figures 2 and 3 below, which can be viewed in their full-size within the study, which is attached to this report.

FIGURE 2 – DESIGN RECOMMENDATION BETWEEN 10TH STREET EAST AND 11TH STREET EAST

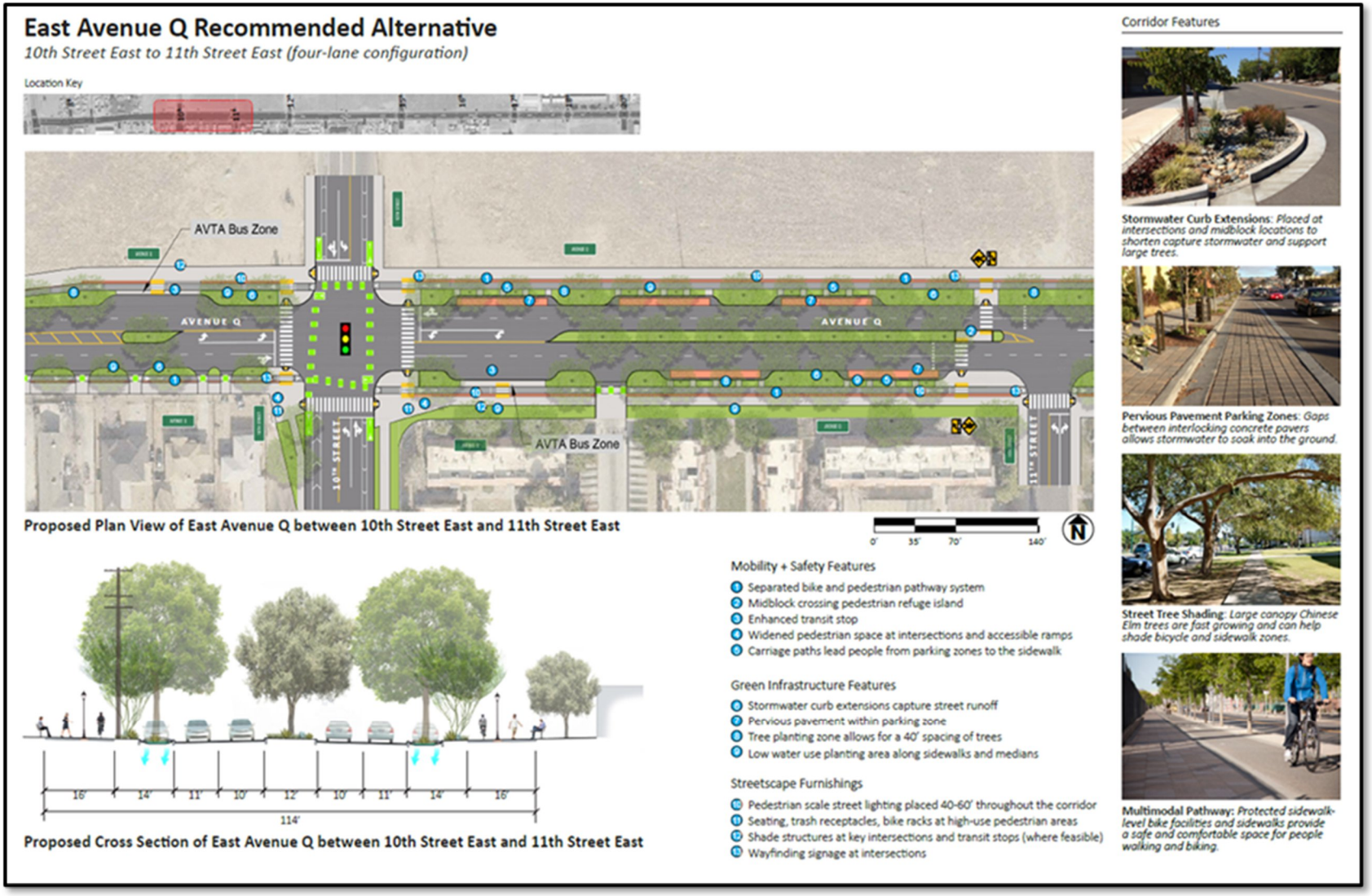
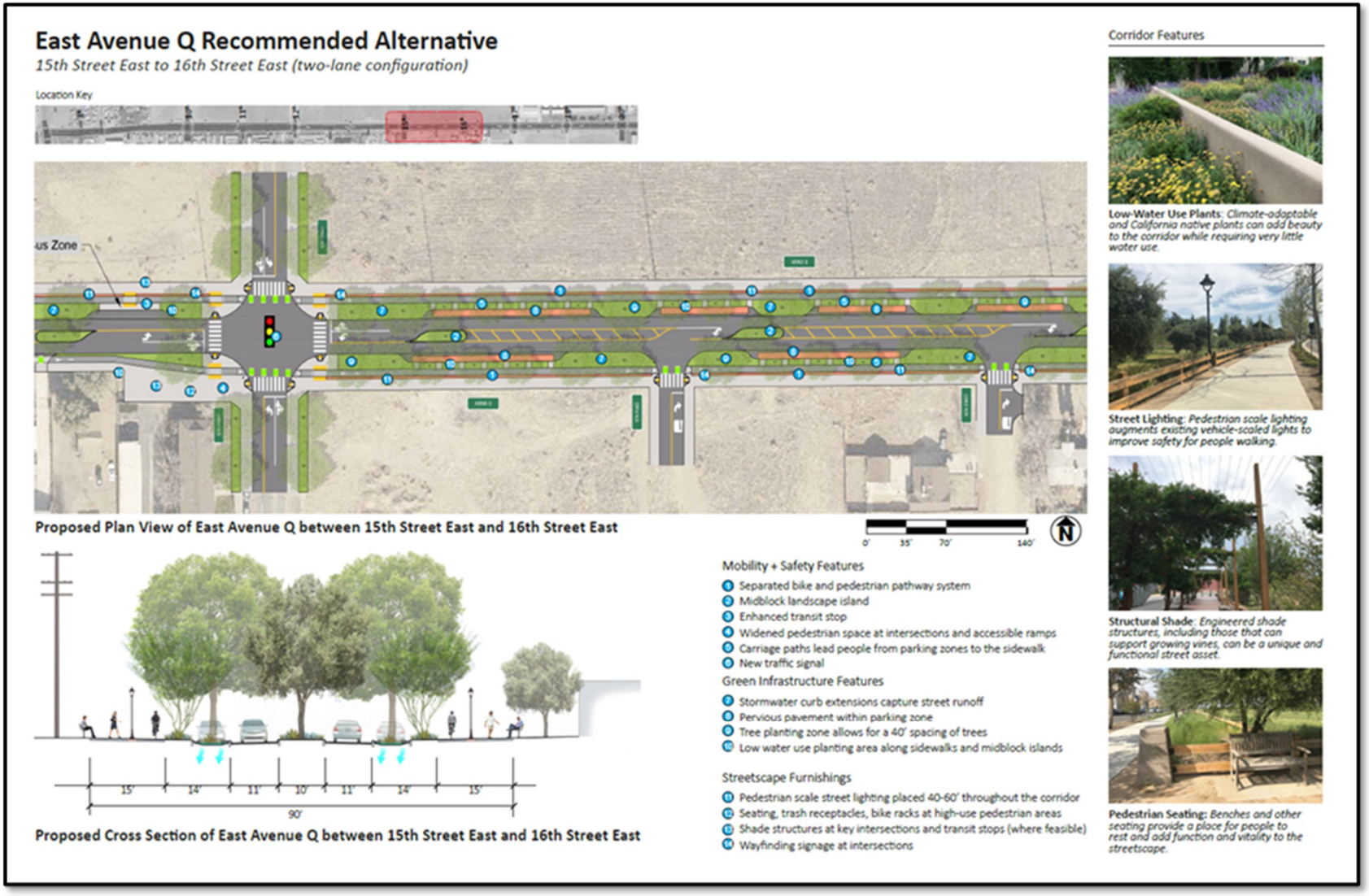


FIGURE 3 – DESIGN RECOMMENDATION BETWEEN 15TH STREET EAST AND 16TH STREET EAST



Plan Recommendations for Land Use

The land use recommendations are consistent with the Palmdale 2045 General Plan. The goals and policies of the plan are outlined below:

Goal 1: Create an active, ground floor pedestrian environment within the three nodes along the corridor: a mixed-use node at 10th Street East, a residential node at 15th Street East, and an employment/retail node at 20th Street East.

- Design the buildings facing East Avenue Q to reflect the vision of a new "main street" – active uses, street-oriented entrances, tall floor-to-ceiling heights, reduced setbacks (unless adjacent to a plaza or park).
- Implement urban design guidelines and features that encourage pedestrian activity and reduce automobile use.
- Encourage outdoor dining for patrons within the Mixed-Use General Plan land use designations along East Avenue Q and 10th Street East.
- Require corner treatments and special architectural features for buildings at the three major intersections on Avenue Q at 10th Street East, 15th Street East, and 20th Street East.
- Expand use of street furniture including lighting, benches, trash receptacles and landscaping to support a comfortable pedestrian environment within the three designated nodes at the intersections of East Avenue Q and 10th Street East, 15th Street East, and 20th Street East.
- Allow for various job-producing uses within the Employment Flex and Neighborhood Commercial General Plan land use designations, as dictated by the Palmdale 2045 General Plan, in pedestrian-oriented building types along East Avenue Q and 20th Street East.

Goal 2: Increase housing opportunities along the corridor

- Promote new multi-family development and urge varying unit size and type within the Mixed-Use and Residential General Plan land use designations along East Avenue Q.
- Encourage affordable units that are seamlessly integrated into the overall residential or mixed-use development, and that connect to and complement the planned bicycle and pedestrian improvements in the study area.

Goal 3: Increase local job opportunities along the corridor.

- Support a diverse mix of light industrial, information, film, makerspace, boutique food/wine/beer processing, food, and technology uses to provide jobs and tax revenues for the community by allowing emerging economic uses and industries within the Mixed-Use and Employment General Plan land use designations.

Land use recommendations also include creating an active, ground floor pedestrian environment with three defined nodes.

FISCAL IMPACT

No fiscal impact. The creation of the study was funded through a Southern California Association of Governments grant and future development and redevelopment would be required to adhere to the recommendation within the plan as part of the development process.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Jasmine Alvarado, Associate Planner
Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Resolution No. CC 2022-086
2. East Avenue Q Complete Streets Study

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2022-086

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING THE PALMDALE EAST AVENUE Q COMPLETE STREETS STUDY

A. RECITALS

WHEREAS, the City of Palmdale has contracted with a private design firm to prepare the Palmdale East Avenue Q Complete Streets Study;

WHEREAS*,* the Palmdale East Avenue Q Complete Streets Study area includes a 1.4-mile segment of East Avenue Q from Sierra Highway to 20th Street East, as shown on the map attached hereto as Exhibit I;

WHEREAS*,* on July 21, 2022, the Planning Commission of the City of Palmdale reviewed the Palmdale East Avenue Q Complete Streets Study and recommended approval of the study by the City Council; and,

WHEREAS*,* on August 17, 2022, the City Council of the City of Palmdale conducted a duly noticed public hearing on the study and concluded said hearing on that date. Evidence, both written and oral, was duly presented and considered by the City Council at the aforesaid public hearing, including but not limited to, the staff report dated August 17, 2022.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

B. RESOLUTION

SECTION 1. The City Council hereby specifically finds that all of the facts set forth in the Recitals, Part A of this Resolution, are true and correct.

SECTION 2. The City Council hereby finds as follows with respect to the environmental documentation for the study.

(a) Pursuant to the California Environmental Quality Act (CEQA) and the City's local CEQA Guidelines, adoption of the East Avenue Q Complete Streets Study is categorically exempt from CEQA because: (1) CEQA exempts minor alterations to public facilities, such as to streets, sidewalks, gutters, and pedestrian trails, including the addition of bike paths (See 14 CCR §§ 15301(c) and 15304(h)); (2) the common sense exemption of CEQA in in Section 15061(b)(3) applies, a section which provides, that where it can be seen with certainly that there is no

possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. The Palmdale East Avenue Q Complete Streets Study consists of guidelines intended for the creation of a corridor that enhances safety and connectivity to future development and provides for multimodal access to the proposed location of the future multimodal high-speed rail station, it does not result in a physical change that could cause an impact to the environment and therefore is not subject to CEQA. Any future development application will be reviewed for CEQA compliance under a separate permit and the appropriate environmental document will be prepared to address project-specific impacts.

(b) The custodian of records for the environmental document, and all other materials which constitute the records of proceedings upon which the City Council's decision is based, is the Planning Manager of the City of Palmdale. Those documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

SECTION 3. Based upon substantial evidence presented to the City Council during the August 17, 2022, public hearing, including public testimony and written and oral staff reports, the City Council specifically finds as follows:

(a) The proposed guidelines conform with the goals, objectives, and policies of the General Plan.

The Palmdale East Avenue Q Complete Streets Study is a multimodal corridor plan that provides transportation guidelines for a 1.4-mile segment of East Avenue Q (from Sierra Highway to 20th Street East). The proposed guidelines conform with the goals, objectives, and policies of the General Plan, because the study is consistent with General Plan Circulation Element Goal C3: Encourage use of non-vehicular transportation throughout the Planning Area. The study aims to aid in the creation of a corridor that enhances safety and connectivity to future development and provides for multimodal access to the future high-speed rail station. Further, the study is consistent with General Plan Circulation Element Objective C1.9: Plan for the development of arterial streetscapes which present an aesthetically pleasing appearance, promote ease of use for pedestrian, and non-motorized as well as vehicular traffic, and provide maximum public safety through design features. Future development requirements within the corridor plan align with the City's General Plan

Update, as dictated by the Palmdale 2045 General Plan, and are geared toward improving walking and biking conditions for people of all ages and abilities, while improving the comfort and safety of active transportation in the high desert weather.

SECTION 4. Based on the findings and conclusions set forth in the above Sections, and based on all other evidence in the record, the City Council hereby approves the Palmdale East Avenue Q Complete Street Study as shown in Exhibit II and finds that the study is exempt from the requirements of CEQA.

SECTION 5. The City Clerk shall certify to the adoption of this resolution.

PASSED, APPROVED and **ADOPTED** this 17th day of August 2022.

_____
Steven D. Hofbauer, Mayor

Approved as to form:

ATTEST:

_____
Scott E. Porter
Acting City Attorney

_____
Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 17th day of August, 2022, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ ABSENT: _____

Date: _____ _____
Shanae S. Smith, City Clerk

EXHIBIT I

AERIAL MAP FOR PALMDALE EAST AVENUE Q COMPLETE STREETS STUDY

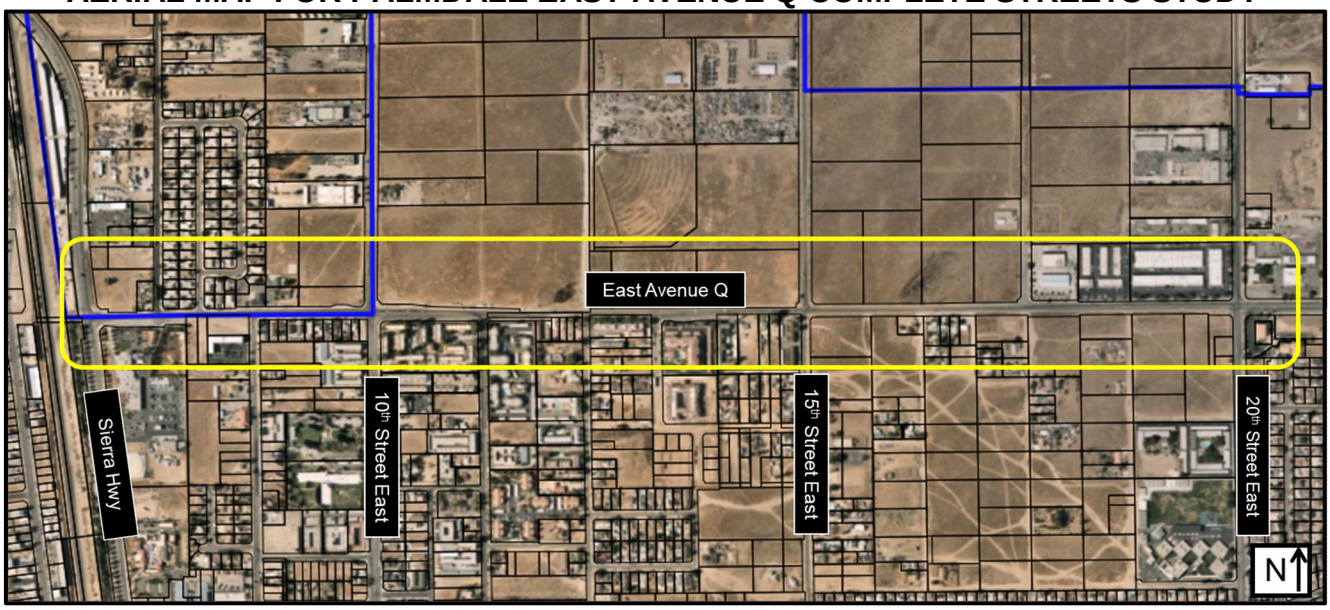
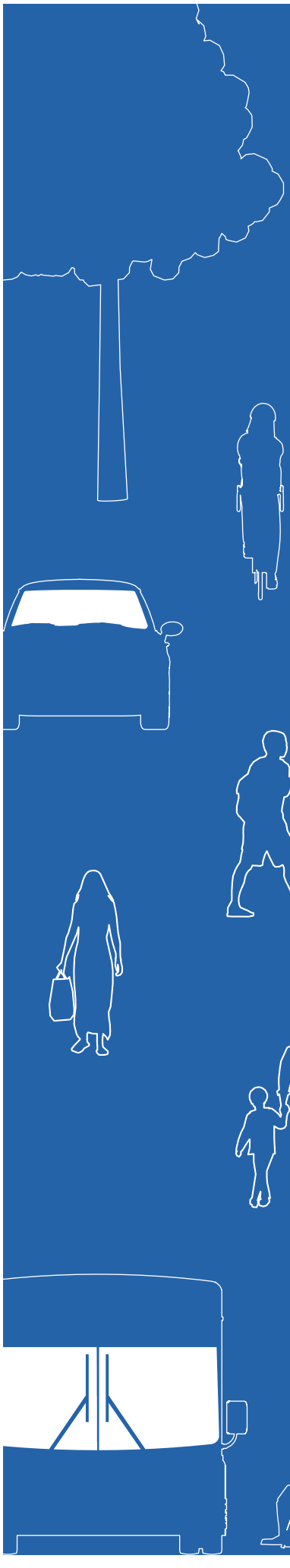


EXHIBIT II



PALMDALE EAST AVENUE Q COMPLETE STREETS PROJECT

FINAL | April 2022

Acknowledgments

The City of Palmdale and Project Team thanks all those who helped shape and develop the Palmdale East Avenue Q Complete Streets Project.

City Staff

Megan Taggart

Ruben Hovanesian

Jay Nelson

Mike Behen

Kery German

Technical Working Group Members

Al Tsai, *Palmdale School District*

Amanda Parrell, *Antelope Valley Union High School District*

Deputy James Murphy, *Los Angeles County Sheriff's Department*

Lovell Fleming, *Antelope Valley Youthbuild*

Maribel Briseno, *Antelope Valley Cycling*

Martin Tompkins, *Antelope Valley Transit Authority*

Michelle Fluke, *Antelope Valley Partners for Health*

Richard Marshalian, *Los Angeles County Department of Regional Planning*

Rocio Castellanos, *Los Angeles Care/Blue Shield Community Resource Center*

Sylvia Duarte, *Antelope Valley Hispanic Chamber of Commerce*

Prepared by

Toole Design

Raimi and Associates

Arellano Associates

Funding Agency

Southern California Association of Governments

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Executive Summary

The **Palmdale East Avenue Q Complete Streets Project** is a multimodal corridor study that provides transportation and land use recommendations for a 1.4-mile segment of East Avenue Q. Recommendations are aligned with the City's General Plan Update and are geared toward improving walking and biking conditions for people of all ages and abilities, as well as improving the comfort and safety of active transportation in high desert weather.

Transportation & Streetscape Recommendations:

Create a public right-of-way along East Avenue Q that includes the following:

- Continuous, protected sidewalk-level bicycle facilities along the length of the study corridor (Sierra Highway to 20th Street East).
- Continuous sidewalks and high-visibility crossings at intersections, with raised crossings at driveways.
- A center landscaped median for traffic calming where possible, reducing points of conflict, and reducing the heat island effect, with gaps as needed for driveway and emergency access.
- Streetscape furniture to create a sense of place and add amenities for people biking, walking, and shopping, including lighting, shade structures, benches, trash receptacles, and bicycle racks.
- Landscaping and green infrastructure to reduce the heat island effect, capture stormwater, and provide shade for people walking and biking along the corridor.

Land Use Recommendations:

- Create an active, ground floor pedestrian environment within three defined nodes:
  - » A mixed-use node at 10th Street East that will be a lively area with mixed use development on all four corners and a "main street" character and feel.
  - » A residential node at 15th Street East, located at the center of the project area, will offer differing intensities of standalone residential uses on all four corners.
  - » An employment/retail node at 20th Street East, which is located at the east end of the project area, serves as a commercial and employment node.
- Increase various types of housing opportunities
- Increase local job opportunities

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Introduction

1

Chapter 1. Introduction

Project Background

The City of Palmdale is re-imagining East Avenue Q as a safer multimodal corridor that encourages economic development and is a direct connection to a multimodal transportation hub that will provide High Speed Rail, Metrolink, and local bus service to residents. The project area includes a 1.4-mile segment of the corridor from Sierra Highway to 20th Street East.

The corridor serves an important function to the residents that live on or near the street, and those that are accessing existing retail, commercial, and institutional destinations, and it provides a connection to those traveling west to Sierra Highway for work or other purposes. East Avenue Q is also anticipated to link major destinations and activity centers, which creates an unprecedented opportunity for the City to consider multiple modes of travel and create a model that could also apply in other locations throughout Palmdale. With the future Palmdale High-Speed Rail station serving both Northern and Southern California, and the High Desert Corridor to Victorville to the east, this segment of East Avenue Q must manage many future needs. Additionally, given the high-desert climate of the city, thermal comfort for people walking and biking in high-heat and high-wind conditions is a key consideration.

Project Goals

The project goals as identified in the original project grant application are to:

- Develop a multimodal preliminary corridor plan to be merged into a Project Initiation Document (PID)
- Enhance pedestrian and bicycle activity and safety on East Avenue Q
- Develop planning-level recommendations to address shade and wind on East Avenue Q
- Provide a framework for modifying roadway geometry and sidewalk improvements that will promote walking and biking as a viable form of safe and active transportation
- Develop designs for continuous bike facilities and sidewalks along the entire stretch of the project area
- Ensure the East Avenue Q complete streets project is consistent with and complementary to the City's General Plan Update (2045 General Plan)

What are Complete Streets?

Complete Streets is a transportation policy and design approach for streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for people of all ages and abilities regardless of their mode of transportation. There is no singular design prescription for Complete Streets; each one is unique and responds to its community context A complete street may include sidewalks, bike lanes, dedicated bus lanes, comfortable and accessible public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, landscaping, and more.



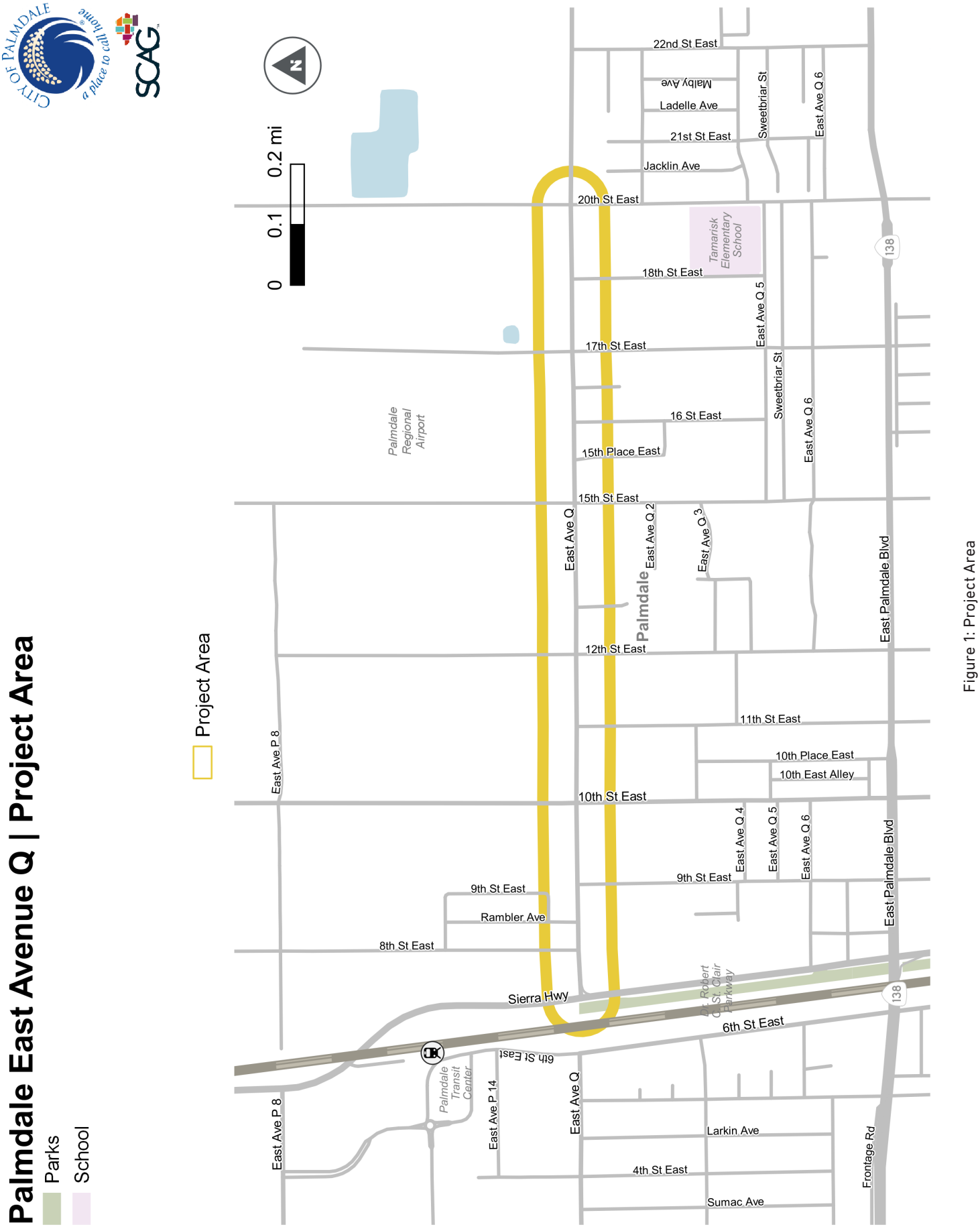
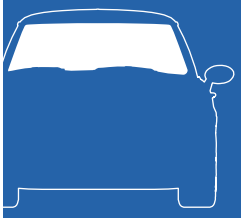


Figure 1: Project Area

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Existing Conditions





2

Chapter 2. Existing Conditions

The City of Palmdale is located in Antelope Valley in northern Los Angeles County, separated from the Los Angeles Basin by the San Gabriel Mountains. Palmdale is 106 square miles in size with a population of 169,450 as of 2020[1].

Safe, sustainable, and convenient travel is essential for everyone who lives in, works in, and visits Palmdale. This chapter provides an overview of the existing conditions for people walking, biking, and taking transit, analyzing who uses the corridor, connectivity, safety, and comfort. Additional analyses conducted as part of the existing conditions review not included in the body of this report are available in Appendix A: Existing Conditions. The Project Team also reviewed the following plans, studies, and reports relevant to the East Avenue Q Complete Streets Project – this review is available in Appendix B: Document and Code Review:

- City of Palmdale General Plan (1993)
- Palmdale Transit Area Specific Plan (2020)
- Avenue Q Feasibility Study (2016)
- City of Palmdale Complete Streets Plan (2019)
- City of Palmdale Safe Routes to School Plan (2019)
- City of Palmdale Design Toolbox (2018 draft)
- City of Palmdale Municipal Code

Land Use on East Avenue Q

The 1993 General Plan land use designations on East Avenue Q are illustrated in Figure 2. The parcels on the north side of East Avenue Q are currently designated as Industrial, Business Park, and Commercial Manufacturing. This area has a heavier jobs focus, and is home to large parcels, that today are largely unbuilt. Parcels on the south side of East Avenue Q are designated as residential between 9th Street East and 18th Street East with Single Family Residential 2, Multifamily Residential, and Medium High Density Residential uses. The west end of the Project Area includes Industrial, Business Park, and Public Facility designations, while the east end includes Neighborhood Commercial and Commercial Manufacturing designations.

The Palmdale General Plan is undergoing a comprehensive update which is expected to conclude in 2022. This update will result in new land use designations and a new General Plan Land Use Map that is detailed in Chapter 4 of this report.

The project area is bound by two public facilities, the Palmdale Sheriff Station at the southeast corner of Sierra Highway and East Avenue Q to the west and the Palmdale Water District (PWD) at the northeast corner of 20th Street East and East Avenue Q to the east. Other key land use types include:

- The Palmdale Sheriff Station–ran and operated by the Los Angeles County Sheriff's Department—serves the City of Palmdale and surrounding communities. The Palmdale Sheriff's Station is a state-of-the-art facility constructed in 2006 that includes a 47,000 square-foot main building, 7,800 square-foot jail, and 8,400 square-foot motor pool and storage building.[2]

1 Source: US Census Bureau. https://www.census.gov/quickfacts/palmdalecitycalifornia

2 Palmdale Sheriff's Station, (n.d.) Los Angeles County Sheriff's Department. Retrieved from: http://shq.lasdnews.net/pages/patrolstation.aspx?id=PLM

- The PWD has provided water services in the Antelope Valley since 1918. PWD serves the City of Palmdale and approximately 187 square miles of land in northeastern Los Angeles County, including several non-contiguous areas of the Antelope Valley.[3]

Mixed residential uses within the project area include single family residences, and primarily two-story apartment complexes ranging in size and density with surface parking lots that face East Avenue Q and its cross streets. There are approximately 77 single family residential units within the project area, many of which are clustered on a single parcel. These single-family units are characterized by front-facing and front-loading garages at either the front of the building or in a detached structure at the back of the parcel. Single-family residential front setbacks range from approximately 25-60 feet on East Avenue Q. The project area contains approximately 376 multifamily residential units. The orientation of buildings and parking lots across multifamily structures varies, with smaller multifamily structures oriented facing East Avenue Q with front-loading parking lots, while larger multifamily structures feature several buildings oriented around the perimeter of a parcel with parking lots at the center.

Who uses East Avenue Q?

To better understand who is impacted by existing conditions along East Avenue Q, the Project Team analyzed the three project census tracts that compose the project area, focusing on demographics and the current environment for people walking, biking, taking transit, and driving along the corridor.

Demographics: Age and Income

One of the tenets of a complete street is that the street should function for people of all ages and abilities. This demographic analysis focuses on age, as young people and older adults may be less likely to drive alone or may be transit dependent. Another focus demographic was income, as lower income residents may also rely on walking, bicycling, and taking transit.

The project area's population skews toward younger age groups, especially in census tract 9101.1, where 40% of residents are 19 years or younger. Table 1 provides an age breakdown within the three groups to help analyze potential mobility barriers for younger children, young adults, and older adults. In all three census tracts reviewed, teenagers and young children constitute a significant share of the population. Youth are likely to use East Avenue Q to travel in the area, as there are multiple schools nearby, including Tamarisk Elementary School, Sierra Paloma High School, Palmdale Prep Academy and R Rex Parris High School.

The Project Team collected median annual household income data to analyze any potential mobility challenges that residents may experience due to income. Residents in the project area are lower-income when compared to the City's median annual household income – incomes in the project area's census tracts range from 29% to 69% of the City's median income of $60,428.

Table 1: Resident Age

Census Tract	Residents 19 years or younger	Residents 20-64 years	Residents 65 and older
9101.1	40%	55%	5%
9105.01	34%	59%	7%
9105.2	26%	69%	5%

Source: American Community Survey (2018)

Walking, Biking, and Taking Transit

The Project Team led a citywide survey and received 551 responses about how residents use East Avenue Q. Of these respondents, 51% walk on East Avenue Q a few times a year or more, 21% bike around the corridor a few times a year or more, and 18% take transit around the project area a few times a year or more. Pedestrian and bicyclist count data collected on a weekday during Spring 2021 also found a low number of people walking and bicycling along the project area.

3 History of PWD, (n.d.) Palmdale Water District. Retrieved from: https://www.palmdalewater.org/about-pwd/pwd-history/

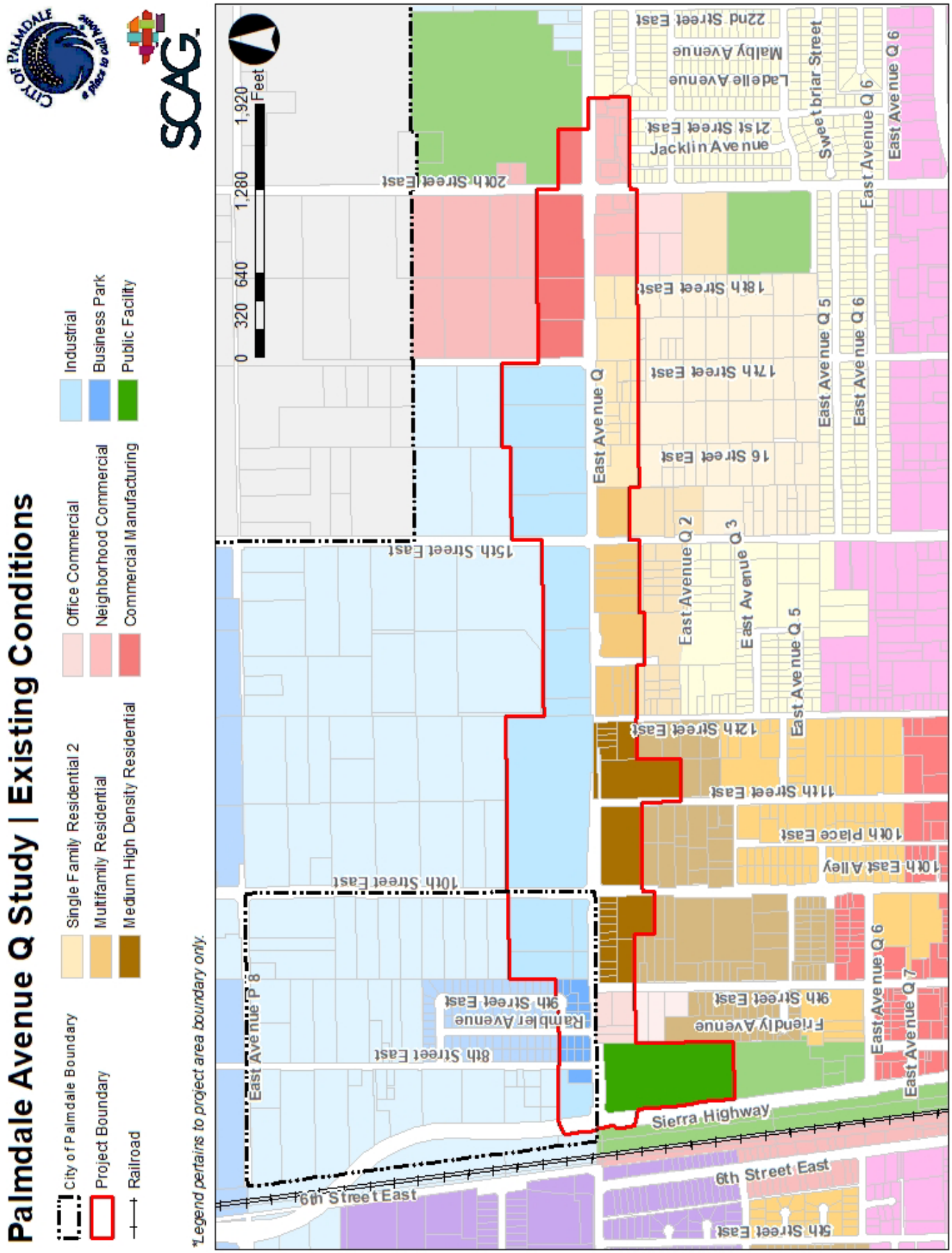


Figure 2: General Plan Land Use Designations

Future counts for the project area may help create a better understanding of who walks and bikes along East Avenue Q, and how walking and bicycling trips can increase once improvements are made. There are few transit riders today and recent service cuts to Antelope Valley Transit Authority (AVTA) lines along East Avenue Q have discouraged people to regularly take the bus.

Most workers within the project area's census tracts have access to at least one vehicle (see Table 2), indicating that many people impacted by the project may not be transit dependent. Young people and older adults, however, may be more dependent on non-automobile commuting and can benefit from balancing modes and improved transit service along East Avenue Q.

Table 2: Vehicles Available (Workers 16 years and over in households)

Census Tract	No vehicles	1 vehicle	2 vehicles	3 vehicles	4 vehicles	5 or more vehicles
Tract 9101.01 (664 total)	2.3% (15)	11.9% (79)	33.6% (223)	41.1% (273)	1.1% (7)	10.1% (67)
Tract 9105.01 (1467 total)	10.3% (151)	56.8% (833)	24.0% (352)	8.9% (131)	0.0% (0)	1.2% (17)
Tract 9105.02 (1547 total)	4.3% (66)	14.5% (224)	50.9% (788)	13.6% (210)	14.8% (229)	3.3% (51)
All tracts (3678 total)	6.3% (232)	30.9% (1136)	37.1% (1363)	16.7% (614)	6.4% (236)	3.7% (135)

Source: American Community Survey (2019)

Multimodal Volumes

Multimodal turning movement counts were collected at five East Avenue Q study intersections on March 4, 2021: Sierra Highway, 10th Street East, 12th Street East, 15th Street East, and 20th Street East. The counts included motor vehicles, pedestrians, and bicyclists and were completed during the AM and PM peak periods (7-9 AM, 4-6 PM). While East Avenue Q is a major arterial, volumes were relatively low, with the highest directional motor vehicle volumes never rising above 500 vehicles per hour. Pedestrian and bicycle volumes were also very low, with no intersection experiencing more than five total during a peak hour. Weather was also likely not a factor in walking and bicycling volumes as there was no precipitation that day with a high temperature of 67 degrees. Count data is summarized in Figure 3 and Figure 4.

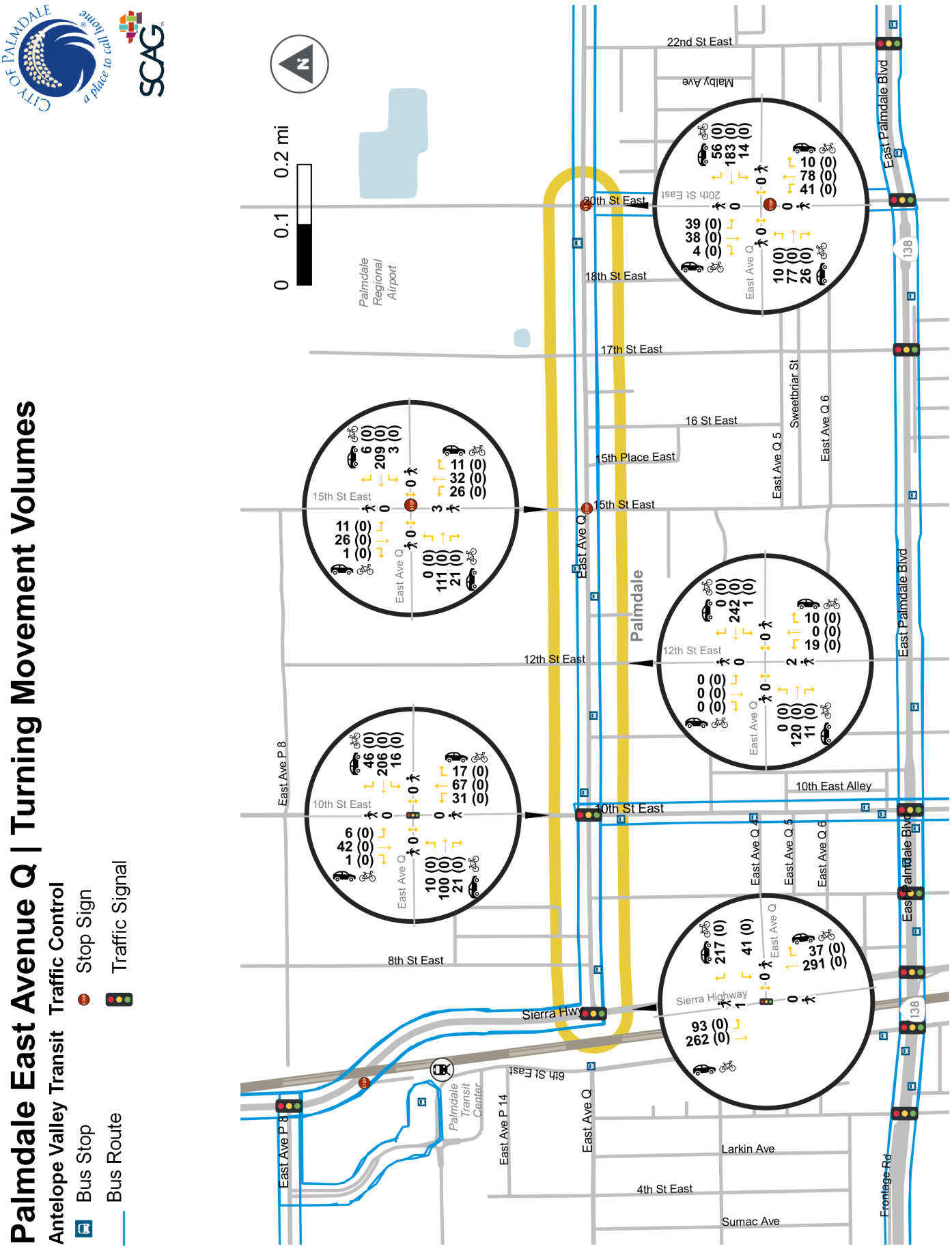


Figure 3: Study Intersection Turning Movement Volumes (AM Peak Hour) – Existing Conditions

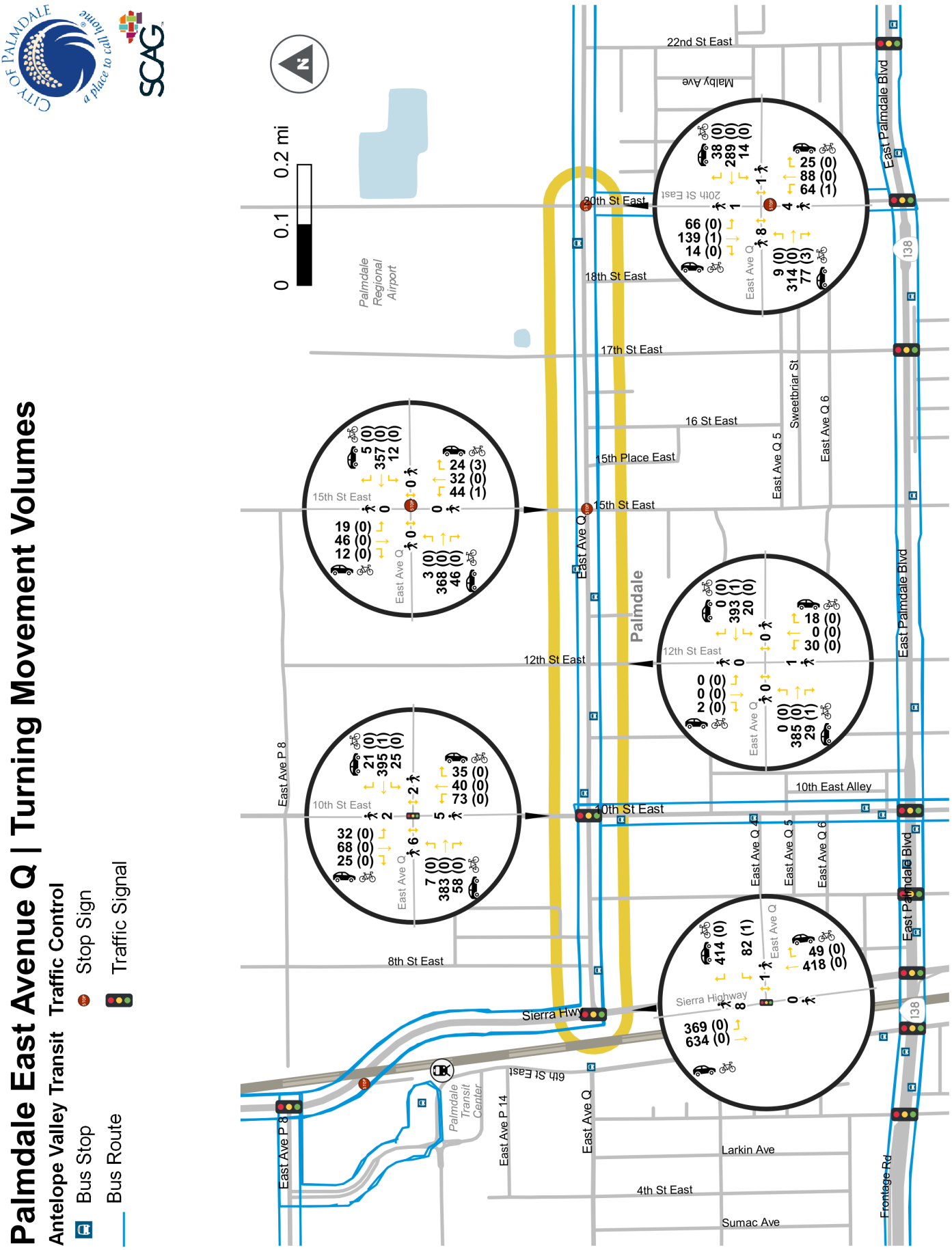


Figure 4: Study Intersection Turning Movement Volumes (PM Peak Hour) – Existing Conditions

Driving

Traffic Operations

A traffic operations analysis was conducted on East Avenue Q to document existing conditions through level of service (LOS)[4], delay (measured in seconds), and volume-to-capacity ratio (v/c)[5]. The analysis, completed in Synchro 10 software, included five signalized and unsignalized intersections on East Avenue Q between Sierra Highway and 20th Street East. Measured traffic operations conditions show very little delay during AM and PM peak hour conditions and suggest some current intersections are overbuilt and additional right- and left-turn lanes are not warranted. A summary of these findings is provided in Table 3.

Parking

Parking along the project area is primarily on-street, except for residential apartments that have assigned off-street parking and commercial locations with surface parking lots. Parking along East Avenue Q is illustrated in Figures 5, 6, and 7. On-street parking along East Avenue Q is underutilized, which is likely associated with the lack of developed parcels. As East Avenue Q develops with more housing and commercial destinations, the demand for parking will grow. Curbside parking is some of the most valuable space and regulating curbside use can help balance space for people who choose not to drive. This can include more dedicated space for expanded sidewalks, parkways, separated bicycle facilities, and dedicated transit stops. The curbside should also support new mobility services, such as passenger loading zones for ride hailing services (Lyft, Uber), and micromobility options like bike share and scooter share.

Table 3: East Avenue Q Traffic Operations Summary: Existing Conditions

Intersection	Time Period	LOS (Delay) [v/c]				
		NB	SB	EB	WB	Total
Sierra Hwy (Signalized)	AM	B (14.3) [0.39]	B (15.3) [0.35]	-	B (12.9) [0.28]	B (14.2) [0.34]
	PM	C (21.2) [0.47]	C (25.8) [0.72]	-	B (18.6) [0.52]	C (22.8) [0.71]
10th Street East (Signalized)	AM	C (26.4) [0.51]	C (24.9) [0.21]	B (16.9) [0.29]	B (16.4) [0.46]	B (19.2) [0.43]
	PM	D (42.2) [0.77]	C (32.8) [0.54]	C (21.8) [0.67]	B (20.0) [0.59]	C (25.9) [0.62]
12th Street East (Unsignalized)	AM	B (11.8) [0.08]	0.0	-	-	A (1.1) [-]
	PM	C (18.6) [0.17]	B (11.0) [0.01]	-	-	A (1.5) [-]
15th Street East (Unsignalized)	AM	A (8.9) [0.12]	A (8.7) [0.07]	A (8.4) [0.22]	B (10.8) [0.41]	A (9.5) [-]
	PM	B (11.3) [0.22]	B (11.0) [0.18	C (16.1) [0.70]	C (17.8) [0.64]	C (15.2) [-]
20th Street East (Unsignalized)	AM	A (8.6) [0.18]	A (8.6) [0.10]	A (8.9) [0.27]	B (11.0) [0.48]	A (9.7) [-]
	PM	B (10.9) [0.28]	B (12.7) [0.20]	E (39.2) [0.03]	C (21.2) [0.82]	C (24.7) [-]

4 LOS describes traffic conditions—the amount of traffic congestion—at an intersection or on a roadway. LOS ranges from A to F, with A indicating a condition of little or no congestion and F indicating a condition with severe congestion, unstable traffic flow, and stop-and-go conditions. For intersections, LOS is based on the average delay experienced by all traffic using the intersection during the busiest (peak) 15-minute period. LOS A through D are generally considered acceptable.

5 Volume-to-capacity ratio (v/c) represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. As the v/c approaches 1.0, traffic becomes unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected.

Palmdale East Avenue Q | Parking

Section 1: Sierra Highway to 10th St East

No Parking
Curb Parking
Unregulated Roadside Parking
Unregulated Roadside (Unoccupied)

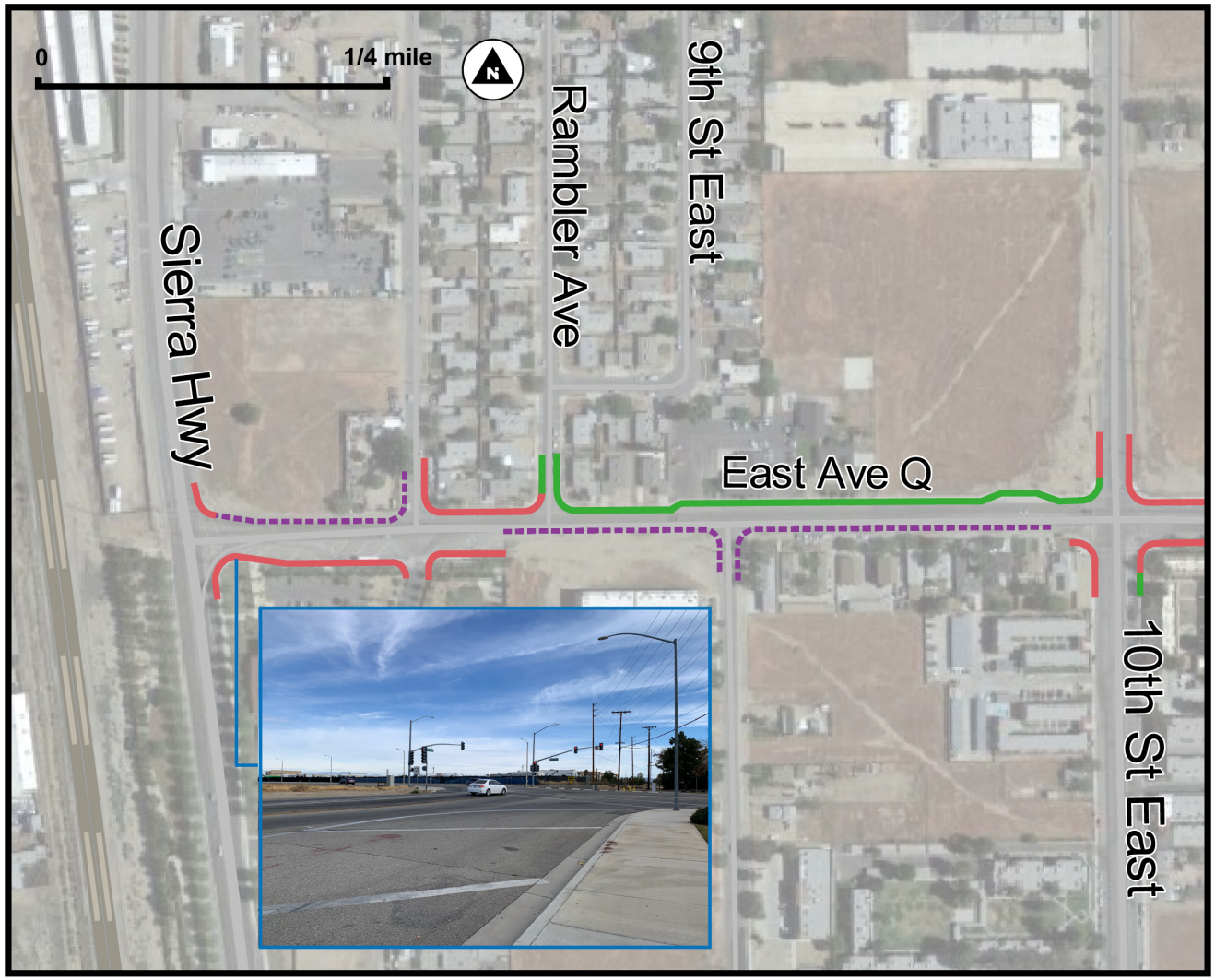


Figure 5: Parking from Sierra Highway to 10th Street East

Palmdale East Avenue Q | Parking

Section 2: 10th St East to 15th St East

No Parking
Curb Parking
Unregulated Roadside Parking
Unregulated Roadside (Unoccupied)

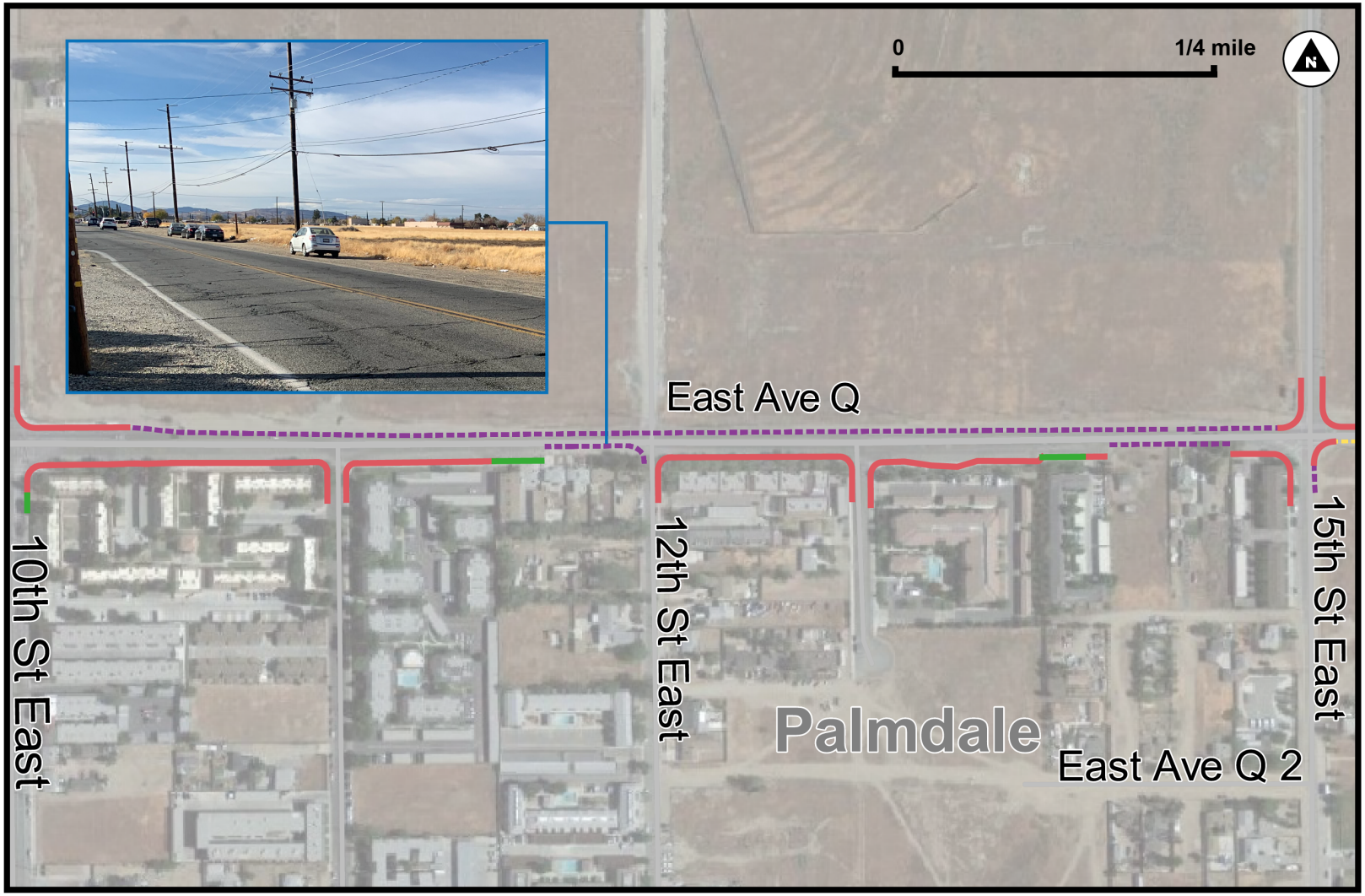


Figure 6: Parking from 10th Street East to 15th Street East

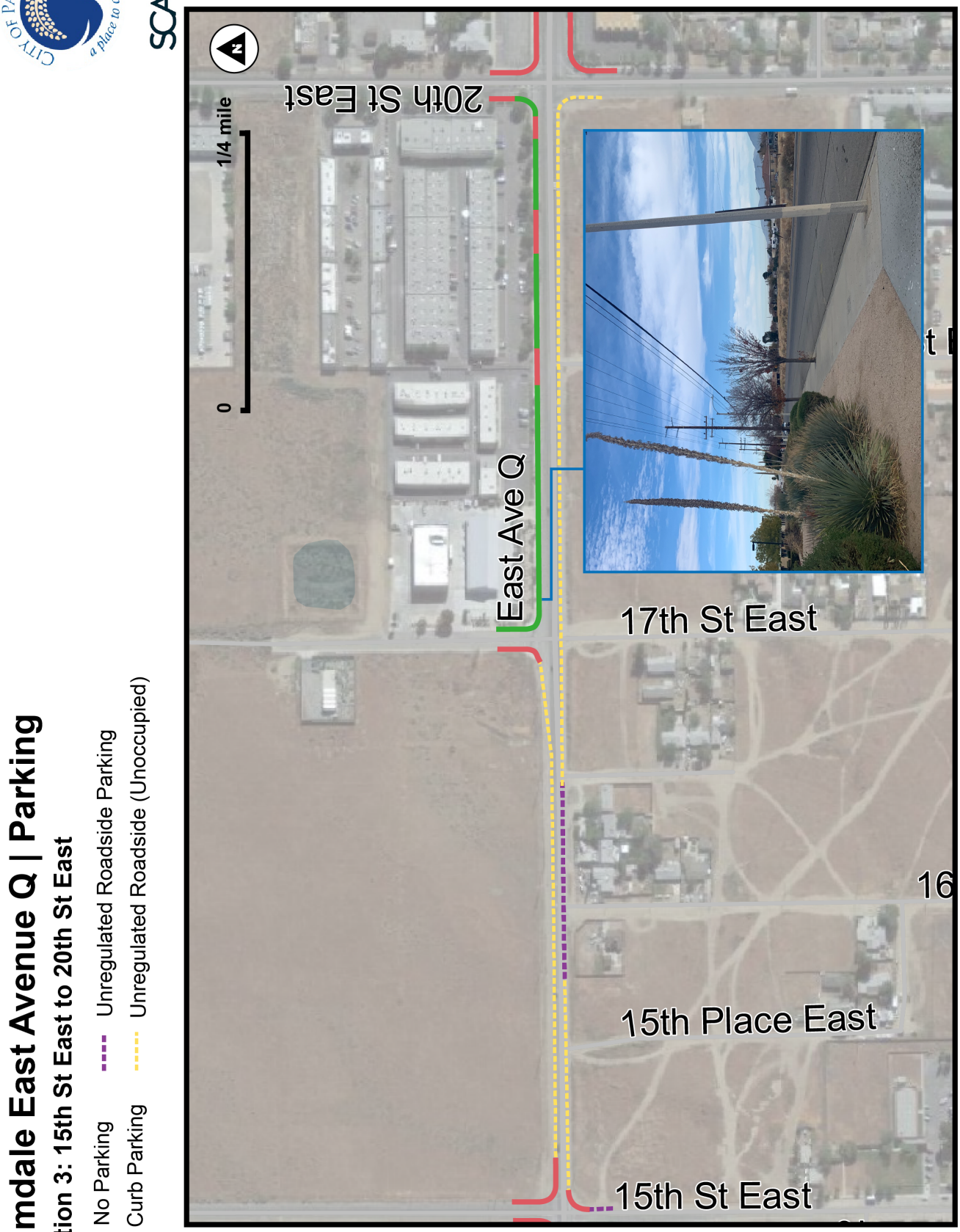


Figure 7: Parking from 15th Street East to 20th Street East

Connectivity

East Avenue Q provides a critical opportunity for improved connectivity in Palmdale – the corridor connects to or is in close proximity to important destinations like the Palmdale Transportation Center, schools, hospitals, and the future high-speed rail. East Avenue Q is also an alternate route to Palmdale Boulevard for access to CA Highway -14, Sierra Highway, and key regional destinations. A map showing the street, bicycle, and transit network, as well as traffic control devices, can be found in Figure 8.

Bicycle and Pedestrian Connectivity

The location of East Avenue Q positions it as an opportune connector for multimodal travel, but the existing conditions on the ground do not yet reflect its potential as a key connective corridor. There are no bicycle facilities along the project area, but the corridor intersects with the Doctor Robert C. St. Clair Parkway, a shared-use off-street path adjacent to Sierra Highway. Bike facilities are proposed for the entire project area, as well as 10th Street East (which intersects with East Avenue Q) as part of the City's Bicycle Master Plan. East Avenue Q has inconsistent sidewalks, with gaps throughout the project area that may discourage walking to nearby destinations or connecting to transit stops.

Transit Connectivity

The project area is near the Palmdale Transportation Center, which serves regional transportation needs and offers multiple transit services: AVTA and Santa Clarita Transit bus service, Amtrak bus service, Greyhound bus service, and Metrolink commuter rail service. East Avenue Q hosts several AVTA transit lines, but there are few people who primarily use transit to commute to work near the project area when compared to other modes.

The most prominent AVTA route along the project area is Route 98, which has six stops (three stops in each direction) and operates very limited hours. This line is a special circulator route for commuters between the Palmdale Transportation Center and Pete Knight High School, running in the eastbound direction during weekday mornings and westbound in the afternoon. Boarding data from January 1, 2019 to January 31, 2020 shows low ridership, with the highest-use stop along the project area being the eastbound 11th Street East stop (55 boardings for the year), and westbound 10th Street East stop (46 alightings for the calendar year). Route 98 was not in operation when students were not in school during the COVID-19 pandemic, but service restarted once students started attending school in person.

Route 3 and 51 also travel on East Avenue Q, but only from Sierra Highway to 10th Street East, with one stop on each side of the roadway. For the same time period per stop boardings ranged from 1,569 to 2,438 and alightings ranged from 1,161 to 2,049. Route 3 operates with a frequency of 30 minutes on weekdays and 60 minutes on weekends, while Route 51 operates approximately every two hours weekdays and weekends. More frequent east-west service in the area operates a half mile to the south on Palmdale Boulevard where Route 1 operates with a 15- to 60-minute frequency depending on time of day and week.

Motor Vehicle Connectivity

East Avenue Q is a major arterial in the City's functional classification system, an autocentric grouping of streets based on connections to other street types and services they provide. Higher order facilities like arterials generally carry higher volumes of traffic and have direct connections to limited access highways like Sierra Highway while also connecting to areas of regional importance. While current volumes on East Avenue Q are relatively low, they may grow significantly as development occurs in the project area.

Motor vehicle connectivity on Avenue Q is continuous from Sierra Highway to 42nd Street East, but is bisected by the rail lines near the project area. Today, anyone living along East Avenue Q east of Sierra Highway would need to travel a roundabout path of at least a mile to reach the Palmdale Transportation Center or R. Rex Parris High School. Better connections would improve overall roadway connectivity and potentially increase multimodal use of the corridor east of Sierra Highway.

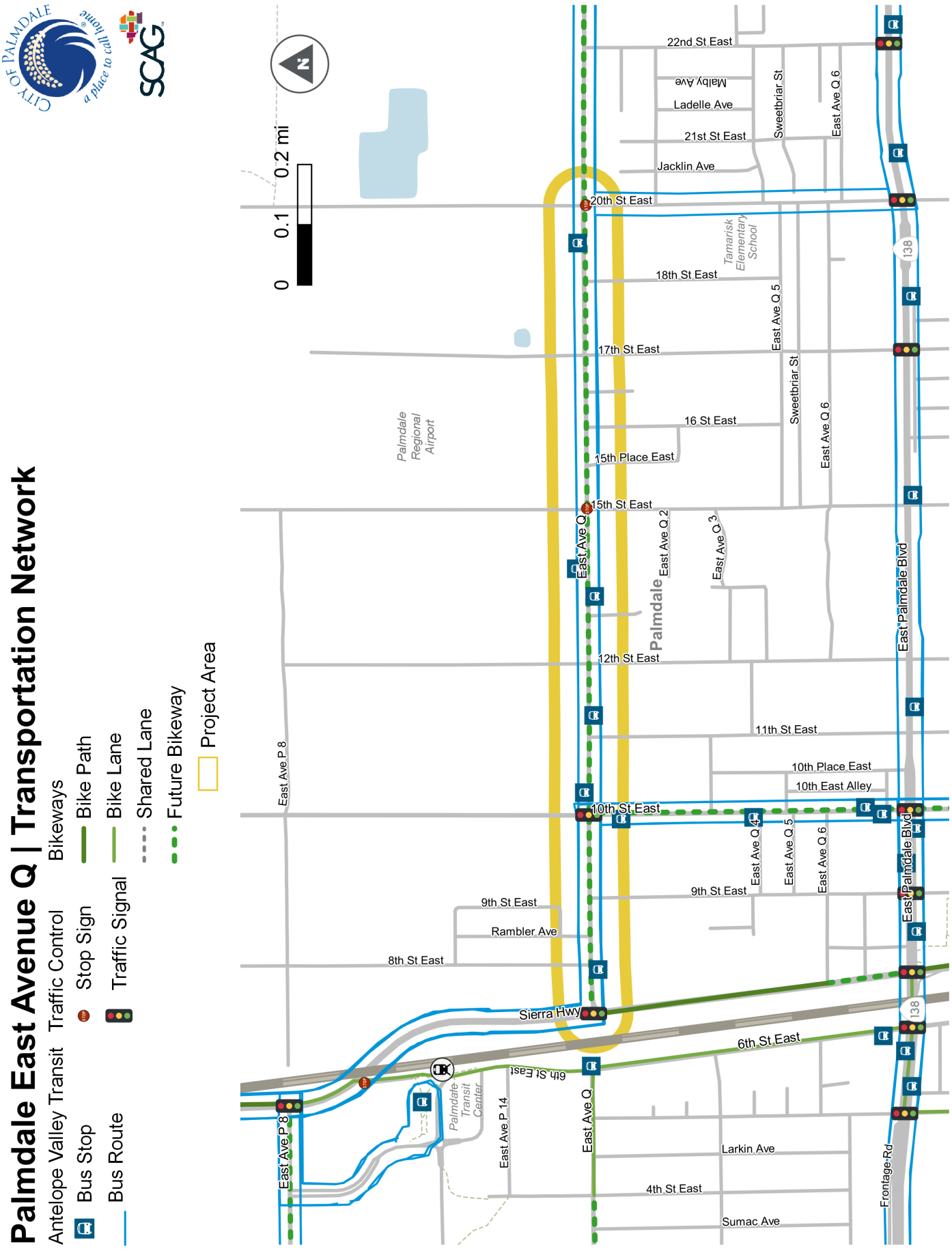


Figure 8: Project Area Transportation Network

Safety and Comfort on East Avenue Q

The Project Team's investigation of safety and comfort focused on pedestrian and bicyclist separation from moving vehicles, safety at crosswalks, and comfort from the natural elements of the high-desert.

Collision History and Areas of Conflict

From 2015 to 2019, there were 12 collisions within the project area. Eleven of the 12 collisions did not involve bicyclists or pedestrians – the one collision involving a pedestrian at the intersection of East Avenue Q and Sierra Highway resulted in a severe injury. Reviewing collision history is one approach to understanding street safety, but a more proactive approach looks at the systemic factors that may cause conflicts in the future. This may include long distances between marked crosswalks, high posted speed limits, permissive turning movements, and low visibility for people driving. Along the corridor, there are multiple potential conflict zones between drivers and people walking and bicycling. Table 4 details the locations and potential conflicts within the project area.

Table 4: Potential Areas of Conflict along East Avenue Q

Location	Description of Conflict
Intersection of Sierra Highway and East Avenue Q	The missing south crosswalk leg at this intersection limits direct connection to the existing dirt trail.
Intersection of 10th St East and East Avenue Q	This intersection has protected left turns and signal phasing for pedestrians, but there is a potential conflict between drivers making eastbound right turns from Avenue Q onto 10th Street East. The geometry at the southwest corner of the intersection is not well defined today.
Intersection of 15th St East and East Avenue Q	In addition to a long east-west crossing distance across 15th Street East, this intersection's complex roadway geometry is unpredictable for all modes and can cause conflicts between drivers, pedestrians, and bicyclists.
Intersection of 17th St East and East Avenue Q	The lack of traffic control devices at this uncontrolled intersection creates potential conflicts between drivers and people walking or biking.
Intersection of 20th St East and East Avenue Q	This 4-way stop controlled intersection does not have marked crosswalks, which impacts pedestrian visibility and presence.
Along East Avenue Q	Large spacing between marked crosswalks and high posted speed limits create a street that encourages speeding. Paired with low levels of street lighting, this can be a significant safety issue at night.

Pedestrian Crossing Assessment

Today, there are very few marked crosswalks along East Avenue Q, and the distances between existing marked crosswalks are more than a quarter mile (Table 5). Studies show that people are more likely to cross at an intersection with a traffic signal or a pedestrian signal head (Walk/Don't Walk signs). People are also more likely to cross at any location with a marked crosswalk than at those without.[6]

Although existing low traffic volumes and undeveloped land use may justify the current infrequency of marked crossings, a complete street must allow people walking the opportunity to safely cross East Avenue Q, particularly at intersections and along travel desire lines. The National Association of City Transportation Officials (NACTO) recommends marked crossings at 200-foot intervals for dense city areas. Examining the context of East Avenue Q, a marked crossing at every major intersection is approximately 650-foot spacing, which would offer more frequent crossing opportunities for people walking.

Table 5: Existing Marked Crosswalks along East Avenue Q

Intersections (from – to)		Distance (ft)
Sierra Hwy	10th Street East	1,635
10th Street East	15th Street East	2,595

6 NCHRP Report 562: Improving Pedestrian Safety at Unsignalized Crossings. https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf

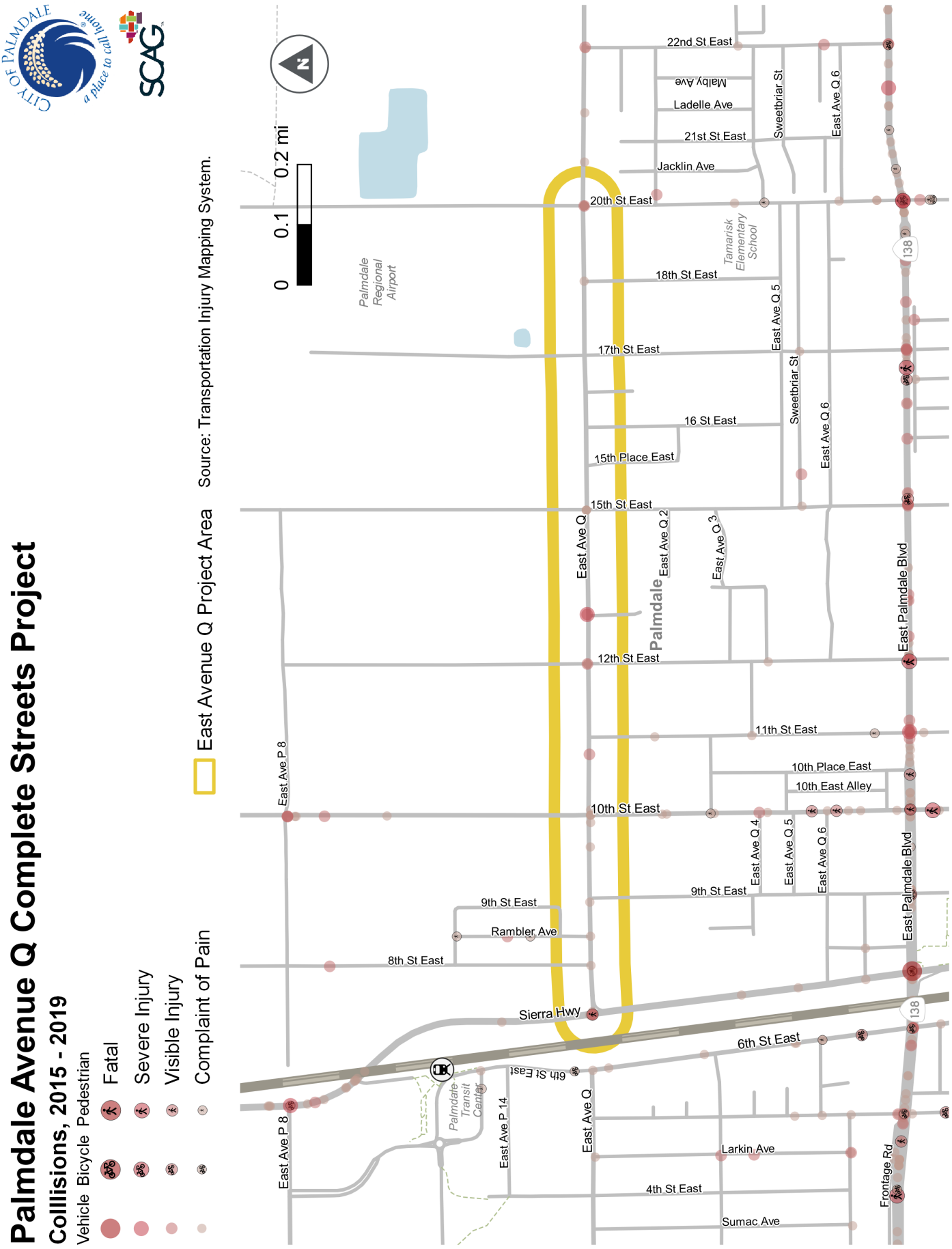


Figure 9: Roadway Collisions (2015-2019)

Bicycling Level of Traffic Stress (LTS)

The Project Team conducted a Level of Traffic Stress (LTS) assessment for people bicycling around the project area to identify the stress of street networks for bicycling based on built-environment, speed, and volume characteristics (Figure 10). The methodology used by the planning team is adapted from criteria published by the Mineta Transportation Institute (MTI).[7] The LTS analysis scores streets on a scale from 1 to 4 as follows:

- **LTS 1**: Strong separation from all except low speed, low volume traffic. Simple crossings. Suitable for children.
- **LTS 2**: Except in low speed / low volume traffic situations, cyclists have their own place to ride that keeps them from having to interact with traffic except at formal crossings. Physical separation from higher speed and multilane traffic. Crossings that are easy for an adult to negotiate. Corresponds to design criteria for Dutch bicycle route facilities. A level of traffic stress that most adults can tolerate, particularly those sometimes classified as "interested but concerned."
- **LTS 3**: Involves interaction with moderate speed or multilane traffic, or close proximity to higher speed traffic. A level of traffic stress acceptable to those classified as "enthused and confident."
- **LTS 4**: Involves interaction with higher speed traffic or close proximity to high-speed traffic. A level of stress acceptable only to those classified as "strong and fearless."

The LTS analysis (Figure 11) found that East Avenue Q is a high-stress corridor for people walking and bicycling today. The street has a varying profile but high posted speed limits for a segment that only has one travel lane in each direction. The absence of continuous sidewalks also contributes to the high stress nature of the street, though missing sidewalks were not a factor incorporated into the LTS analysis. Today, residents may not feel comfortable bicycling beyond the limits of their immediate neighborhood because it is hemmed in by larger, high-stress streets like Sierra Highway, 10th Street East, 15th Street East, 20th Street East, and East Palmdale Boulevard, or cut off from the adjacent neighborhood by a high-stress crossing of a major street.

Figure 10 illustrates how different types of riders are comfortable with different types of bicycle facilities. Shared use paths are more comfortable and less stressful for children, while shared roadways may only encourage advanced bicyclists. In general, collector and arterial streets with bicycle facilities are less stressful than those without, but many streets with bicycle facilities can still be high stress due to higher vehicular speeds and volumes. Bicycle facility planning and design thinking over the past decades has not included consideration of riders who may feel uncomfortable in these situations. East Avenue Q has the opportunity to serve as a low stress east-west connection and create a more comfortable way to connect neighborhoods to services.

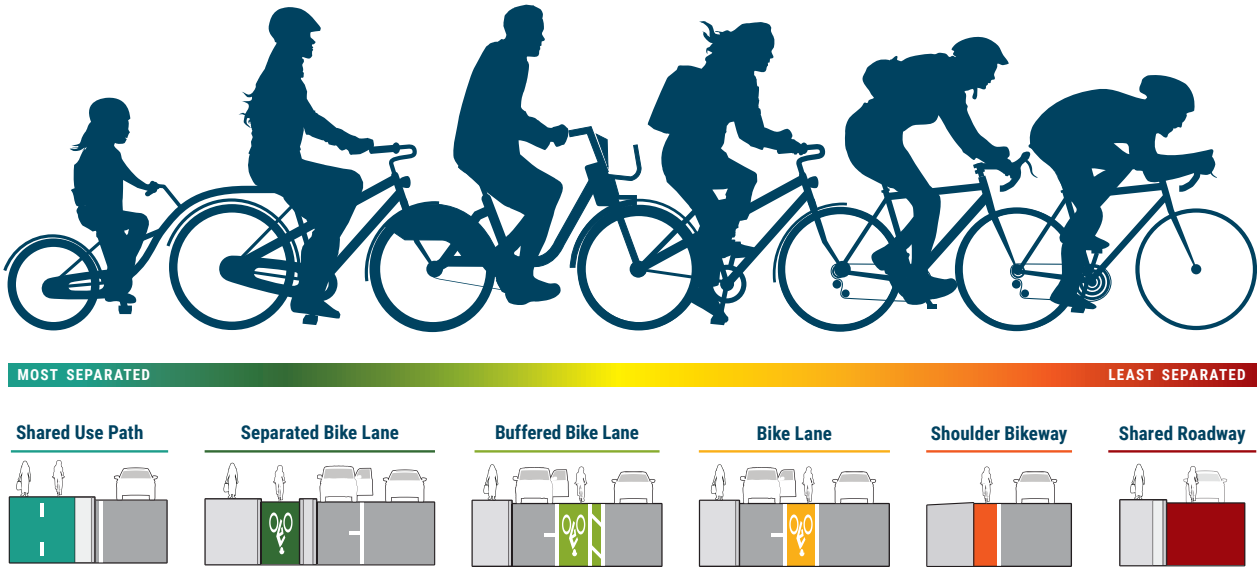


Figure 10: Bicycle Facilities Continuum Chart

7 Low Stress Bicycling and Network Connectivity. https://transweb.sjsu.edu/sites/default/files/1005-low-stress-bicycling-network-connectivity.pdf

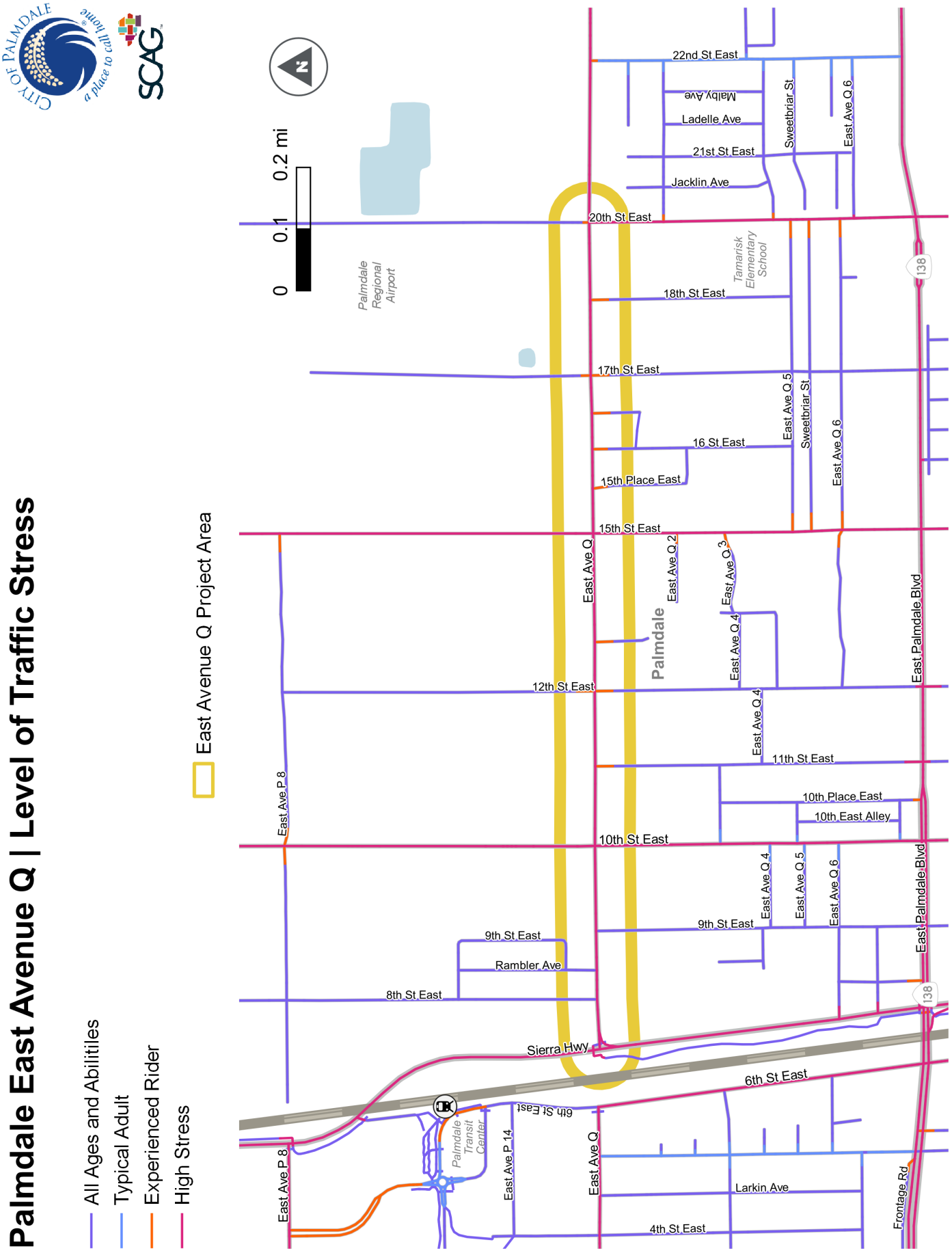


Figure 11: Level of Traffic Stress – Existing Conditions

Transit Facilities

Six AVTA bus stops are located along East Avenue Q. Most bus stops on the corridor have accompanying facilities like seating and a shelter, which offers refuge from the heat and rain. Some, however, lack these amenities, creating an uncomfortable waiting environment for transit riders. One bus stop location (the westbound Line 98 stop at 10th Street East) has a cut out for buses to pull into, complete with a concrete pad. This cut out is located at the far side of the intersection, although the actual bus zone is located at the nearside of the intersection (east of 10th Street East) within a dedicated right turn lane.



Example of a bus stop on East Avenue Q that lacks amenities like shade and seating

Shade Analysis

The city's high-desert climate warrants special focus on shade elements to enhance the thermal comfort of people walking, biking, and taking transit. The full corridor was organized into three distinct sections for the shade analysis – see Appendix A for all shade exhibits.

As typical for most California geographies, the northern section of the corridor is mostly exposed to direct sunlight and lacks sufficient shade. This largely undeveloped part of the corridor lacks sidewalk facilities and mature canopy trees, making it a prime area for shade investment as the area experiences new development. The northwestern portion of East Avenue Q between Sierra Highway and 10th Street East, with the single-family units, has no street trees and therefore lacks sufficient shade throughout the year. The south side of East Avenue Q from 9th Street East to 12th Street East lacks sufficient shade during hotter months due to inconsistent tree spacing. The south side of the corridor from 12th Street East to 15th Street East provides sufficient shade throughout the year because mature canopy trees have been planted within eight feet of the back of the sidewalk. The north side of East Avenue Q between 15th Street East and 20th Street East (where the commercial development adjacent to 20th Street East is located) provides pockets of sufficient shade; one of which includes a bus stop with a shade structure. While the tree spacing in this section is seemingly inconsistent, additional tree wells along the sidewalk create shade coverage that encompasses the entire sidewalk in specific pockets, one of which includes a bus stop without a shelter.

Two bus stops out of the six along the corridor are completely exposed and lack any shade from canopy trees or shade structures. The first stop sits on the south side of the East Avenue Q between 11th Street East and 12th Street East, and the second is on the north side of East Avenue Q between Orchid View Place and 15th Street East. The remaining four bus stops are in areas that maintain sufficient shade throughout the year due to the presence of shelters and densely planted canopy trees.

Engagement and Outreach

3





Chapter 3. Engagement and Outreach

Community outreach and engagement were critical parts of the entire planning process. Overall, the goal of the community engagement for this project was to leverage a transparent and inclusive set of outreach activities that provide ample opportunities for meaningful engagement from the City's diverse community. The intention was to foster a sense of participation, contribution, and ownership among local corridor residents and business owners, as well as the larger Palmdale community.

Outreach and Engagement Strategies

A wide variety of outreach and engagement strategies were used to work toward the project's engagement goals, with the hope of minimizing barriers to participation and inviting the broadest possible community input.

The first round of community engagement began in Spring 2021 and focused on gathering input on the community's experiences within the project area, understanding current perceptions of the corridor's existing conditions, and identifying future opportunities and the types of improvements that community members would like to see. Community input was collected and used to develop draft concepts. The second round of public engagement began in the Summer of 2021, when draft concept alternatives for East Avenue Q were shared with the public for final input and confirmation.

Public input contributed to defining a shared vision for the corridor and a better understanding of future transportation uses and needs. Outreach activities to gather community feedback were conducted in both project phases and virtual activities were supplemented with tactics designed to reach people without internet or computer access. These activities included:

- Three Technical Working Group meetings
- One project survey
- Two virtual workshops with Q&A
- Two pop-up events (in-person)
- Youth outreach (one interview)

COVID-19 Approach

In alignment with public health guidelines for in-person gatherings, the Project Team implemented 100% virtual public meetings. This format achieved attendance numbers that perhaps may not have been reached using traditional in-person methods. To promote participation in the project from those who had limited internet or computer access, socially distanced in-person pop-ups were hosted in or near the project area to meet people using the corridor and solicit their feedback.

Promotion and Notification

The Project Team designed a notification process that aimed to reach all levels of stakeholders, including non-English speakers. Spanish translation and interpretation were provided for all project materials and at both public workshops. The project's database of 1,400+ contacts (City officials/staff, major employers, academic institutions, business associations, and community groups) was a key resource for disseminating project information and encouraging participation.

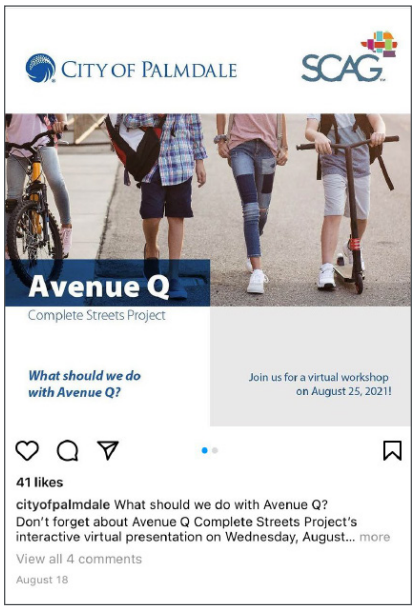


Figure 12: Instagram Post

Promotion and notification materials and distribution methods are detailed in Table 6, and examples of promotional materials can be seen in Figures 12, 13, and 14.

Table 6: Promotion and Notification Materials and Distribution Methods

Notification type	Materials and Distribution Methods
Print notification	• **Flyers and posters:** Distributed at Palmdale Transportation Center, Marie Kerr Center, Palmdale City Library, Palmdale Community Resource Center, City Hall, Palmdale Sheriff's Station, Legacy Commons, Palmdale School District, South Antelope Valley Emergency Services, Yucca House Community Garden, Domenic Massari Park, Hispanic Chamber of Commerce, Palmdale Water District, and other key business and high-traffic areas along Avenue Q • **Postcards:** Mailed to 2000+ addresses within a ¼ mile of the project corridor
Digital notification	• **Social media campaign:** 8 Facebook and Twitter posts with almost 20,000 impressions • **Geofenced online advertisements:** Targeted online ads with over 250,000 impressions • **Press releases:** Antelope Valley Press and Antelope Valley Times • **Palmdale Connections newsletters** • **Weekly eblasts** • **Electronic billboard advertisements** • **Palmdale Minute video segment** • **Extended outreach toolkit:** A resource for 83 stakeholders and Technical Working Group members that contained copy-ready text, graphics, and links with details about upcoming engagement opportunities

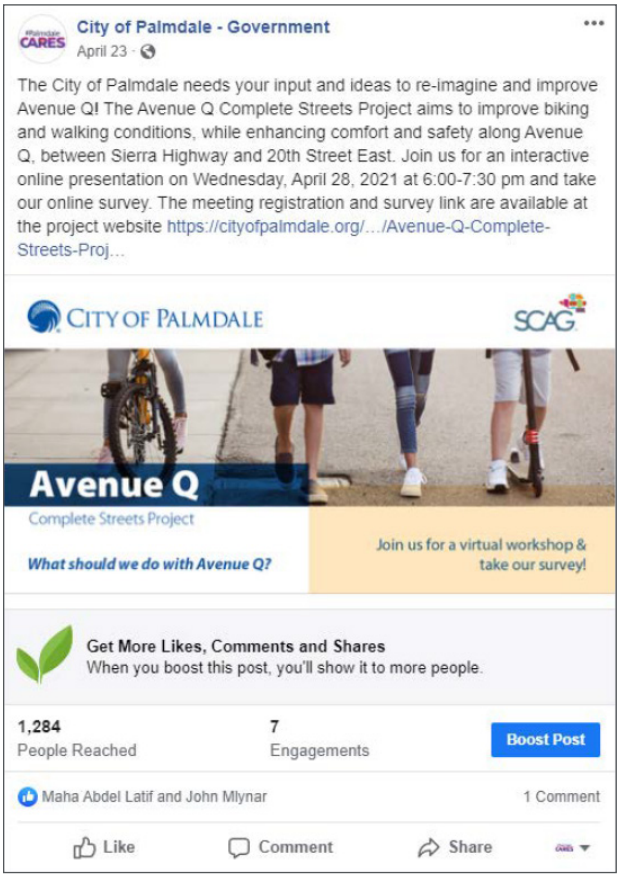


Figure 13: Facebook Post



Figure 14: Postcard Mailer (back and front)

Technical Working Group Meetings

The Project Team convened an 18-person Technical Working Group (TWG) made up of representatives from local and regional organizations, Los Angeles County staff, and City of Palmdale staff. The TWG's role was to review and provide feedback on key findings and recommendations throughout the life of the project, and the group met three times.

- **April 2021:** The Project Team presented an overview of the project and described key findings from the existing conditions analysis. Feedback from the TWG included the importance of connectivity for bike and pedestrian networks, the need for improvements to support all ages and abilities, and a desire for improved landscaping and lighting.
- **July 2021:** The Project Team gave an update on public input and presented multiple draft cross-section options for East Avenue Q. TWG feedback (see Figure 15) included support for one-way bike lanes and concern over having enough space for bike and pedestrian facilities to shift where the right-of-way was limited.
- **October 2021:** The Project Team provided an engagement summary and presented the preferred design alternative as well as new crossing locations. TWG feedback included support for a two-lane cross section, sidewalk-level bike lanes, and pedestrian-scale lighting.

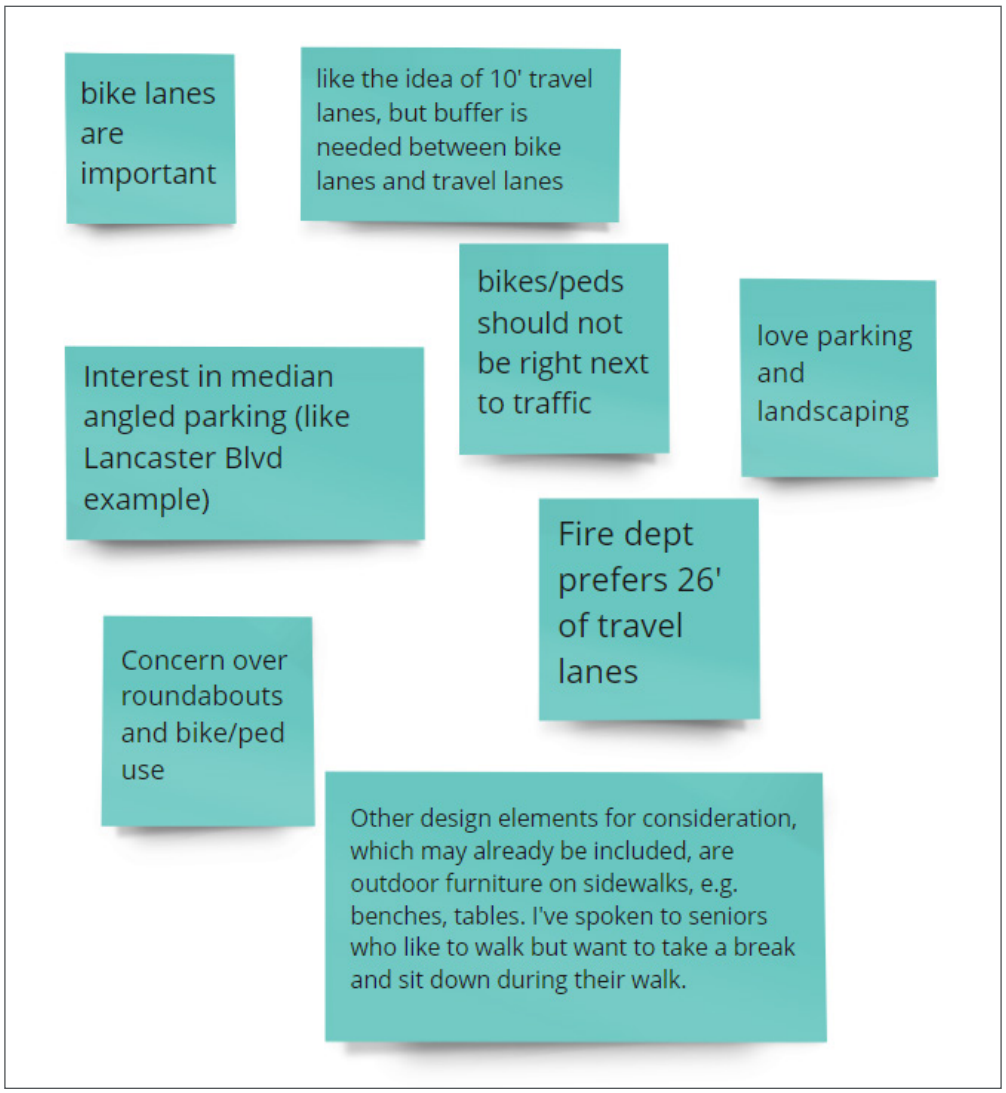


Figure 15: Feedback from a TWG meeting captured in Miro (a virtual presentation/whiteboard tool)

Project Survey

A bilingual online survey was available from March 29, 2021, to May 9, 2021. The survey asked respondents for input on how they use the corridor, concerns, priorities for improvements, and overall vision for active transportation and a complete street on East Avenue Q. 551 people responded to the survey.

Active modes are rarely used along the corridor – only 12.9% of survey respondents walk on or near East Avenue Q at least once or twice a week, and 78.5% stated they never ride their bikes on the corridor. Transit use was also low among respondents – 81.8% never take public transit on East Avenue Q. In comparison, around a quarter of respondents drive daily on East Avenue Q, while almost a third drive the corridor at least once or twice a week. These responses highlight the current car-oriented streetscape along the corridor, which creates a uninviting environment for people walking, biking, or taking transit.

The amenities/improvements survey respondents wanted to see most on East Avenue Q were lighting (66.2%), continuous sidewalks (61.7%), and improved pavement quality (55.3%). Primary concerns for travel along the corridor included maintenance for vandalism, trash dumping, and potholes (54.3%), missing sidewalks or crosswalks (51.9%), and an unsafe environment for walking (50.6%).

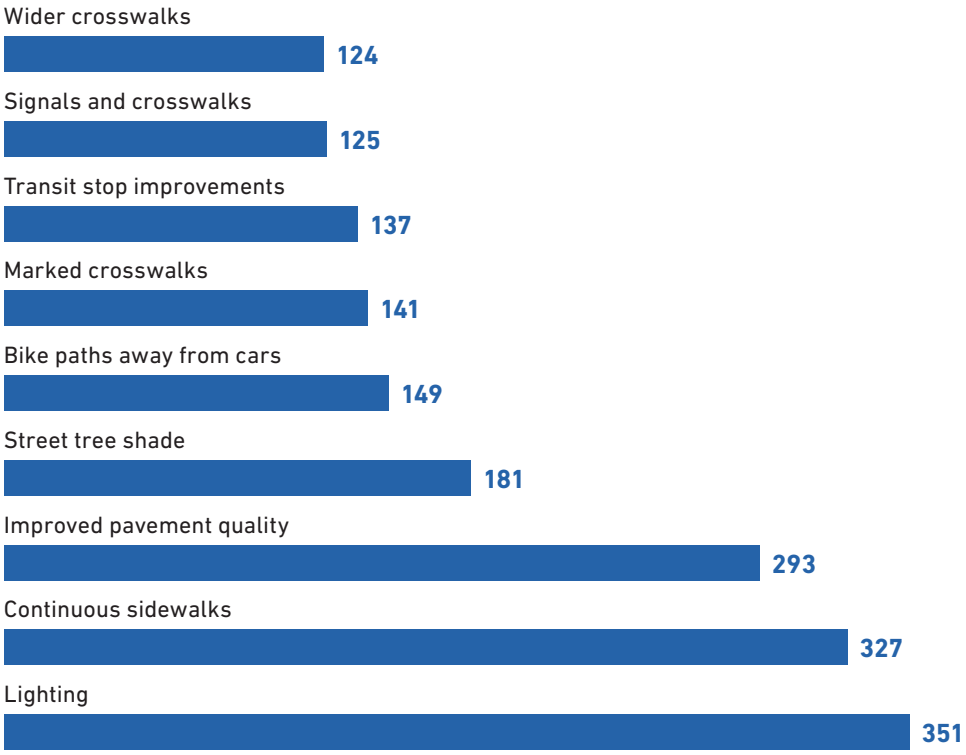


Figure 16: Survey results for desired improvements along East Avenue Q

Virtual Workshops

Due to COVID-19, both workshops were conducted virtually using Zoom with live Spanish interpretation provided. During the workshop, materials were shared using Miro, a virtual whiteboard/presentation tool that allows for live note-taking and annotation of concepts and diagrams, as well as additional collaborative features that allow participants to see their feedback captured in real-time.

Workshop #1

The first virtual workshop was held on May 28, 2021, from 6-8pm, with 24 people in attendance. The Project Team presented a project overview, shared existing conditions findings, and identified opportunities for enhancements along the corridor. During polls conducted throughout the workshop, 83% of attendees stated they neither walk nor bike along East Avenue Q, and 89% “strongly agreed”

that the corridor needs improvements. All attendees either "somewhat agreed" or "strongly agreed" with the opportunities for East Avenue Q identified by the Project Team, which included continuous sidewalks, more crossing options, continuous bike lanes, better connections for bicyclists, consistent shade, and better bus stop amenities.

Workshop #2

The second virtual workshop was held on August 25, 2021, from 6pm-7:30pm, with 36 people in attendance. The Project Team shared an overview of the project, a summary of public input gathered so far, and three draft concepts for East Avenue Q.



Figure 17: Sample slide from Workshop #1 presentation

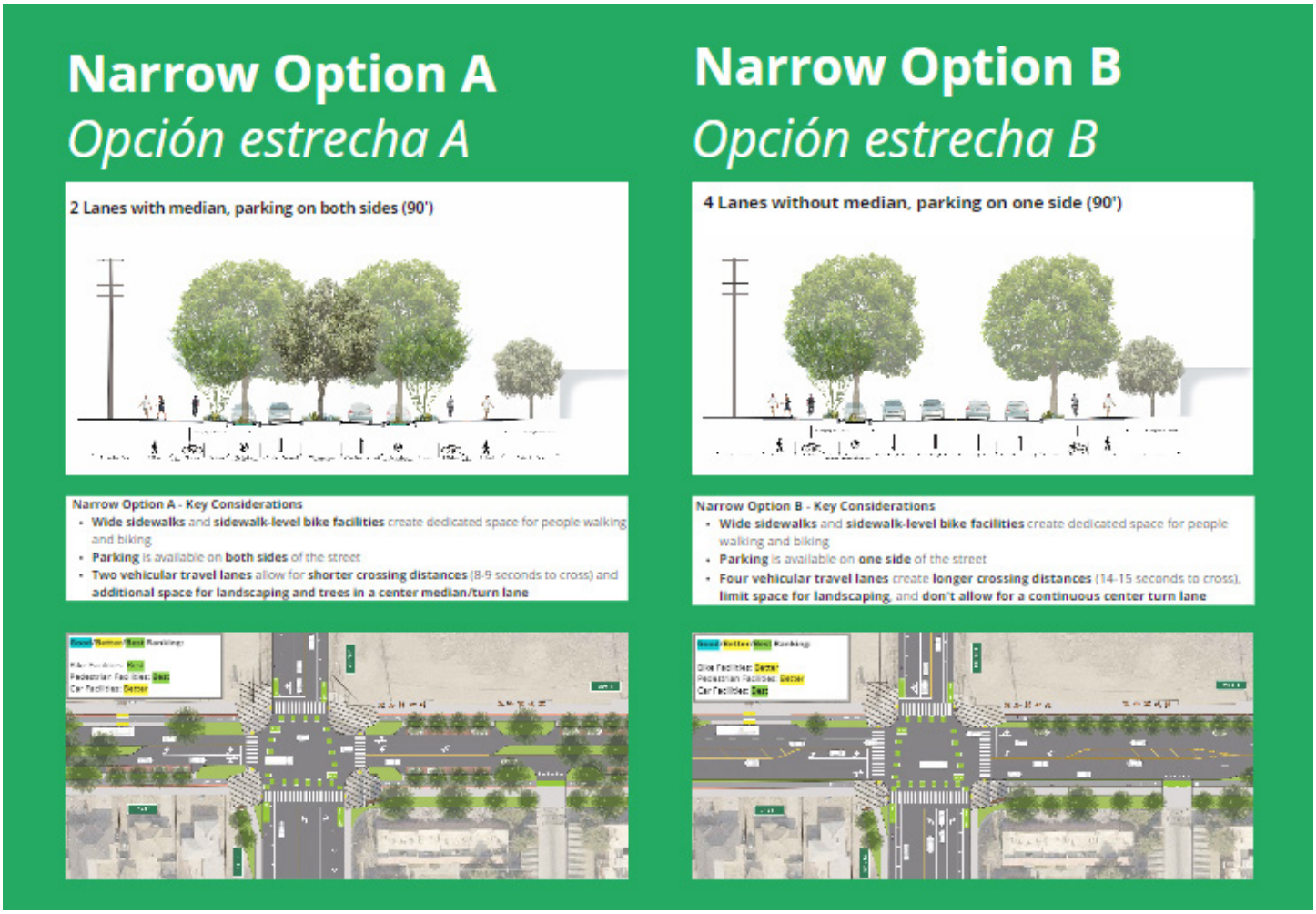


Figure 18: Two "narrow" draft options presented in Workshop #2 in Miro

During polls conducted throughout the workshop, attendees stated their most important complete streets elements for East Avenue Q were safe crossing opportunities; new, wide sidewalks; and landscaping and tree canopy. All attendees who responded to a poll on bike facility types preferred sidewalk-level bike lanes to on-street bike lanes along the corridor, and all respondents also agreed that they would be willing to spend a little more time while driving on East Avenue Q to ensure a safer environment for people walking and biking. Feedback on the draft concepts included enthusiasm for public seating, crosswalks, and landscaping/trees. Attendees supported a design option with wider sidewalks and no more than two vehicular travel lanes (one in each direction), stating that additional travel lanes (as depicted in Figure 19) would encourage dangerous speeds.



Figure 19: A "wider" draft option presented in Workshop #2 in Miro

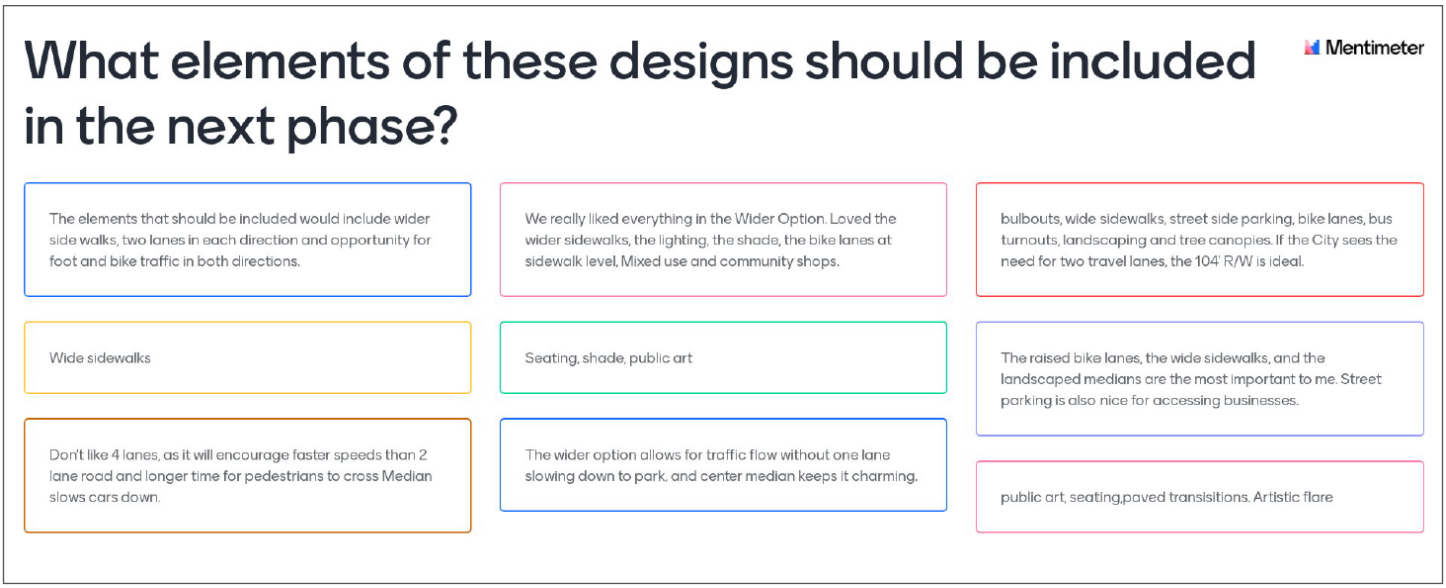


Figure 20: Workshop #2 poll responses

Pop-Up Tabling

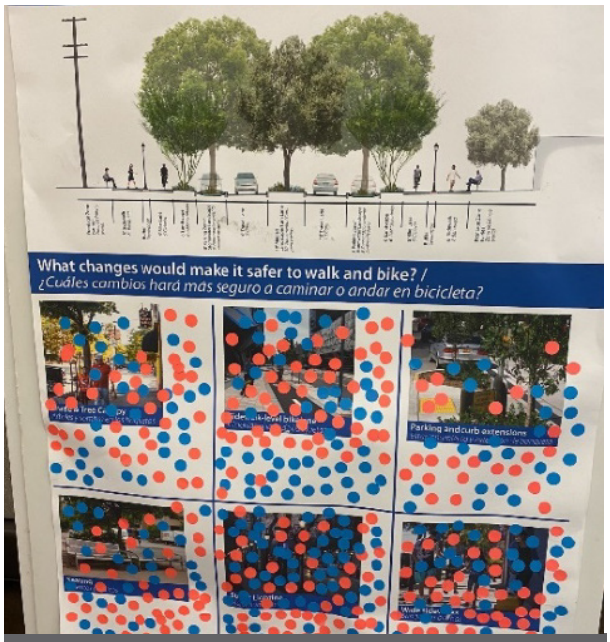
Two pop-up events were held in August 2021 (one at Palmdale Transit Center and one at the Palmdale Community Resource Center) to further promote the project and encourage feedback. Participants were asked to review potential improvements and choose their top improvements. Over 300 people participated in the pop-up events, and the top two selected improvements at both events were sidewalk level bike lanes and street lighting.



Pop-up event at Palmdale Transit Center

Youth Outreach

To gain feedback from youth stakeholders in the project area, the Project Team conducted an interview in August 2021 with members of Antelope Valley Youth Build, a program that serves learners aged 16-29 years old. Five Antelope Valley Youth Build members participated in a 45-minute interview. They described their experiences traveling on East Avenue Q as "fast and reckless" due to the lack of sidewalks and bike lanes and stated that walking and biking on the corridor felt unsafe and uncomfortable because of high driver speeds. Interviewee feedback on draft concepts was divided – some interviewees preferred a wider option with four lanes of traffic since people are "used to driving fast", while others preferred a narrower two-lane option to calm traffic, reduce driver racing, and allow people to slow down and "appreciate small businesses."



Feedback from pop-up event at Palmdale Community Resource Center

What We Heard

Community members who participated in the project's outreach activities provided broad and detailed information about their needs and concerns while traveling on East Avenue Q. The following key themes came up most frequently in public feedback received about the project:



The current lack of pedestrian and bicycle infrastructure creates a harsh and uncomfortable walking and biking environment. Sidewalk gaps, unmarked crossings, and a lack of bikeways were highlighted in feedback across all outreach activities. Many participants in the outreach activities were infrequent walkers, bicyclists, and transit riders along the corridor. This is likely due to the current conditions of East Avenue Q, which is more vehicle-oriented.



Dangerous driver behavior is an issue. Speeding and racing were brought up in workshops and in the AV Youth Build interview as factors that contribute to a dangerous environment along East Avenue Q. Traffic calming elements like medians could help address speeding issues, an idea that was supported by workshop attendees. Community members also generally supported a two-lane design for East Avenue Q (opposed to a four-lane concept) due to concerns about speeding and safety. There was also a willingness to sacrifice driving convenience for pedestrian and bicyclist safety -- all Workshop #1 attendees stated they were willing to spend a little more time driving along East Avenue Q in order to make conditions safer for people walking and biking.



High-quality bike facilities are needed along the corridor. East Avenue Q is a high-stress street for people riding bikes – current speed limits range from 40-50 miles per hour along the corridor. There was enthusiastic public input around adding bike facilities to the street, and huge support for a sidewalk-level bike lane (at pop-up events and in workshops) that would separate people riding bikes from people driving cars.



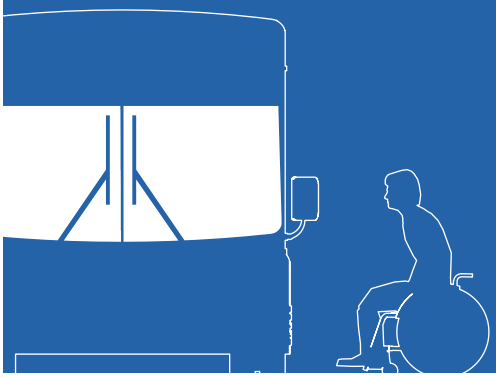
Improved landscaping and lighting would vastly upgrade the walking experience on East Avenue Q. The high desert conditions along the corridor can be hot and uncomfortable in the summer and adding trees or other shade-providing structures would mitigate the impacts of walking in hot weather. Community members pointed out the lack of lighting along the corridor, and street lighting was the most popular improvement recorded at the pop-up events.

Community feedback was incorporated throughout the planning process, helping shape the Project Team's existing analysis, draft design concepts, and final recommended design alternative.

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Recommendations

4



4. Recommendations

The following project recommendations for East Avenue Q focus on street improvements that improve conditions for people walking, biking, taking transit, and driving, while incorporating projected land use and zoning along the corridor consistent with the General Plan Update. These recommendations represent a logical evolution of the extensive existing conditions analysis and stakeholder engagement completed for this project.

Land Use and Zoning Recommendations

Key Land Use Issues and Opportunities

Through the planning and community engagement process, several issues and opportunities were identified. A series of key issues and opportunities pertaining to land use and urban design within the project area include:

- **Suburban Development Pattern:** Nearly all the existing development along East Avenue Q is oriented to vehicular traffic in a traditional suburban development pattern. This development type presents challenges for creating an active, pedestrian-oriented mixed use and employment corridor.
- **Vacant Land:** Approximately 55%[8] of the parcels within the project area are currently vacant, mostly on the north side of the corridor. While vacant land presents an opportunity to save on development costs, it also presents a challenge when individual projects develop at different times, leaving gaps in a street frontage.
- **County Jurisdiction:** A portion of the land within the project area - a "County Island"- is under County of Los Angeles jurisdiction. While the City's General Plan provides the vision for the County Island, the County of Los Angeles regulates zoning in the area. This affects the City's ability to further the intended main street environment within the west end of the project area.
- **Supportive of Large Projects:** While large swaths of vacant land can be challenging to develop at a similar pace, the makeup of large parcels facing East Avenue Q also presents a unique opportunity to support large mixed use and multifamily development projects, which will encourage the active, pedestrian environment envisioned for East Avenue Q.
- **Incomplete Frontages:** Although a current constraint, existing sidewalk gaps provide an opportunity to consider not only width and quality of sidewalks but how new development interfaces with the public realm.
- **Proximity to Downtown:** The project area includes the east end of the future Downtown, as envisioned within the Palmdale Transit Area Specific Plan (PTASP). The PTASP reconceptualizes Avenue Q as a "key" street with vibrant retail and entrainment activity in a mixed-used environment. East Avenue Q is envisioned as a place for commercial uses that serve daily shopping needs, mixed-use development, and multimodal transportation. The future multimodal transit station and planned "main street" near the project area will bring needed infrastructure, development, and activity to the corridor.

8 City of Palmdale GIS, UrbanFootprint (2019-2021)

Land Use Goals and Policies

The goals and policies presented below are consistent with the draft Palmdale 2045 General Plan. Policies taken directly from the draft 2045 General Plan are marked with an asterisk (*).

Goal 1: Create an active, ground floor pedestrian environment within the three nodes along the corridor: a mixed-use node at 10th Street East, a residential node at 15th Street East, and an employment/retail node at 20th Street East.

- Design the buildings facing East Avenue Q to reflect the vision for a new "main street" – active uses, street-oriented entrances, tall floor-to-ceiling heights, reduced setbacks (unless adjacent to a plaza or park).*
- Implement urban design guidelines and features that encourage pedestrian activity and reduce automobile use.*
- Encourage outdoor dining for patrons within the mixed-use designations along East Avenue Q and 10th Street East.
- Require corner treatments and special architectural features for buildings at the three major intersections on Avenue Q at 10th Street East, 15th Street East, and 20th Street East.
- Expand use of street furniture including lighting, benches, trash receptacles and landscaping to support a comfortable pedestrian environment within the three designated nodes at the intersections of East Avenue Q and 10th Street East, 15th Street East, and 20th Street East.
- Allow for various job-producing uses within the Employment Flex and Neighborhood Commercial designations, as dictated by the Palmdale 2045 General Plan, in pedestrian-oriented building types along East Avenue Q and 20th Street East.

Goal 2: Increase housing opportunities along the corridor.

- Promote new multifamily development within the mixed-use and standalone residential designations along East Avenue Q.
- Urge varying unit size and type within the standalone residential and mixed-use zones within the project area.
- Encourage affordable units that are seamlessly integrated into the overall residential or mixed-use development, and that connect to and complement the planned bicycle and pedestrian improvements planned in the project area.

Goal 3: Increase local job opportunities along the corridor.

- Support a diverse mix of light industrial, information, film, makerspace, boutique food/wine/beer processing, local food, and technology uses to provide jobs and tax revenues for the community by allowing emerging economic uses and industries within the Mixed-Use and Employment designations.*

Recommendations

The overall land use and design framework for creating a vibrant, pedestrian-oriented mixed-use multimodal corridor along East Avenue Q is presented in the following sections. A clear framework provides visitors and residents with a strong sense of place, an understanding of how to find their way around easily and safely and to efficiently identify uses and activities. These recommendations are intended to integrate both private and public realm development by focusing on the types of allowed land uses and their relationship to the public right-of-way, while leveraging the Complete Streets improvements envisioned for the corridor. The framework also addresses the City's desired objectives of achieving a new urban form that is more compact and complete, where a diversity of uses and amenities are located within close walking distance of residences, work, and transit.

The land use designations in the draft Palmdale 2045 General Plan, are also included to provide a high-level overview of the place types envisioned for the corridor. A description of the applicable zoning from the PTASP is also included.

Land Use and Design Framework

Through the Palmdale 2045 General Plan and Palmdale Transit Area Specific Plan (PTASP), East Avenue Q transitions from a semi-residential and semi-industrial avenue to a mixed-use and mixed residential corridor. The project area, which includes the east end of the PTASP, includes mixed-use, multi-family, and employment land uses. While not currently connected across the rail tracks west of Sierra Highway, East Avenue Q is intended to continue the "main street" Palmdale environment from Division Street (which is outside of the project area) through to 10th Street East. Avenue Q will also be connected across Sierra Highway in the future via an underpass.

The East Avenue Q corridor offers three key activity nodes, one at 10th Street East, 15th Street East, and 20th Street East, all of which feature different land uses and feel. These nodes offer greater pedestrian amenities to support safe pedestrian crossings and encourage active transportation. Detailed below and illustrated in Figure 21 are key features of each node within the project area.

Avenue Q Nodes

Mixed Use Node: The node at 10th Street East will be a lively area with mixed use development on all four corners and a "main street" character and feel. This area also serves as the eastern boundary of the PTASP. Within this node, mixed-use development allows for multistory multifamily residential with active ground floor commercial uses. Ground floor uses within the mixed-use node will incorporate wide sidewalks with outdoor dining, large shopfront windows with displays and or dining rooms, street furniture and awnings to increase pedestrian comfort. The environment within this node will be the most active of the three intersections and will serve as the unofficial end of "main street" as indicated within the PTASP.

Residential Node: The 15th Street East intersection, which is located at the center of the project area, will offer differing intensities of standalone residential uses on all four corners. The intersections at this node will offer enhanced pedestrian crossings with additional amenities such as shade trees, wide sidewalks, street lighting, and bicycle parking. Residential development within this node will integrate a mix of landscaping and hardscaping.



A lower intensity multifamily residential building situated close to the sidewalk with landscaping.



A retail building with pedestrian amenities including a plaza and landscaping.

Employment/ Retail Node: The 20th Street East node, which is located at the east end of the project area, serves as a commercial and employment node. This node features different employment-based uses that require different variations of public access, though all buildings will be oriented to the street. The environment at this node will be active with pedestrian facing commercial uses, and pedestrian interface at the employment uses.

As shown in Figure 21, the land use setting along East Avenue Q evolves from more intensive mixed-use development near 10th Street East, to decreasing densities of standalone multifamily residential across the corridor to 17th Street East. From 17th Street East, the corridor moves east into employment, utilities, and retail related uses near the 20th Street East intersection, which is also the eastern project boundary. The residential development creates continuous development along the street frontage. All non-residential development is also oriented toward the street with buildings situated close to the proposed sidewalk.

Palmdale East Avenue Q | Land Use and Design Framework

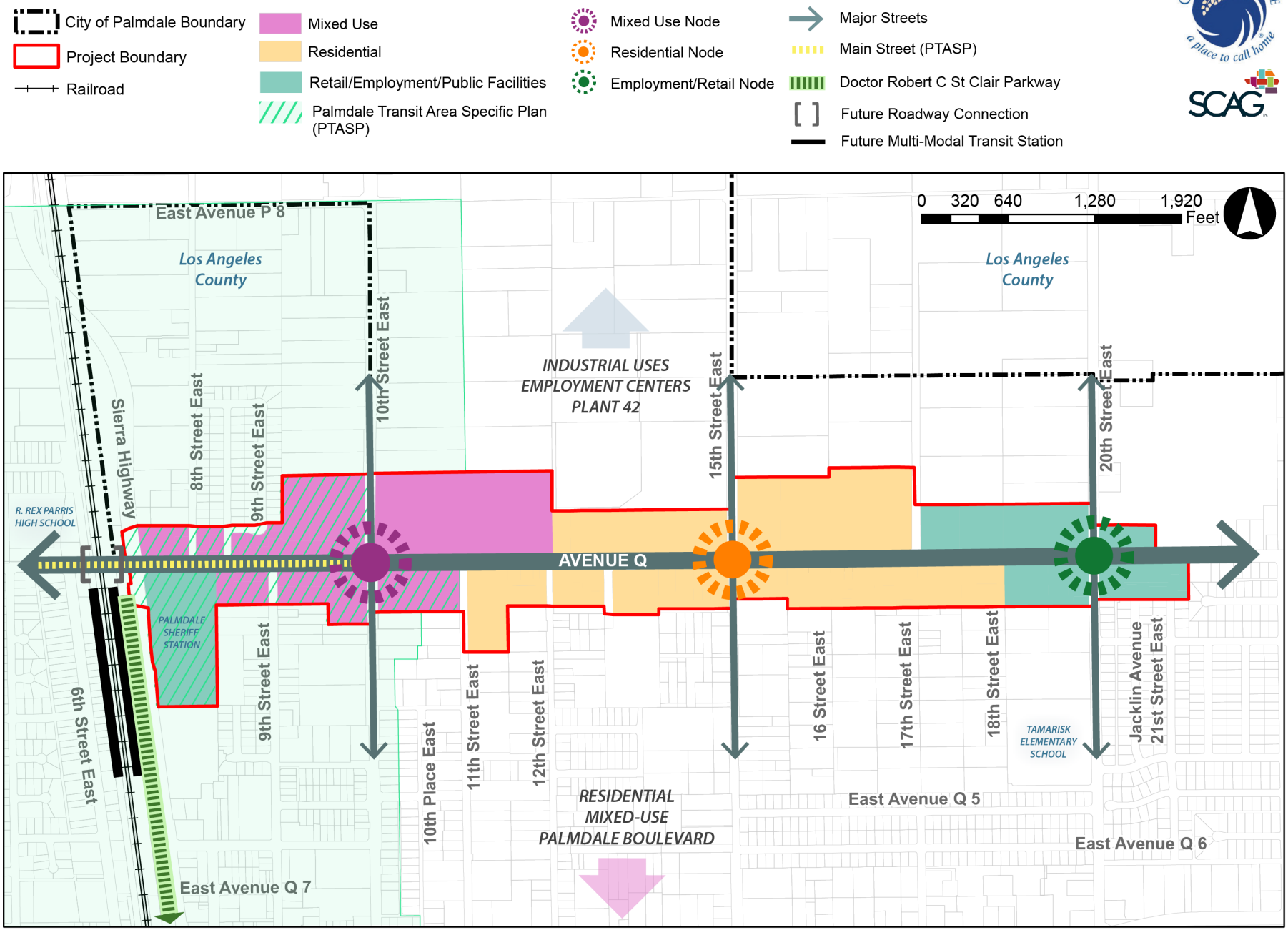


Figure 21: Land Use and Design Framework

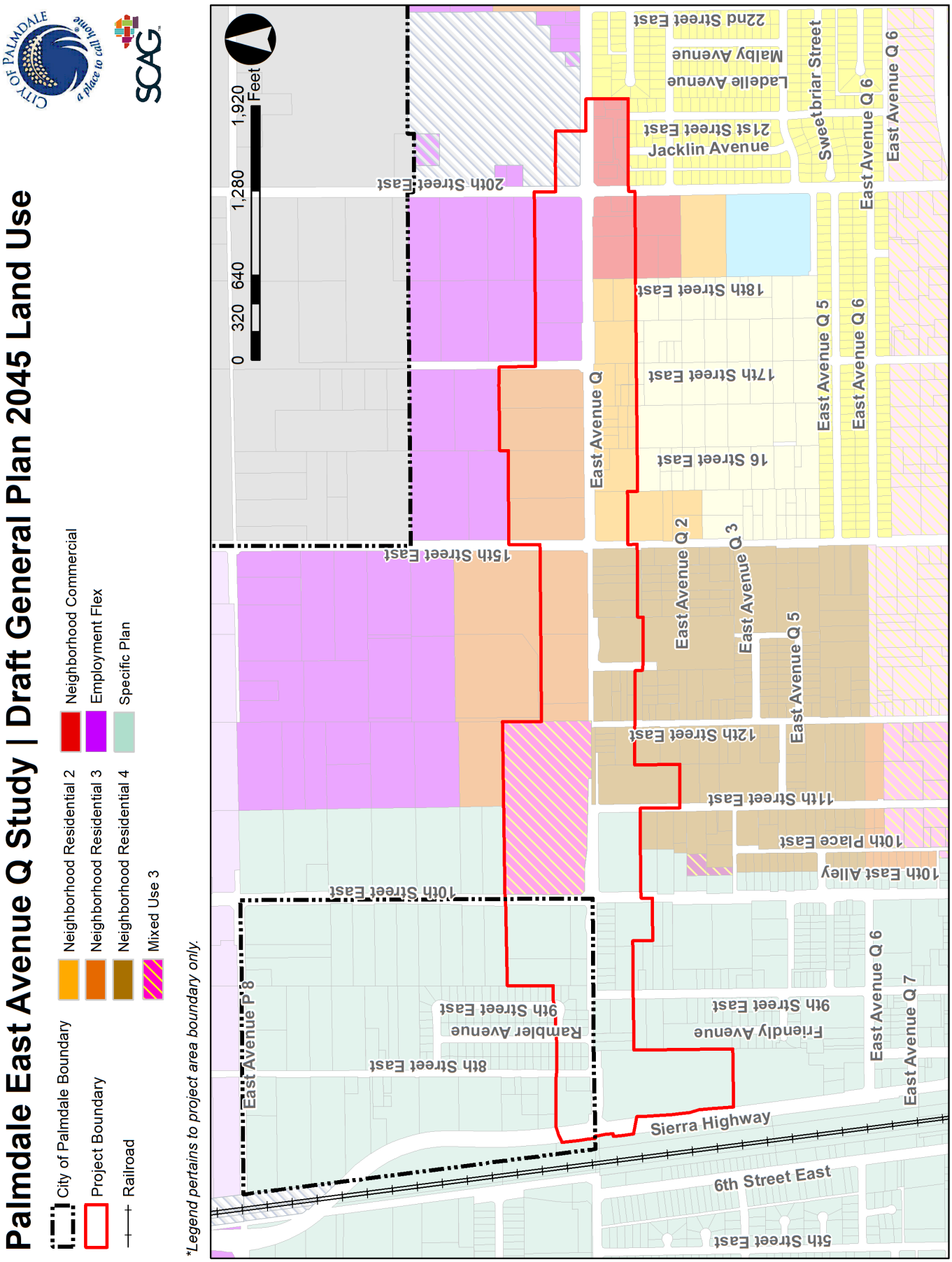


Figure 22: Draft General Plan 2045 Land Use**

**Subject to minor change

Land Use Regulations

Land use regulations provide descriptions of allowed land use along with character, intent, and interaction with the corridor. Below are descriptions of land use regulations that apply to the parcels along East Avenue Q and are illustrated in Figure 22. The Draft General Plan 2045 Land Use Map in Figure 22 offers detailed, specific regulations for each parcel within the project area, while Figure 21 offers a high-level framework or vision of the intended place.

General Plan Land Use

The City of Palmdale is expected to complete the Palmdale 2045 General Plan in 2022. The plan will provide land use regulations for all parcels within the city's jurisdiction. The Land Use Map and place types, which are listed below, are anticipated to be the final presiding General Plan land use designations, and therefore will regulate land uses within the project area. It should be noted that the land use map and place types are not yet adopted and therefore subject to minor change. General Plan place types, indicating land use, intensity, and character, are listed below for the parcels within the project area, as shown in Figure 24. The City of Palmdale is also in the process of updating its Zoning Code. The updated Zoning map and accompanying districts will be consistent with and reflect the Palmdale 2045 General Plan Land Use Map.

Neighborhood Residential 2 (RN-2): This place type is intended for a range of housing types with on-site recreation and open space up to 20 dwelling units per acre. Examples of building types within this designation include small lot detached houses, duplexes and low-rise attached houses, multiplexes, cluster housing, courtyard apartments and low-rise walkups. Buildings are setback at regular, shallow distances from the street with narrow side setbacks. The main entrance to the development and individual units are oriented to the primary street frontage and accessible directly from the street. Site design for larger developments includes narrow residential streets, wide sidewalks (minimum of six feet wide), street trees, lighting, and integrated open space of varying sizes and scales.

Neighborhood Residential 3 (RN-3): This place type is intended for "missing middle" or middle-density housing up to 30 dwelling units per acre. These neighborhoods provide a transition in scale and intensity between lower-intensity residential neighborhoods and more intense neighborhoods or mixed-use areas. Building types in this designation include duplexes and low-rise attached housing, multiplexes, garden and courtyard apartments, and low-rise walkups. Buildings are oriented to the pedestrian, with shallow setbacks and narrow side setbacks. The main entrance is located within the front façade and directly accessed from the street. Site design for larger developments includes narrow streets, wide sidewalks (minimum of six feet wide) street trees and lighting at regular intervals, and ample common open space for residents.

Neighborhood Residential 4 (RN-4): This place type is intended as a high-intensity, walkable neighborhood with a variety of types of housing, predominantly multi-family up to 50 dwelling units per acre. Areas with the RN-4 designation are located proximal to commercial, civic, employment and recreational uses These neighborhoods are located near the high-speed rail station and function as a buffer between lower-intensity residential neighborhoods and intense mixed-use areas. Building types in this designation include townhouses or rowhouses, garden and courtyard apartments, and mid-rise apartments. Buildings are oriented toward the pedestrian, with main entrances on the front facing façade and with minimal or zero setbacks. Properties have common yards and high-quality frontages.



Example of RN-2



Example of RN-3



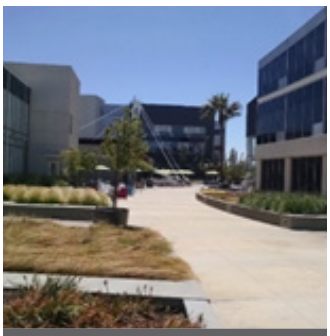
Example of RN-4


Example of MU-3



Example of NC


Example of PF


Example of EF

Mixed Use 3 (MU-3): This place type which correlates to the PTASP Urban Center (T5) designation, is intended to create a high-intensity concentration of commercial businesses and civic amenities mixed with multi-family housing along major corridors and/or near major transit. Allowed density range is 30-50 dwelling units per acre. Allowed uses include multi-family residential, retail and services, office and medical, civic, and research and development use. MU-3 areas provide employment, shopping, and living in a horizontal or vertical mixed-use format. Ground floors are primarily office, light R&D, and retail with housing above or behind. Allowed building types include condominiums or rowhouses, low-rise walkups, standalone commercial, and block-form low-rise and mid-rise buildings.

Buildings face a public street with minimal setbacks. Frontages are defined with entrance lobbies, shopfronts, or active spaces with awnings to promote a comfortable pedestrian environment. Sidewalks are required in all areas with a minimum of ten feet in width, with planting strips where possible, and include amenities like street trees, lighting, seating, among others, at regular intervals. Onsite open space typically includes plazas, mini parks, or internal courtyards. Vehicular access is encouraged to be off the rear or side streets where possible.

Neighborhood Commercial (NC): This place type is intended to foster convenience-type retail, neighborhood offices and service activities that serve the daily needs of the immediate neighborhood. Neighborhood Commercial areas are primarily located near neighborhoods, with development occasionally found on small corner parcels but more often in slightly larger configurations (5 to 10 acres). Allowed uses include neighborhood-serving retail, services, and office, entertainment, auto service, and civic uses. These designations provide gathering places for the residents of surrounding neighborhoods and are ideal locations for high-quality transit stops. Building types include standalone commercial, attached low-rise commercial buildings in a walkable "main street" configuration, and block-form low-rise buildings. Buildings support both pedestrians and vehicle traffic, with entrances direct from the sidewalk along Avenue Q and if needed, facing a rear parking lot.

Employment Flex (EF): This place type is intended to permit a mix of lighter industrial uses and more intensive service, incidental retail, and commercial uses. It is a transition zone that allows a mix of businesses that provide a wide variety of employment-generating activity. The uses allowed in this designation will support job generation, focusing on fabrication, research, distribution, and similar operations conducted primarily indoors. Primary allowed uses in this designation include light industrial, flex/makerspace, Research &Development, and office and medical uses. Secondary and supportive uses include retail, services, and auto related uses. Building types in the Employment Flex designation include minimal setbacks, oriented to the street.

Public Facilities (PF): This place type is applied to parcels that include public or private utilities and infrastructure. Uses in this designation include water storage tanks and support facilities, powerlines and rights-of-way, railroad lines and rights-of-way, and electrical substations, among others. This designation permits support buildings that are required to operate and service public and private utilities.

Specific Plan (SP): The Specific Plan designation applies to parcels that fall within an existing Specific Plan in Palmdale. Those individual Specific Plan's include allowed uses and regulations such as height, density, and floor area ratio (FAR). Portions of the East Avenue Q project area fall within the boundaries of the PTASP. The PTASP regulates all parcels with a regulating plan with zoning districts. The zoning districts within the PTASP that affect the East Avenue Q project area are described in the following section in more detail.

Palmdale Transit Area Specific Plan

A portion of the project area falls within the PTASP, which covers the region around the future multimodal transit station and positions the segment of East Avenue Q between Division Street and 10th Street East as a future "Main Street" for Downtown Palmdale. With a future connection across Sierra Highway, East Avenue Q will continue the main street environment as it transitions into residential and other employment uses along the corridor. Listed below are the PTASP districts that are also within the project area.[9] These parcels are outlined in red within the Regulating Plan shown in Figure 23.

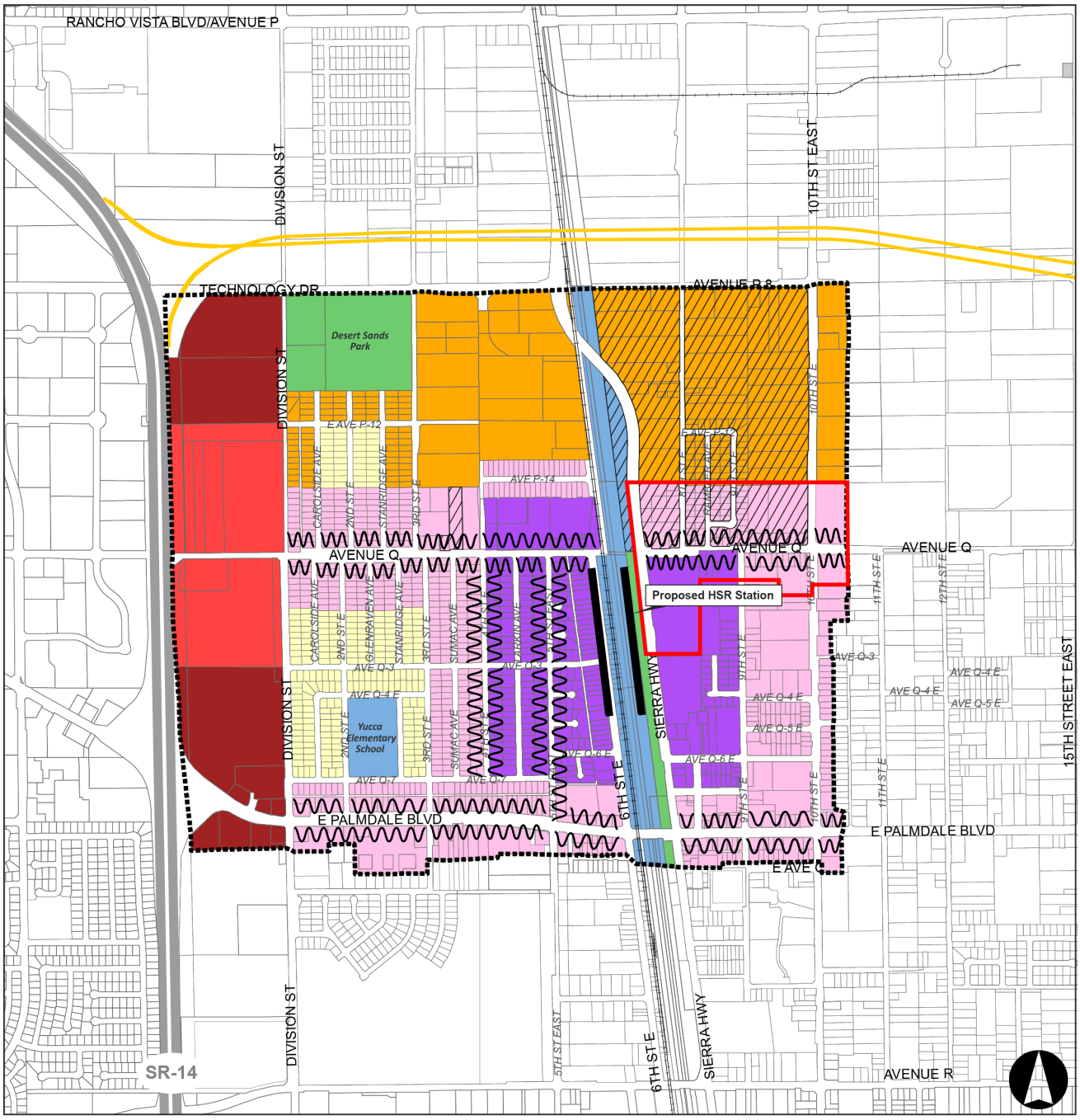
Urban Core (T6):

- Desired Character: The Urban Core Zone is intended to provide buildings with the highest intensity immediately surrounding the site of the future Palmdale Multimodal Station. The focus of this zone is to provide jobs and amenities near transit.
- Desired Land Uses: Ground floors may house retail, restaurant, service, and office uses, while upper floors may accommodate office and residential uses. Residential uses are prohibited on the ground floor in this zone. Active pedestrian-oriented commercial uses are required along Avenue Q, 4th Street East, 5th Street East, Palmdale Boulevard and Sierra Highway.
- Allowed Intensity and Height: FAR range – 2.5 - 4.0; Residential density: 50-80 du/acre. Buildings up to 85 feet are permitted.

Urban Center (T5):

- Desired Character: The Urban Center Zone is intended for urban, mixed-use development immediately adjacent to, and surrounding, the Urban Core Zone and along both sides of Avenue Q and Palmdale Boulevard.
- Desired Land Uses: This zone provides for residential or mixed-use buildings up to five stories. Active pedestrian-oriented commercial uses are required on the ground floor along 4th Street East, Avenue Q and Palmdale Boulevard. Other streets may have residential uses on the ground floor. Buildings within this zone are required to step down to two stories along portions of the parcel that abut single-family zones.
- Allowed Intensity and Height: FAR range – 1.5 - 3.0; Residential density: 30-50 du/acre. Buildings up to 65 feet are permitted.

9 A pending modification to the PTASP may impact the noted floor-area ratios.



Transit Area Specific Plan

Figure 5-1 Regulating Plan

0 1,000 2,000 3,000 4,000 Feet

- Transit Area Specific Plan Boundary
- High Desert Corridor Alignment (Potential)
- SR-14 Freeway
- Union Pacific & Metrolink Rail Right-of-Way
- County of Los Angeles (Pre-Zone)
- Urban Core
- Urban Center
- General Urban
- Traditional Neighborhood
- Regional Commercial
- Business Mix
- Public Facilities
- Open Space - Recreation
- Required Active Frontage
- East Avenue Q Project Area within PTASP*

**Note: East Avenue Q Project area extends beyond map extents*

Figure 23: PTASP Regulating Plan

Corridor Development

The parcels on the north side of East Avenue Q are mostly vacant, providing an unprecedented opportunity for developing consistent frontages and streetscape along the street. While private development may occur over time, the City may choose to install the public realm improvements at one time to ensure development of uniform streetscape.

Private Frontages

As described in the land use framework section above and detailed below, there are three frontage types in the corridor:

Mixed-use development on East Avenue Q will have active pedestrian frontages that maintain a continuous building line at the ground floor at or near the front property line. Occasional setbacks are acceptable to incorporate outdoor patios and plazas. Mixed use frontages include primary entrances facing East Avenue Q with shopfront windows and landscaping. Frontage types include shopfronts, arcades, and galleries. Awnings and other similar shade structures will be enlarged in order to provide shade for pedestrians. Residential uses are located on upper stories or behind the buildings fronting East Avenue Q. At the 10th Street East intersection, mixed use buildings may be designed to include specialized corner treatments like angled corners and architectural elements like plazas, towers, or domes. Upper-level balconies that overhang on the public right-of-way will be permitted with appropriate encroachment permits.

Residential development will contain frontage types that are oriented to East Avenue Q with windows to provide "eyes on the street." These include porches, stoops, and small yards. Buildings will be articulated to express the rhythm of the individual units. All buildings have at least one entrance on the front façade and directly accessed from the street. Entrances may be raised up to three feet above finished grade to provide privacy for residents. Buildings will incorporate windows and landscaping, encouraging four-sided architecture.

Commercial and employment-related development will be designed to have frontages that are oriented to the street with parking located behind the buildings. While buildings may have entrances from the parking areas, primary entrances will be oriented to the street. Setback areas will be landscaped to provide visual relief as well as privacy for ground floor users.

Public Realm

Placemaking is a key concept to creating a comfortable pedestrian environment that supports and encourages active transportation along the corridor. Listed below are descriptions of key elements of the public realm within the project area.

- **Open Space:** To support the mixed-use and residential nature of East Avenue Q, new open space amenities must be provided to complement and connect existing nearby facilities like the Robert C. St. Clair Parkway on the west side of Sierra Highway south of East Avenue Q. Onsite open space should be integrated into new multi-family residential developments, in the form of tot lots, plazas, dog runs, and mini parks, among others. New retail, commercial, and mixed-use developments must offer small courtyards and gathering spaces to support outdoor dining and other public gatherings. New mixed-use and residential development must connect to off-site parks such as the nearby Melville J. Courson Park, Poncitlán Square, William J. McAdam Park, and Desert Sands Park (once a connection across the rail tracks is established) among others.
- **Amenities:** A key component of creating a welcoming and vibrant environment along East Avenue Q is to provide supportive amenities for residents and visitors alike. See the Transportation Recommendations and Streetscape Standards section of this chapter for additional details on public realm amenities like streetscape furniture, shade, and landscaping.



An active retail frontage with pedestrian amenities


Multifamily residential development


Sidewalk dining

Transportation Recommendations and Streetscape Standards

Key Transportation Issues and Opportunities

- **Existing street widths:** The street has variable widths throughout the corridor, which creates constraints on creating consistent, linear improvements throughout the length of East Avenue Q. However, many segments have enough width to provide opportunities for spot infrastructure improvements like pedestrian refuge islands, medians, or curb extensions.
- **Unsignalized intersections:** Only two intersections within the project area are signalized, and the other intersections throughout the corridor present opportunities for installing new signals or other forms of traffic calming devices to control speed and improve safety.
- **High stress environment for active transportation:** East Avenue Q is a high-stress street for people walking and biking. People riding bikes along East Avenue Q are forced to share the roadway with vehicles traveling at high speeds, and sidewalks are inconsistent throughout the project area, varying from five to eight feet in width, to missing entirely.
- **Lack of shade:** A limited tree canopy and many existing undeveloped parcels along East Avenue Q create a mostly unshaded environment for those traveling along the corridor.

Design Goals and Objectives

The Project Team synthesized the existing condition analysis, key issues and opportunities, input from City staff and stakeholders, and community priorities shared via public feedback, to create a set of design goals and objectives for the Project's recommendations (Table 7).

Table 7: Design Goals and Objectives

Goal	Objective	Community Priorities
Connectivity	• Develop continuous sidewalks and bike lanes along East Avenue Q. • Create a direct connection to the future High Speed Rail station. • Increase connections to the existing and proposed bicycle facility network.	Developing continuous sidewalks and bicycle facilities are common feedback items from our community engagement phases.
Multimodal Operations	Rebalance East Avenue Q to better serve all road users, including people walking, biking, taking transit, and driving.	Balancing priorities for all modes was a key response from participants who attended the second workshop, as well as AV Youth Build stakeholders.
Safety & Comfort	• Improve walking and biking conditions for people of all ages and abilities. • Incorporate recommendations to improve shade. • Improve lighting.	Community members noted issues with speeding along Avenue Q. They also noted a willingness to spend more time driving on Avenue Q to ensure a safer environment for people walking and biking.
Aesthetics, Sense of Place, and Land Use Integration	• Beautify East Avenue Q, create a sense of place, and promote economic vitality with amenities like street landscaping, lighting, and signage. • Complement proposed / future land uses along East Avenue Q.	Community feedback indicated that lighting, shade, and spaces for children are important to include for the future Avenue Q.

The Complete Streets recommendations for East Avenue Q include the following infrastructure changes/upgrades and streetscape recommendations:

- **Continuous, protected sidewalk-level bicycle facilities** along the length of the study corridor (Sierra Highway to 20th Street East).
- **Continuous sidewalks** and high-visibility crossings at intersections, with raised crossings at driveways.
- **A center landscaped median** for traffic calming where possible, reducing points of conflict, and reducing the heat island effect, with gaps as needed for driveway access and emergency access.
- **Streetscape furniture** to create a sense of place and add amenities for people biking and walking including lighting, shade structures, benches, trash receptacles, and bicycle racks.
- **Landscaping and green infrastructure** to reduce the heat island effect, capture stormwater, and provide shade for people walking along the corridor.

Public Right-of-Way

The available public right-of-way on East Avenue Q is a key factor in the concept alternatives developed for this study. The available right-of-way fluctuates from as little as 40 feet west of 9th Street East and as much as 104 feet immediately east of 10th Street. Most of the property line deviations occur in the western portion of the corridor where adjacent properties have already been developed, whereas the corridor east of 15th Street East is consistently about 80 feet. The variability in the public right-of-way does have an impact on an overall cross section for the corridor, especially if existing properties and structures are not impacted or removed. However, the north side of East Avenue Q between 9th Street East and 17th Street East is vacant land and represents a more likely opportunity for the City to acquire needed frontage as these parcels develop. Figures 24, 25, 26, and 27 highlight these varying right-of-way widths.

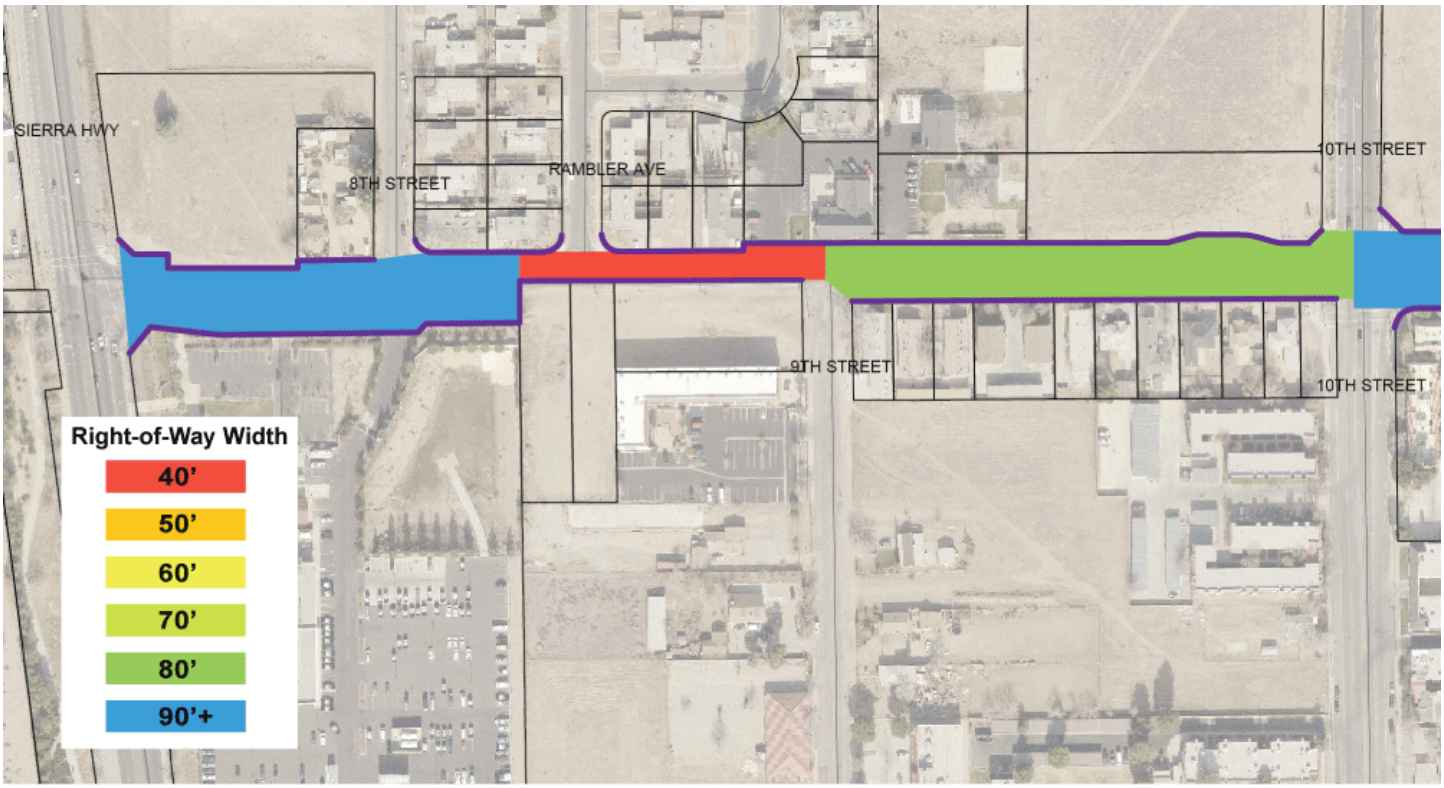


Figure 24: Existing Right-of-Way on East Avenue Q between Sierra Highway and 10th Street East

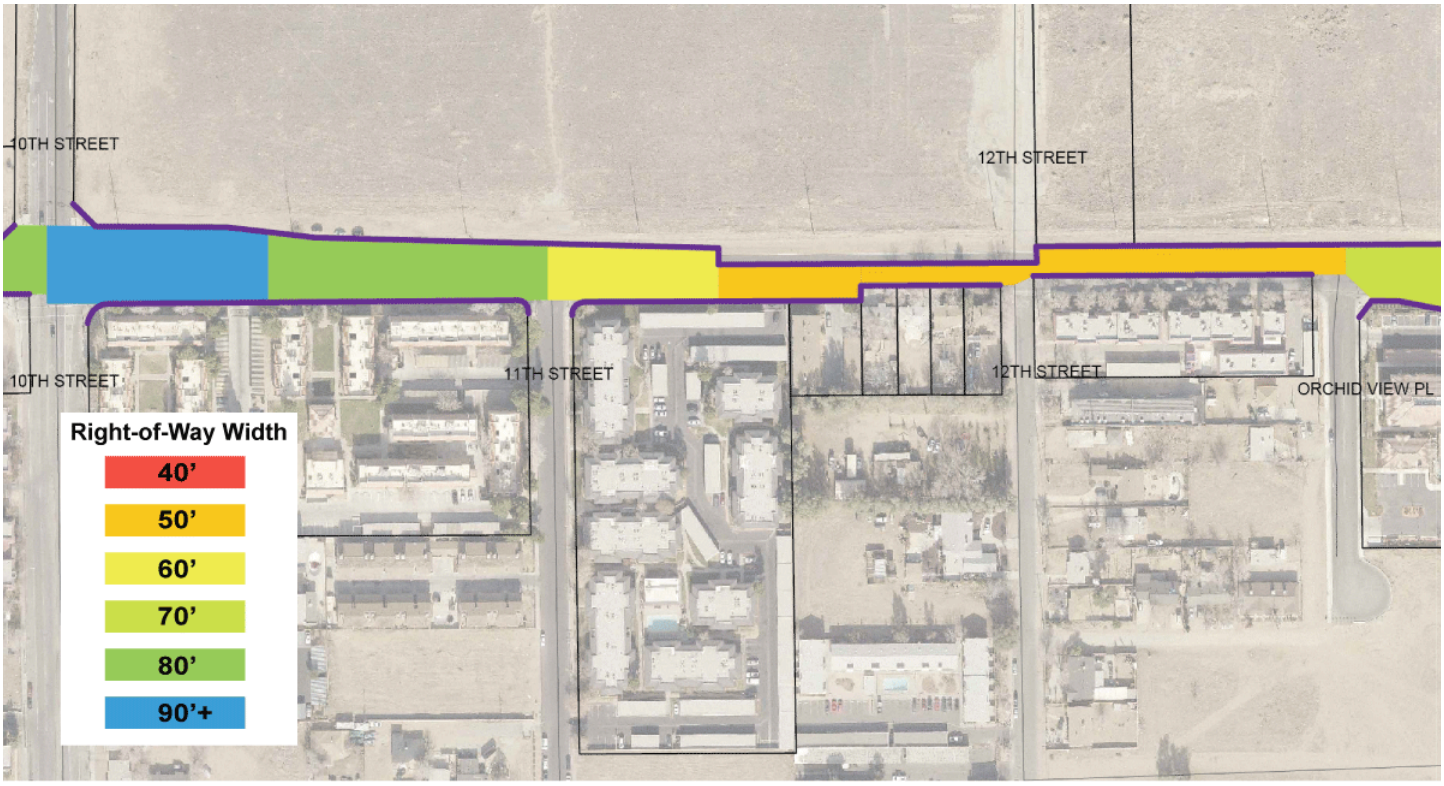


Figure 25: Existing Right-of-Way on East Avenue Q from 10th Street East to Orchid View Place

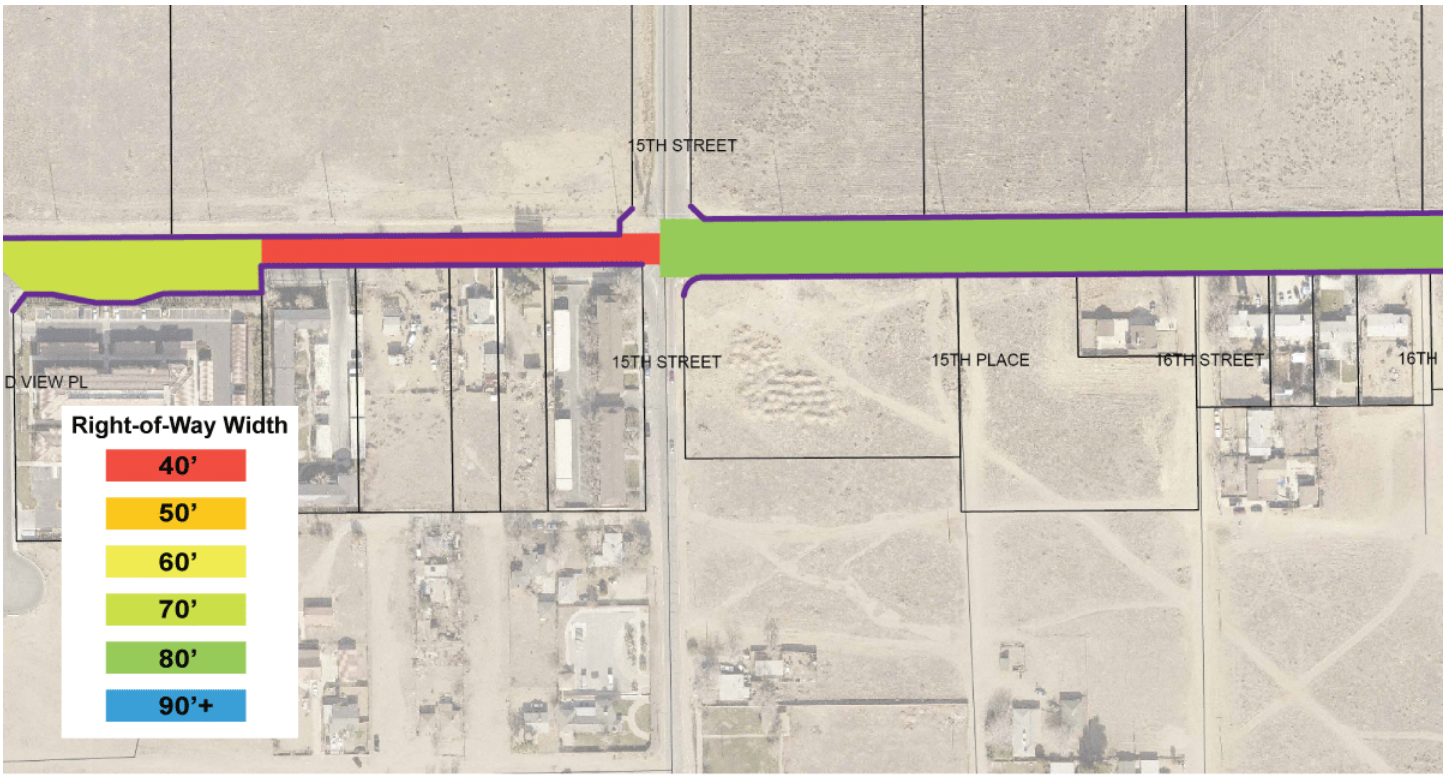


Figure 26: Existing Right-of-Way on East Avenue Q from Orchid View Place to 16th Place East

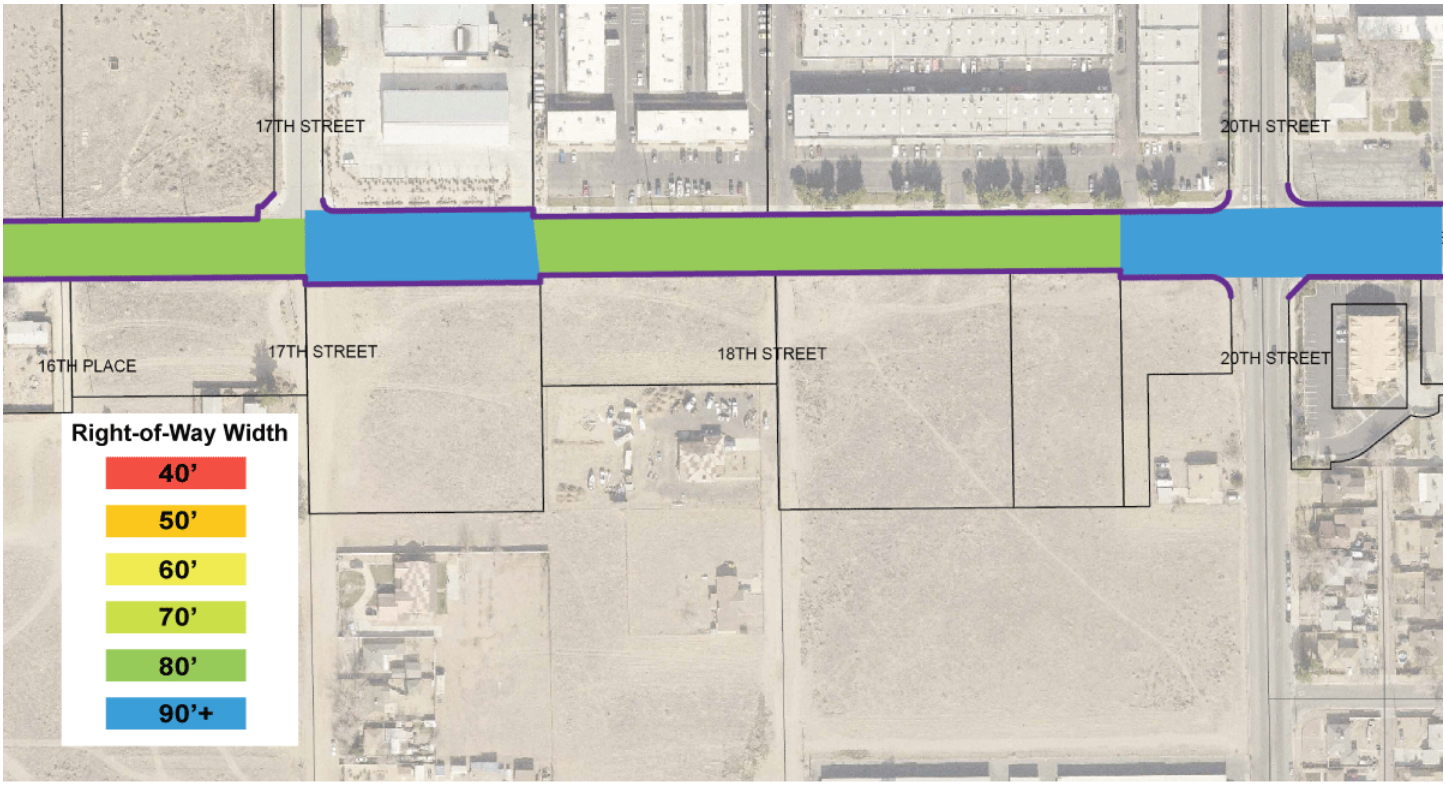


Figure 27: Existing Right-of-Way on East Avenue Q from 16th Place East to 20th Street East

Basis of Design

Building on the previously discussed Design Goals and Objectives (Table 7), design criteria were identified that best represent a street that is safe and comfortable for all ages, abilities, and travel choice. While constraints like right-of-way, emergency access, and adjacent properties, among others, may limit the size and scope of change on East Avenue Q, these design criteria represent conditions that should be met, regardless of these constraints. These design criteria also adhere to the following design standards:

- City of Palmdale Safe Routes to School Plan, Bicycle Design Guidelines
- California Department of Transportation (Caltrans) Highway Design Manual
- Public Right-of Way Accessibility Guidelines (PROWAG)
- California Manual on Uniform Traffic Control Devices (CAMUTCD)
- California Building Code (CBC)
- Caltrans Design Information Bulletin 89-01: Class IV Bikeway Guidance

Table 8 presents key design assumptions used during the development of design alternatives.

Table 8: Basis of Design Criteria

Design Criteria	Value(s)	Justification
Travel lane width	• 11-foot curbside travel lanes* • 10-foot turn lanes • 10-foot inside travel lanes • 26-foot width for Fire Department access *excluding gutters	Eleven-foot lanes are sufficient to accommodate bus and truck traffic in curbside lanes and are narrow enough to discourage speeding by smaller motor vehicles. Ten-foot interior lanes further discourage speeding while still comfortably accommodating vehicles. This national best practice is supported in the NACTO Urban Street Design Guide.
Bike lane width	• 5-foot minimum (excluding gutter) • 6 to 8 feet preferred* (excluding gutter) *on arterials	Six-to-eight-foot bike lanes are preferred for bicyclist safety and comfort. Five-foot bike lanes are the minimum recommended one-way bicycle facility width per the AASHTO *Guide for the Development of Bicycle Facilities*, 5th Ed. In constrained conditions, a four-foot bike lane may be applied near bus zones, for example.
Bike lane buffer width	• 2-foot minimum • 3 feet preferred (required adjacent to parking)	Three-foot buffers are preferred for bicyclist comfort and safety. Two-foot buffers are the minimum recommended width.
Sidewalk width	• 5-foot minimum • 8 feet preferred • 10-foot minimum preferred at mixed-use nodes • 4 feet at pinch points	Five feet is a standard minimum width for sidewalks. Eight feet is preferred to allow for side-by-side travel. Four feet is the minimum width at constrained locations, per PROWAG. Per California Building Code 11B-403.5.3, if the sidewalk is less than five feet in width, a "passing space" must be provided every 200 feet.
Landscaped buffer width	• 4-foot minimum • 6 to 8 feet preferred* *reference City Approved Plant and Tree List	Five feet provides sufficient space for trees to flourish without damaging the sidewalk and curb line; six to eight feet is preferred. It is possible to provide a four-foot landscaped buffer if needed.
Design vehicle	• 40-foot City Bus on city and school bus routes • SU-30 at other locations	These design vehicles will ensure that Regional Transit bus and school bus movements are accommodated by design alternatives at bus stops and intersections. Otherwise, the design will accommodate a single unit truck.
Land use context	Right of way design is reflective of and sensitive to the surrounding land use context	Pedestrian and cyclist amenities and need for on street parking will be different based on the adjacent land uses along East Avenue Q. Driveway frequency and interruptions will vary based on land use.
Acquisition cost	Wider right-of-way will require more land acquisition	Most typical right of way width is approximately 80 feet along East Avenue Q with some pinch points that are approximately 40 feet.

Additional design assumptions include:

- **Signal timing adjustments** may be warranted to accommodate bicycle, pedestrian, and/or transit improvements.
- **Adjustments to existing infrastructure** (e.g., signal infrastructure, light poles, drainage, curb lines, additional utilities) may be warranted to accommodate roadway improvements.
- **Accessibility upgrades** such as installation of tactile domes at curb ramps, reconstruction of outdated curb ramps, and construction of wheelchair clear zones at bus stops will be included in design alternatives.
- **Right-of-way impacts** will strive to be minimized but will not be constrained by existing right-of-way in areas that are currently not developed.
- **A center landscaped median** included where feasible in the design alternatives to improve aesthetics, calm traffic, reduce points of conflict, and reduce the heat island effect. Emergency vehicle access requirements may limit some opportunities for this.
- **A minimum five-foot by eight-foot boarding area** is provided at bus stops.
- **Meeting current Americans with Disability Act Standards** for all new construction.

Alternatives Analysis

Three potential design alternatives for the corridor were developed based on the design objectives and goals identified in the previous section. The alternatives included a 90-foot configuration with one vehicular lane in each direction (Figure 28), a 90-foot configuration with two vehicular lanes in each direction (Figure 29), and a 114-foot configuration with two vehicular lanes in each direction (Figure 30). In alignment with this Plan's Complete Streets goals, all three configurations included protected bicycle facilities, ample sidewalk widths, along with space for landscaping, trees, seating, lighting, and shade.

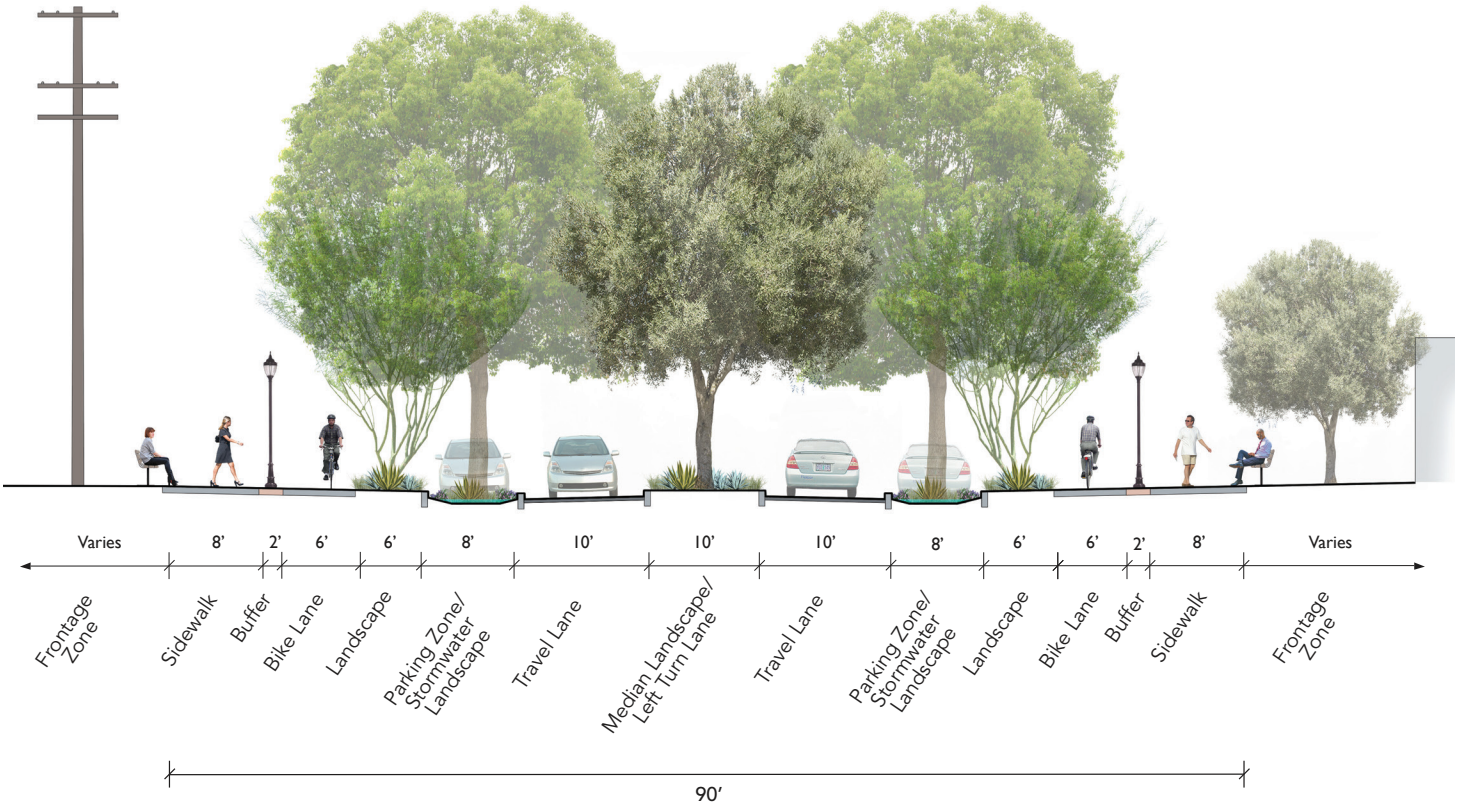


Figure 28: "Narrow Option A" Alternative as presented for community feedback

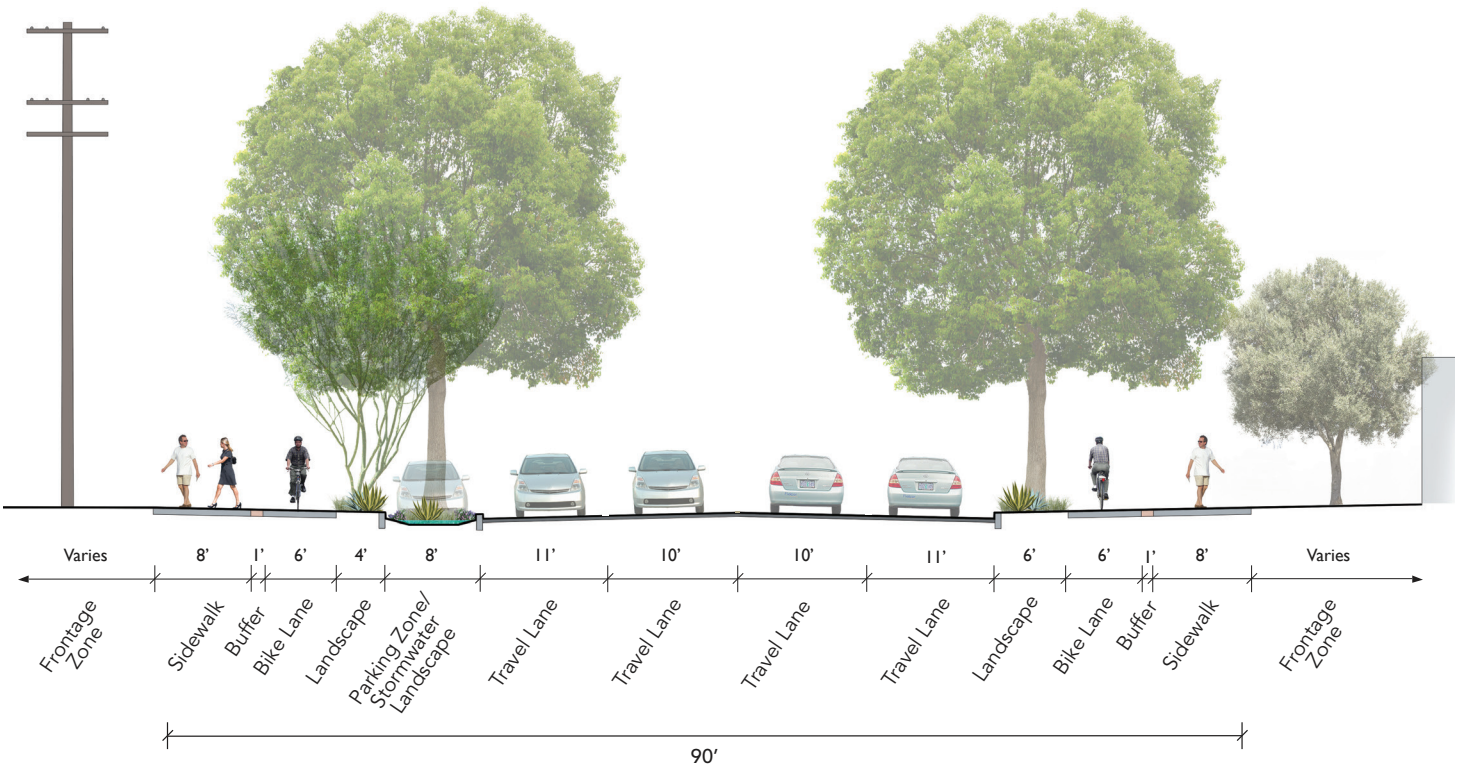


Figure 29: "Narrow Option B" Alternative as presented for community feedback

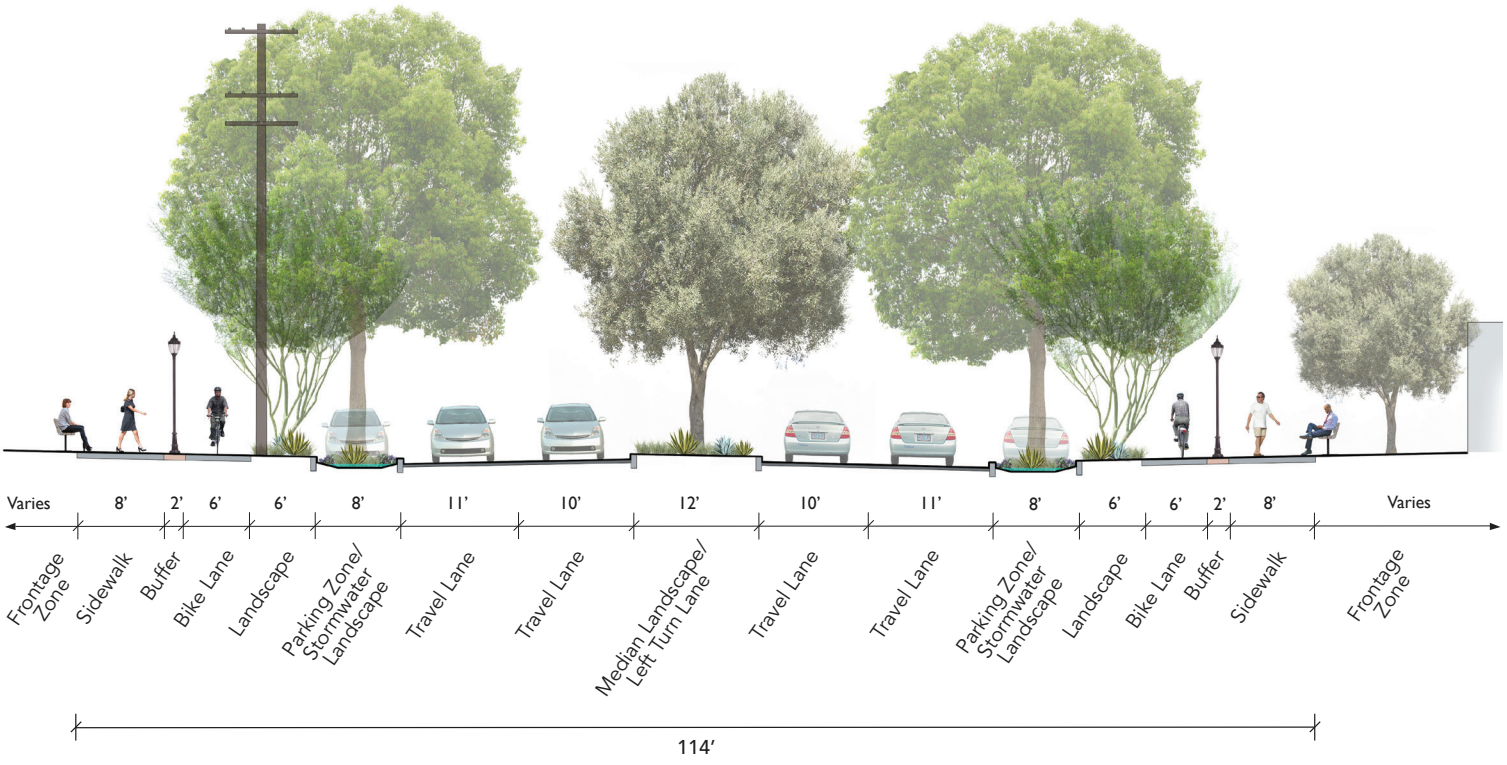


Figure 30: "Wider Option" as presented for community feedback

City staff and the Technical Working Group provided additional feedback to help refine the alternatives, and the Project Team then conducted an evaluation of how each alternative met the Complete Streets goals of the Plan. Table 9 details the results of the alternatives evaluation:

- ● A full circle indicates the evaluation metric is met,
- ◑ A half-circle indicates the evaluation is partially met,
- ○ An empty circle indicates the evaluation metric is not met.

Table 9: Alternatives Evaluation

Evaluation Metric (goals)	Basis of Evaluation	90-foot 2-lane configuration (Figure 28)	90-foot 4-lane configuration (Figure 29)	114-foot 4-lane configuration (Figure 30)
Connectivity	Continuous and consistent bikeway and pedestrian facilities throughout the project area	●	●	●
	Frequent and convenient crossings for bicyclists, pedestrians, and transit users	●	●	●
Multimodal Operations	Minimized conflict points between modes (i.e., bikeway and pedestrian route conflict points with vehicles and transit loading and unloading)	◑	○	◑
	Vehicle delay	◑	●	●
	Parking availability	◑	○	●
Safety & Comfort	Wide pedestrian and bicycle facilities	●	◑	●
	Short crossing distances for pedestrians	●	◑	○
	Horizontal and vertical separation between vehicles and bicyclists/pedestrians	●	◑	●
	Intuitiveness and ease of use of facilities	●	◑	●
	Accessible design throughout the corridor	●	●	●
Aesthetics, Sense of Place, and Land Use Integration	Sense of a *Downtown Street*, a *destination*	●	◑	◑
	Shade and "Greening" of the corridor with vegetation and landscaping	●	◑	●
	Right of way design is reflective of and sensitive to the surrounding land use context	◑	◑	◑
	Limited right of way impacts	●	●	○

Recommended Corridor Alternative

After review of the three alternatives and feedback from City staff and key stakeholders, the Project Team's final recommendation for the corridor includes a varied configuration of travel lanes and right-of-way widths that maintains comfortable walking and biking facilities with space for landscaping and street furniture, while acknowledging that automobile demand would likely increase as properties along the corridor redevelop under the proposed Palmdale 2045 General Plan land uses and zoning. Table 10 details the different configurations along each segment of East Avenue Q. The widest configuration (114 feet) recommended between Sierra Highway and 9th Street East is included as it creates a more logical continuation of the street section required within the PTASP.

Table 10: Final Recommendation Design Details

Street Segment	Design Recommendation
East Avenue Q between Sierra Highway and 9th Street East	• 114-foot public right-of-way • Four vehicular lanes with turn lanes • Landscaped median • Sidewalk-level bike facilities on both sides of the street • Sidewalks and landscaping on both sides of the street • Parking on both sides of the street
East Avenue Q between 9th Street East and 12th Street East	• 90-foot public right-of-way • Four vehicular lanes / turn lanes (as needed) • Landscaped median • Sidewalk-level bike facilities on both sides of the street • Sidewalks on both sides of the street • Landscaping on the south side of the street • Parking on the north side of the street
East Avenue Q between 12th Street East and 20th Street East	• 90-foot public right-of-way • Two vehicle lanes with turn lanes (as needed) • Striped and landscaped/striped median • Sidewalk level bike facilities on both sides of the street • Sidewalks and landscaping on both sides of the street • Parking on both sides of the street

Streetscape and Green Infrastructure Recommendations

The public right-of-way recommendations will be enhanced through use of shade trees, street furniture, and lighting at regular intervals. Detailed below are the specific amenities that will create a comfortable pedestrian environment within the project area. These recommendations are an extension of those for East Avenue Q within the PTASP, building a more seamless experience as one travels along the corridor.

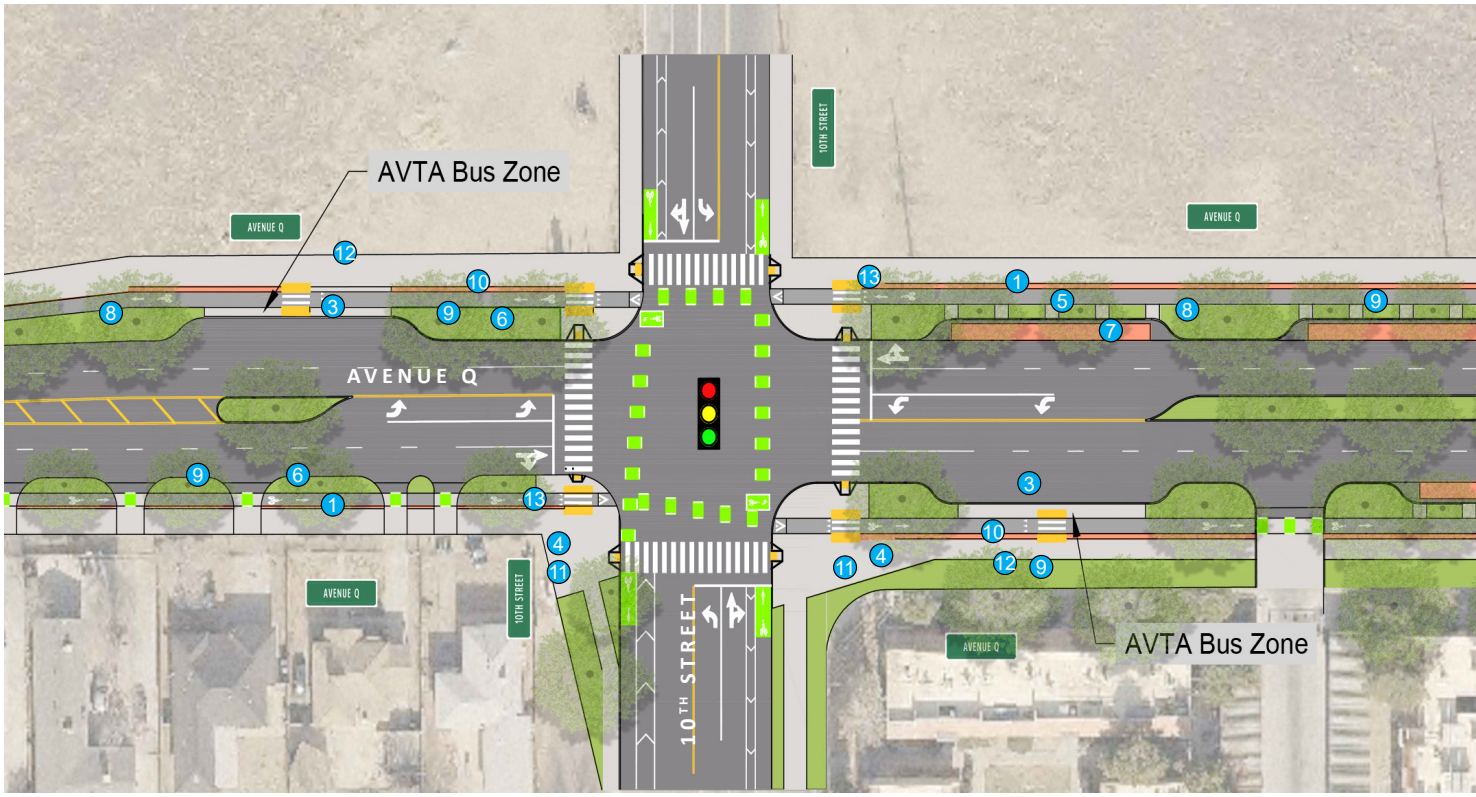
- **Shade, Landscaping and Green Infrastructure:**
  - The Chinese Elm "Ulmus Parvifolia" is the preferred deciduous tree variety along East Avenue Q, with recommended spacing of approximately 40 feet on center with four-foot tree wells at the nodes and major intersections. Tree spacing intervals may increase between nodes along East Avenue Q. Typical spacing for large canopy trees located within curb extensions and eight-foot+ wide planting strips would be 30-40 feet on center, while medium canopy trees located adjacent to parking zones and four-foot+ wide planting strips would be 20-25 feet on center. While much of the northern portion of the corridor is constrained by overhead utility lines, careful placement of trees along with shade structures can contribute to providing sufficient shade as the corridor continues to develop.
  - Engineered shade structures can support additional landscaping as well as provide much-needed shade. These structures should be placed in concert with all proposed transit stop location as well as intersections with seating.
  - Low-water use plants and ground cover should be placed along sidewalks and in medians.
  - Pervious pavement parking zones allow stormwater to soak into the ground.
  - Stormwater curb extensions capture stormwater and support large trees and should be located based on existing catch basins.
- **Streetscape Furniture:**
  - Benches, trash receptacles, and bicycle racks should be provided in high pedestrian activity areas, such as the mixed-use and retail/employment areas. These amenities must be appropriate for the high desert climate and be consistent with the surrounding design and architecture.
  - Pedestrian-scaled lighting fixtures must augment existing vehicle-scaled lights along East Avenue Q to increase safety and security of pedestrians. Fixtures should be spaced 40 to 60 feet apart within the mixed-use areas, with intervals increasing along the residential areas between nodes. Fixtures should be 15 to 20 feet tall, with LED bulbs, and adhere to the Dark Sky Association lighting guidelines.
  - All street furniture and lighting must have a consistent look across the corridor regardless of vendor or manufacturer.

Concept Design

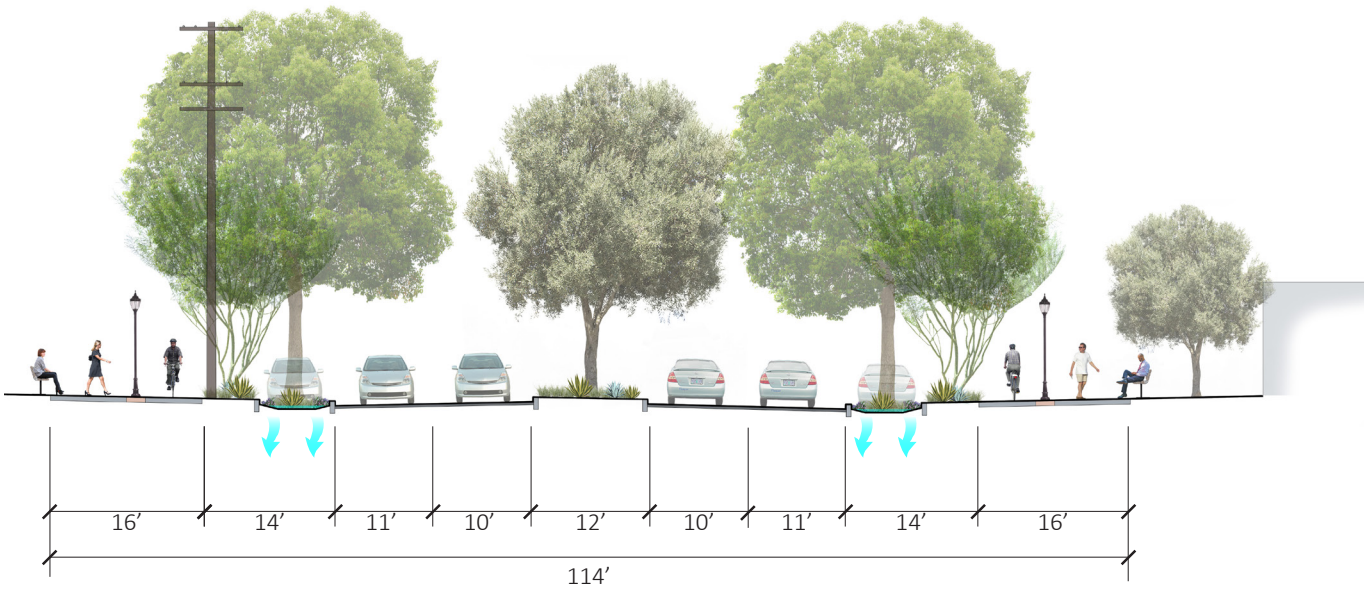
The following concepts illustrate a plan view and cross-section to represent the four-lane configuration and the two-lane configuration included in the recommended corridor alternative, as well as recommendations for general placement of green infrastructure and streetscape furnishing elements. The full concept design is located in Appendix F.

Location Key



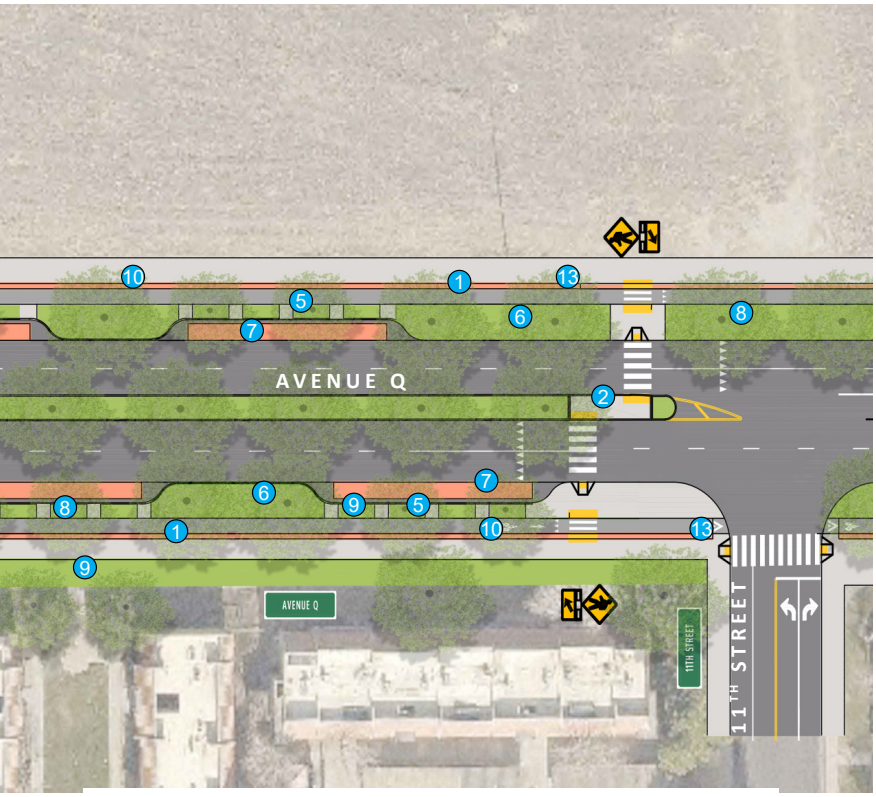


Proposed Plan View of East Avenue Q between 10th Street East and 11th Street East



Proposed Cross Section of East Avenue Q between 10th Street East and 11th Street East

Figure 31: **East Avenue Q Recommended Alternative, 10th Street to 11th Street East (Four-Lane Configuration)**



Mobility + Safety Features

1. Separated bike and pedestrian pathway system
2. Midblock crossing pedestrian refuge island
3. Enhanced transit stop
4. Widened pedestrian space at intersections and accessible ramps
5. Carriage paths lead people from parking zones to the sidewalk

Green Infrastructure Features

6. Stormwater curb extensions capture street runoff
7. Pervious pavement within parking zone
8. Tree planting zone allows for a 40’ spacing of trees
9. Low water use planting area along sidewalks and medians

Streetscape Furnishings

10. Pedestrian scale street lighting placed 40-60’ throughout the corridor
11. Seating, trash receptacles, bike racks at high-use pedestrian areas
12. Shade structures at key intersections and transit stops (where feasible)
13. Wayfinding signage at intersections

Corridor Features



Stormwater Curb Extensions: *Placed at intersections and midblock locations to shorten crossing distance, capture stormwater, and support large trees.*



Pervious Pavement Parking Zones: *Gaps between interlocking concrete pavers allows stormwater to soak into the ground.*



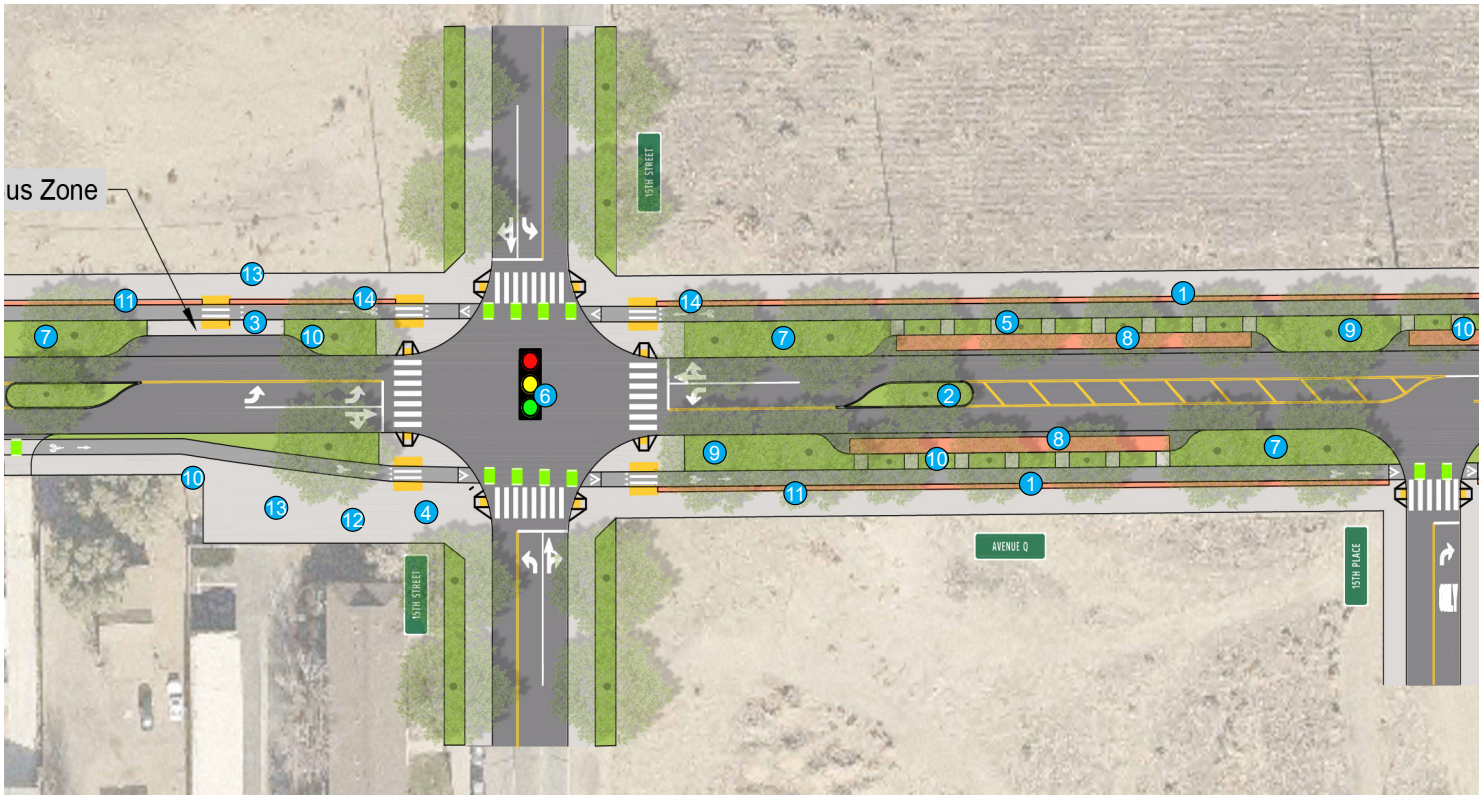
Street Tree Shading: *Large canopy Chinese Elm trees are fast growing and can help shade bicycle and sidewalk zones.*



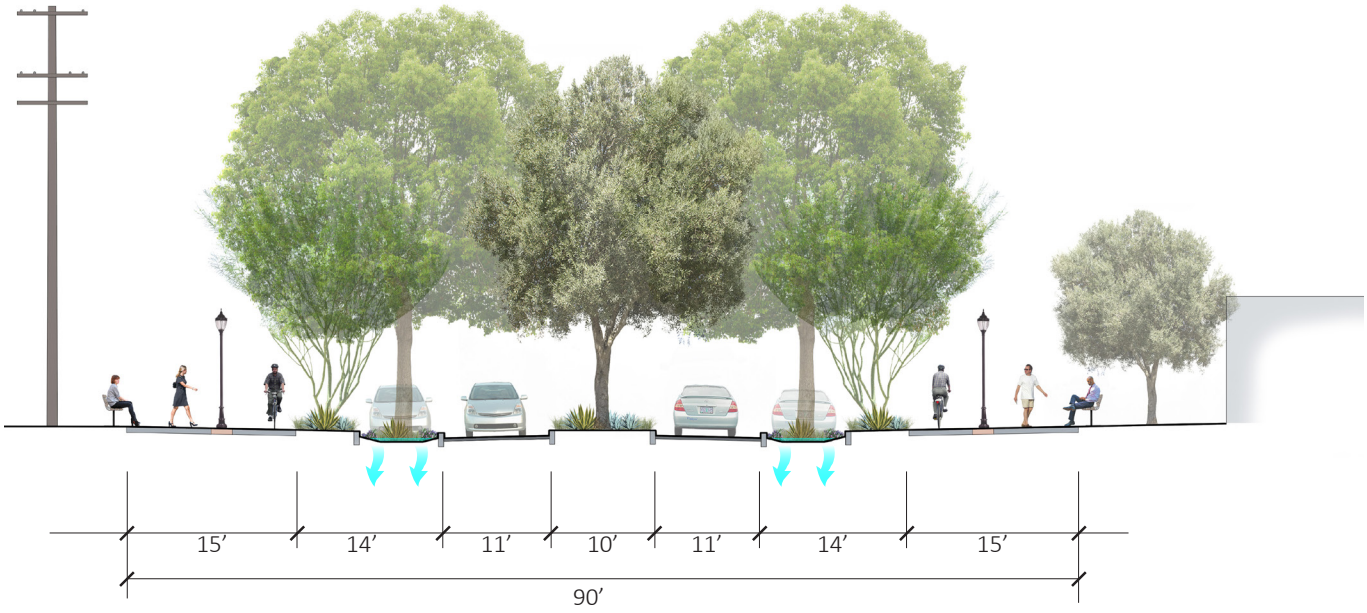
Multimodal Pathway: *Protected sidewalk-level bike facilities and sidewalks provide a safe and comfortable space for people walking and biking.*

Location Key



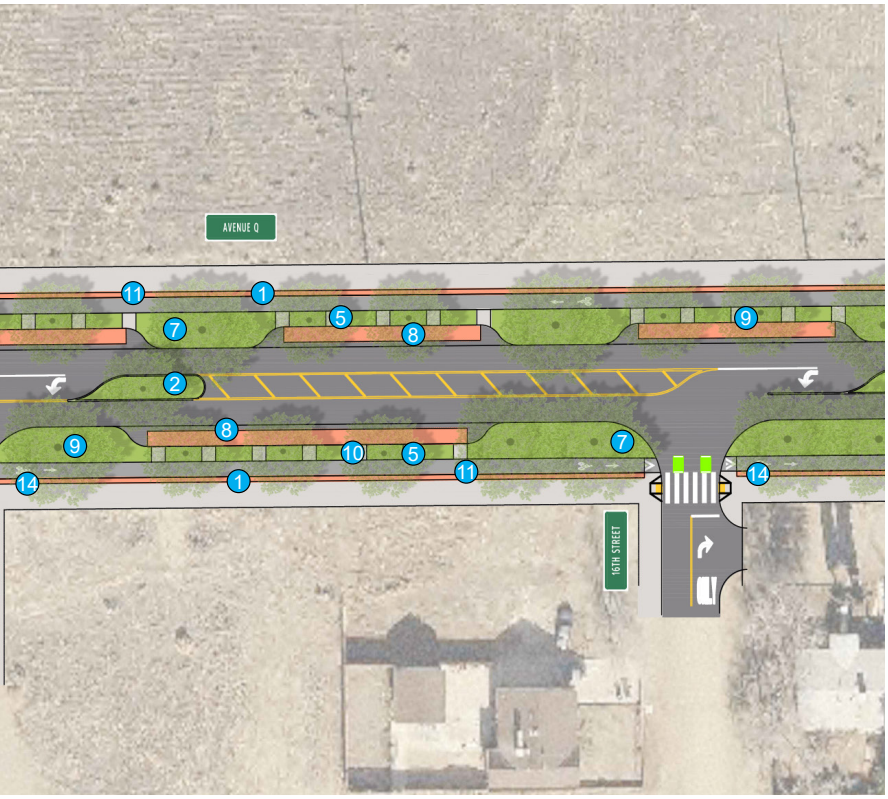


Proposed Plan View of East Avenue Q between 15th Street East and 16th Street East



Proposed Cross Section of East Avenue Q between 15th Street East and 16th Street East

Figure 32: **East Avenue Q Recommended Alternative,15th Street to 16th Street East (Two-Lane Configuration)**



Mobility + Safety Features

1. Separated bike and pedestrian pathway system
2. Midblock landscape island
3. Enhanced transit stop
4. Widened pedestrian space at intersections and accessible ramps
5. Carriage paths lead people from parking zones to the sidewalk
6. New traffic signal

Green Infrastructure Features

7. Stormwater curb extensions capture street runoff
8. Pervious pavement within parking zone
9. Tree planting zone allows for a 40’ spacing of trees
10. Low water use planting area along sidewalks and midblock islands

Streetscape Furnishings

11. Pedestrian scale street lighting placed 40-60’ throughout the corridor
12. Seating, trash receptacles, bike racks at high-use pedestrian areas
13. Shade structures at key intersections and transit stops (where feasible)
14. Wayfinding signage at intersections

Corridor Features



Low-Water Use Plants: *Climate-adaptable and California native plants can add beauty to the corridor while requiring very little water use.*



Street Lighting: *Pedestrian scale lighting augments existing vehicle-scaled lights to improve safety for people walking.*



Structural Shade: *Engineered shade structures, including those that can support growing vines, can be a unique and functional street asset.*



Pedestrian Seating: *Benches and other seating provide a place for people to rest and add function and vitality to the streetscape.*

Implementation Impacts

The Project Team evaluated the implementation impacts of the final recommended corridor alternative, reviewing traffic operations, parking, connectivity, level of traffic stress, and pedestrian crossings.

Traffic Volumes

The Southern California Association of Governments' (SCAG) Regional Transportation Model was used to determine future traffic volumes on East Avenue Q. 2030 and 2045 future model volumes are available from SCAG, and the 2045 volumes were used to determine a growth factor that has been applied to traffic volumes collected on East Avenue Q in 2021. The model volumes account for future household-level and person-level travel choices, and as a result also determines future traffic volumes. These future turning movement volumes were then applied to the recommended alternative roadway configuration to assess impacts to motor vehicle delay (see Figures 33 and 34).

Due to ongoing COVID-19 pandemic conditions, collecting accurate data and forecasting future traffic volumes can be challenging. Traffic volumes should be collected and tracked over time to determine if these projected 2045 traffic volumes track accurately. This is especially difficult when most of the study area is currently vacant and assumes significant build-out of adjacent properties in the next 20 years. The projected peak hour directional volumes are approximately 650-750 vehicles per hour between Sierra Highway and 12th Street East, which is on the higher end of what a single travel lane can reasonably process without noticeable delays and queuing. As such, a four-lane option has been included in this section of the corridor to represent the amount of space that may be required under this higher-volume scenario, while also aligning with future land use designations that call for higher levels of mixed-use density. However, the City of Palmdale may determine that a four-lane cross section is not warranted in the future based on traffic volumes, increased numbers of pedestrians and bicyclists, lack of intense development, funding, or public input and if that is the case, a two-lane cross section may be more appropriate. The two-lane cross section recommended on the eastern end of the corridor (i.e., 12th Street East to 20th Street East) could serve as a template for the western end of the corridor if four total travel lanes are not desired.

Roadway and Intersection Capacity Operations

Similar to the existing conditions traffic operations analysis described earlier in the report, a future conditions traffic operations analysis was conducted on East Avenue Q to document future conditions (year 2045) through level of service (LOS)[10], delay (measured in seconds), and volume-to-capacity ratio (v/c)[11]. The analysis, completed in Synchro 10 software, was completed at the same five intersections documented in the existing conditions section. For the future 2045 conditions, the proposed roadway configuration was considered, including a four-lane cross section between Sierra Highway and 12th Street East, a two-lane cross section between 12th Street East and 20th Street East, and five signalized intersections (under current conditions only two study intersections are signalized). As properties along East Avenue Q develop over time and traffic volumes increase, signal warrant evaluations should be completed to determine if and when these proposed signals are warranted, but in the interim all-way stop controlled intersections would be appropriate. The findings of this analysis are summarized in Table 11 and show no adverse traffic impact conditions.

A single-lane roundabout has been included in the recommended concept design at 17th Street East. Turning movement counts were not collected at this location which is why it is not included in Table 11. The intent of the roundabout at a single location is to visually represent what a roundabout could look like on the corridor and to also show the amount of space that may be required. Roundabouts have a proven track record of reducing the number and severity of crashes at intersections as they minimize the number of potential conflict points when

10 LOS describes traffic conditions—the amount of traffic congestion—at an intersection or on a roadway. LOS ranges from A to F, with A indicating a condition of little or no congestion and F indicating a condition with severe congestion, unstable traffic flow, and stop-and-go conditions. For intersections, LOS is based on the average delay experienced by all traffic using the intersection during the busiest (peak) 15-minute period. LOS A through D are generally considered acceptable.

11 Volume-to-capacity ratio (v/c) represents the sufficiency of an intersection to accommodate the vehicular demand. A v/c ratio less than 0.85 generally indicates that adequate capacity is available, and vehicles are not expected to experience significant queues and delays. As the v/c approaches 1.0, traffic becomes unstable, and delay and queuing conditions may occur. Once the demand exceeds the capacity (a v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected.

compared to a traditional signalized intersection and also facilitate slower speeds which reduces severity of potential crashes. However, roundabouts do require adjustment by users who have not navigated them before, and they also introduce a yield condition to pedestrians and bicyclists at designated crossing locations whereas a traffic signal can provide a "protected" phase for people walking or biking across the street. Roundabouts typically require more initial design and construction costs but over time require less maintenance than traffic signals.

Table 11: Traffic Operations Summary - Year 2045 Conditions

Intersection	Time Period	LOS (Delay) [v/c]				
		NB	SB	EB	WB	Intersection
Sierra Hwy (Signalized)	AM	B (17.6) [0.54]	B (17.9) [0.48]	-	B (15.8) [0.52]	B (17.2) [0.63]
	PM	C (31.4) [0.69]	E (64.4) [1.00]	-	C (29.1) [0.77]	D (46.7) [0.99]
10th Street East (Signalized)	AM	C (26.0) [0.57]	C (22.9) [0.30]	C (23.5) [0.57]	C (26.1) [0.67]	C (25.1) [0.57]
	PM	D (36.8) [0.73]	D (36.8) [0.74]	C (33.9) [0.76]	C (33.4) [0.71]	C (34.8) [0.74]
12th Street East (Signalized*)	AM	A (8.6) [0.13]	A (9.1) [0.29]	A (5.7) [0.29]	A (7.3) [0.55]	A (7.4) [0.45]
	PM	B (12.7) [0.18]	B (13.6) [0.38]	A (6.6) [0.57]	A (8.0) [0.66]	A (8.5) [0.58]
15th Street East (Signalized*)	AM	A (9.1) [0.16]	A (9.1) [0.12]	A (5.1) [0.30]	A (6.5) [0.56]	A (6.7) [0.43]
	PM	B (12.4) [0.20]	B (12.5) [0.19]	A (7.7) [0.68]	A (7.0) [0.64]	A (8.2) [0.55]
20th Street East (Signalized*)	AM	A (9.1) [0.24]	A (8.8) [0.15]	A (5.7) [0.35]	A (6.8) [0.54]	A (7.0) [0.43]
	PM	B (14.5) [0.37]	B (14.6) [0.39]	A (9.7) [0.69]	A (7.7) [0.58]	B (10.4) [0.60]

***Proposed**

Parking Impacts

There are currently very few formalized on-street parking lanes along East Avenue Q (see Figures 5, 6 and 7), and most of the corridor does not have on-street parking or has unregulated/informal curbside parking. On-street parking under the recommended alternative formalizes parking on both sides of the street where space permits and includes approximately 140 parking spaces.

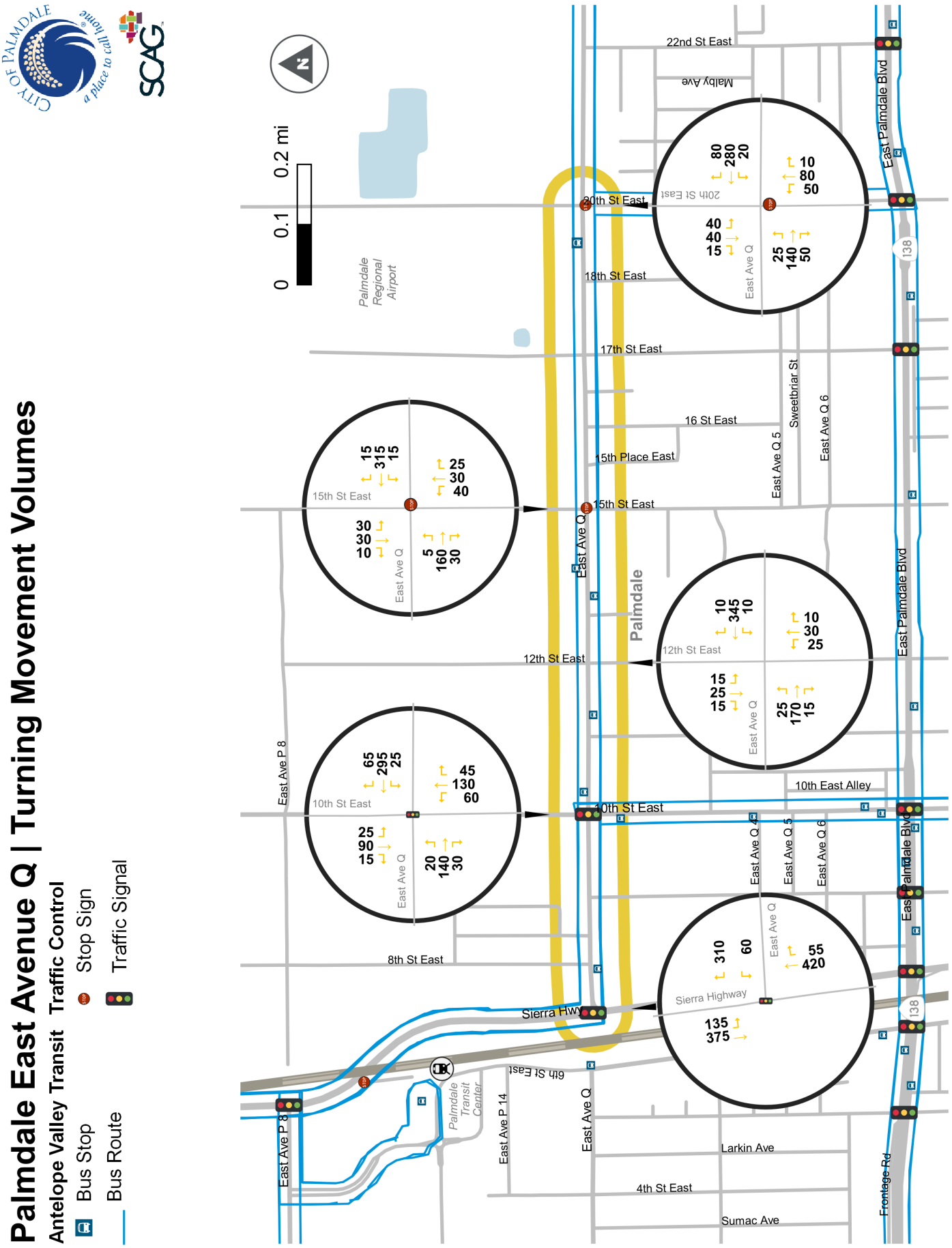


Figure 33: Study Intersection Turning Movement Volumes (AM Peak Hour) - Recommended Alternative (2045)

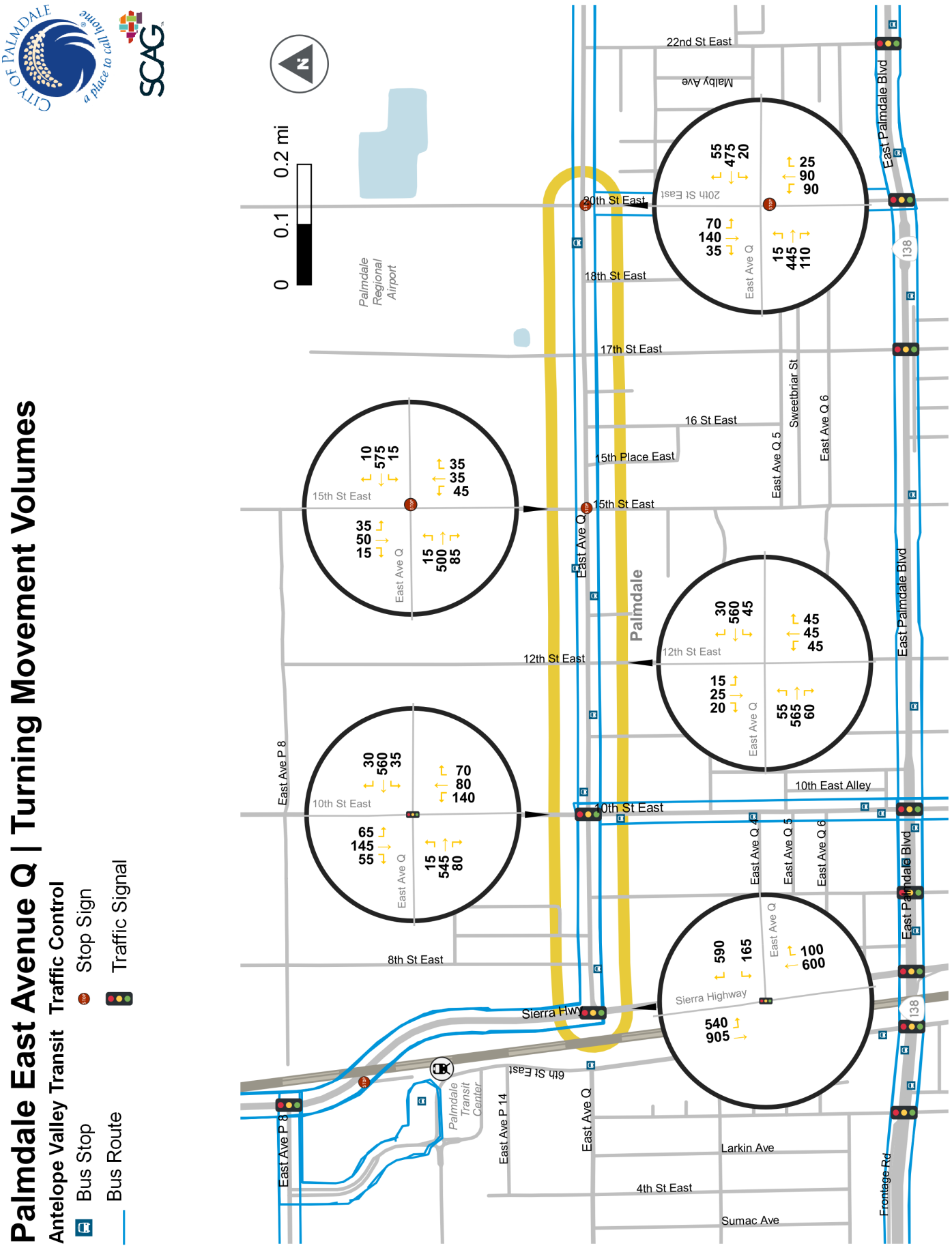


Figure 34: Study Intersection Turning Movement Volumes (PM Peak Hour) - Recommended Alternative (2045)

Bicycling Level of Traffic Stress

An updated Level of Traffic Stress analysis reflecting the recommended alternative upgrades East Avenue Q from a "High Stress" facility for people biking to an "All Ages and Abilities" corridor. The full physical protection, potential automobile speed reductions, and significant upgrades at all intersections would drastically improve conditions for bicycling along and across East Avenue Q. Without the roadway serving as a major barrier to existing low stress streets, the ability for people biking to more safely and comfortably access larger portions of Palmdale are significantly improved. The updated analysis is provided in Figure 35.

Pedestrian Crossing Assessment

There are very limited marked crossing opportunities along East Avenue Q today, with over 2,000 feet between some controlled crossings (i.e., crossings that include a marked crosswalk and some form of traffic control to stop traffic like a stop sign, traffic signal, or pedestrian signal/beacons). Under the proposed recommendation, the distance between controlled crossings is reduced to less than 800 feet (and shorter in most instances), with new traffic signals at 12th Street East, 15th Street East, 18th Street East, and 20th Street East, and pedestrian beacons at Rambler Avenue, 11th Street East, east of Orchid View Place, and between 16th Street East and 16th Place. The signals and beacons are not warranted yet, but will likely be warranted at some point in the future as adjacent properties develop and more multimodal trips are made along and across East Avenue Q. The consistent spacing of these controlled crossings will also reinforce typical pedestrian desire lines for crossing the street, contributing to a safer and more comfortable pedestrian environment.

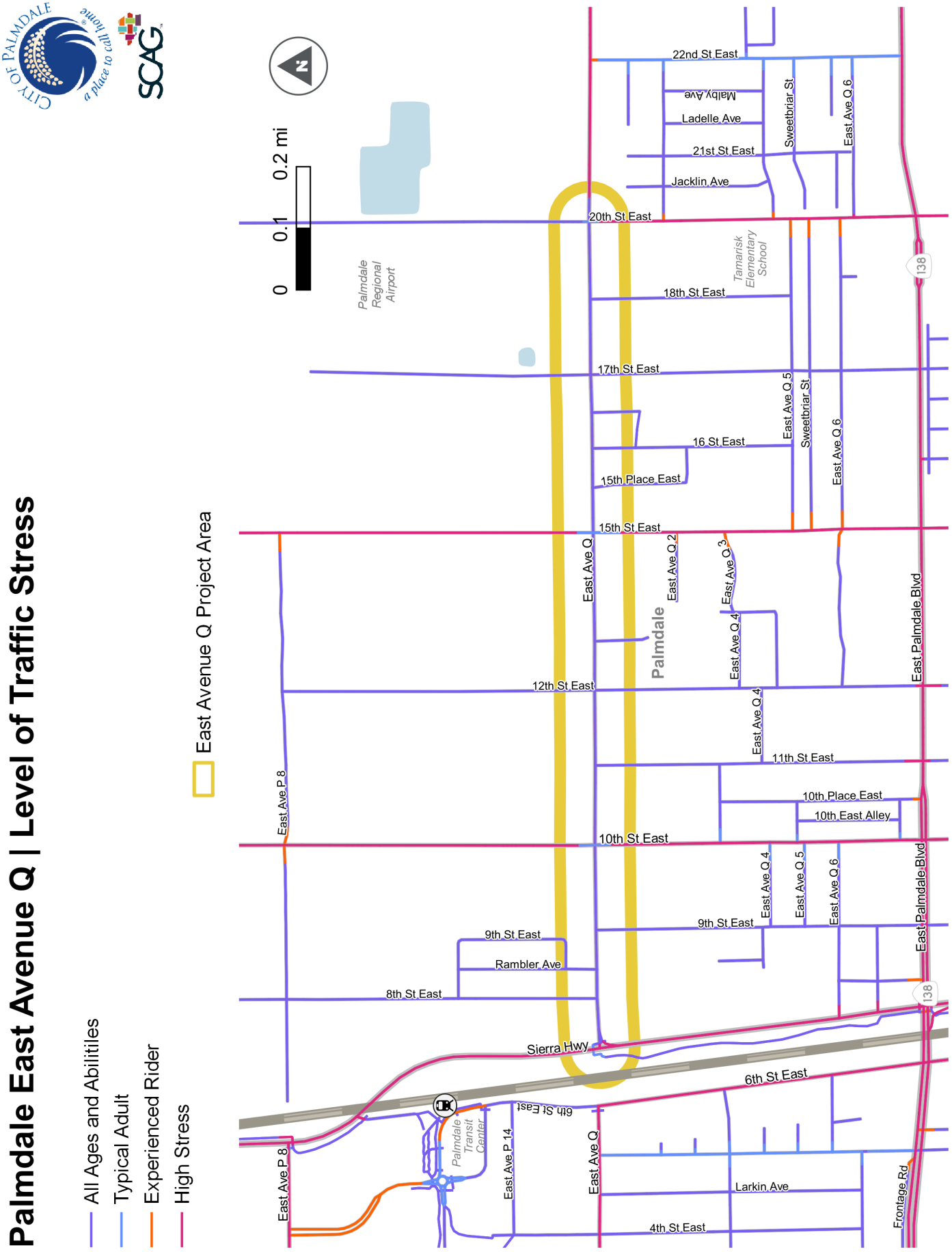


Figure 35: Level of Traffic Stress – Recommended Alternative

Funding Opportunities

Cities can fund complete streets in a variety of ways including funding from city, county, regional, state, federal, private, or non-profit sources. The Federal Highway Administration (FHWA), the California Department of Transportation (Caltrans), the California Transportation Commission (CTC), the California Office of Traffic Safety (OTS), the Los Angeles County Metropolitan Transportation Authority (Metro), and the Southern California Association of Governments (SCAG), among other agencies, offer a variety of active transportation funding sources that the City could use to fund and implement the designs recommended in this Corridor Study (Table 12).

The City may also consider establishing a dedicated funding source by increasing the proportion of capital improvement project (CIP) funds dedicated to complete streets projects.

Table 12: Summary of Potential Funding Sources

Transportation Funding Sources	Transit-Supportive and Access Improvements	Traffic Calming	Roundabouts	Pedestrian Crossing Enhancements	Complete Streets and Corridor Planning Studies	Simple Striping and Signage	Signal Modification / Improvement	Access Consolidation / Restriction	Pedestrian-Scale Illumination	Maintenance and Operations	Agency
Federal Programs											
Congestion Management & Air Quality (CMAQ)	X	X	X	X		X	X				FHWA
State Programs											
Active Transportation Program (ATP) Grant	X	X	X	X	X				X		Caltrans
Caltrans Transportation Planning Grant Program					X	X	X	X	X		Caltrans
Highways Safety Improvement (HSIP) Grant				X		X	X	X	X	X	Caltrans
State Transportation Improvement Program (STIP)	X		X			X	X	X	X		CTC
Office of Traffic Safety Grants											OTS
Regional Programs											
Sustainable Community Program (SCAG)[12]	X	X	X	X	X	X	X	X	X		SCAG
Metro Active Transport, Transit First/Last Mile Program	X	X	X	X		X	X		X		Metro

12 Implementation/construction elements must be quick-build projects

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PALMDALE EAST AVENUE Q COMPLETE STREETS PROJECT

FINAL | April 2022

PALMDALE EAST AVENUE Q COMPLETE STREETS PROJECT

Appendix



APPENDIX A: EXISTING CONDITIONS REPORT

APPENDIX B: PUBLIC ENGAGEMENT SUMMARY REPORT

APPENDIX C: TURNING MOVEMENT COUNTS

APPENDIX D: SCAG TRAVEL DEMAND MODEL VOLUMES

APPENDIX E: TRAFFIC ANALYSIS REPORTS (SYNCHRO)

APPENDIX F: CONCEPT DESIGN

Existing Conditions Report



TOOLE DESIGN

PALMDALE AVENUE Q COMPLETE STREETS: EXISTING CONDITIONS

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PROJECT BACKGROUND

The City of Palmdale is re-imagining Avenue Q as a safer corridor that encourages economic development, and as a direct connection to a multimodal transportation hub that will provide High Speed Rail, Metrolink, and local bus service to residents. The study area for the project and in this Existing Conditions Report is a 1.4 mile segment of the corridor from Sierra Highway to 20th St East (see Figure 1).

The corridor serves an important function to the residents that live on or near the street, and those that are accessing existing retail, commercial, and institutional destinations. Avenue Q is also anticipated to link major destinations and activity centers. This serves as an unprecedented opportunity for the City to consider multiple modes of travel and create a model that could have additional application in other locations throughout the City. With the future Palmdale High-Speed Rail station serving both Northern and Southern California, and the High Desert Corridor to Victorville to the east, Avenue Q will have to manage many needs. Additionally, given Palmdale's high-desert climate, thoughtful considerations need to be made about the comfort of walking and biking in high-heat and high-wind conditions.

The project goals include:

- Develop a multimodal preliminary corridor plan to be merged into a Project Initiation Document (PID)
- Enhance pedestrian and bicycle activity on Avenue Q
- Develop planning-level recommendations to address shade and wind on Avenue Q
- Provide framework for modifying roadway geometry and sidewalk improvements that will promote walking and biking as a viable form of safe and active transportation
- Develop designs for continuous bike facilities and sidewalks along the entire stretch of project area
- Ensure the Avenue Q complete streets project is consistent and complementary to the City's General Plan Update (2045 General Plan)

Figure 1 - Study Area



DOCUMENT AND CODE REVIEW

Document Review

The Project Team reviewed plans, studies, and reports relevant to the Avenue Q Complete Streets Project. Findings, guidelines, and recommendations related to and affecting walking, biking, and taking transit, particularly as they apply to the project area, are summarized below. Our team reviewed and summarized the following list of documents:

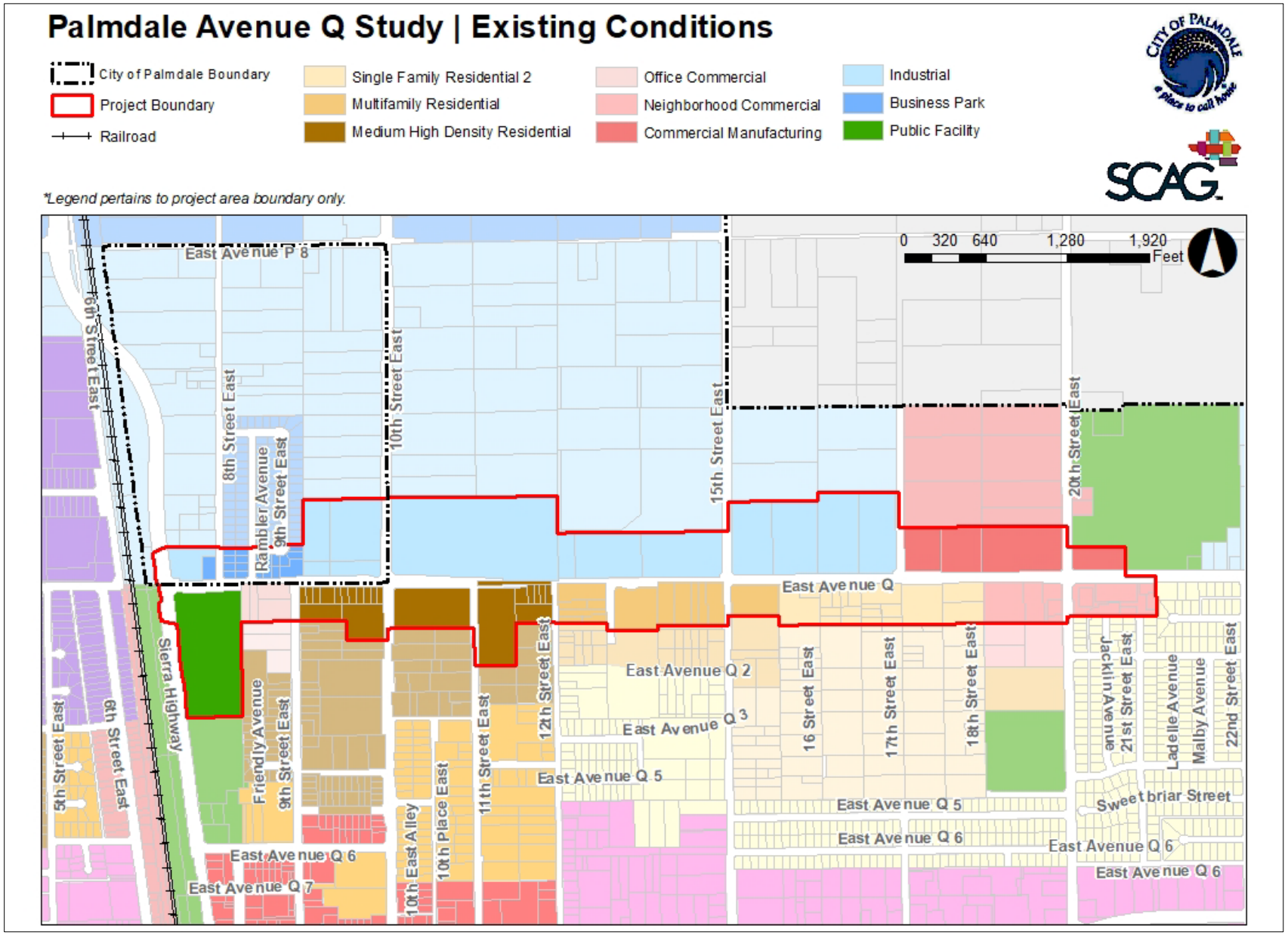
- City of Palmdale General Plan (1993)
- Palmdale Transit Area Specific Plan (2020)
- Avenue Q Feasibility Study (2016)
- City of Palmdale Complete Streets Plan (2019)
- City of Palmdale Safe Routes to School Plan (2019)
- City of Palmdale Design Toolbox (2018 draft)
- City of Palmdale Municipal Code

City of Palmdale General Plan (1993)

The current General Plan's current land use designations on Avenue Q are illustrated in Figure 2. The parcels on the north side of Avenue Q are currently designated as Industrial, Business Park, and Commercial Manufacturing. This area has a heavier jobs focus, and is home to large parcels, that today are largely unbuilt. While the parcels on the south side of Avenue Q are designated as residential between 9th Street East and 18th Street East with Single Family Residential 2, Multifamily Residential, and Medium High Density Residential uses. The west end of the Project Area includes Industrial, Business Park, and Public Facility designations, while the east end includes Neighborhood Commercial and Commercial Manufacturing designations.

The Palmdale General Plan is undergoing a comprehensive update which is expected to conclude in early 2022. This update will result in new land use designations and a new General Plan Land Use Map that shall serve to create a pedestrian and bicyclist friendly Avenue Q as described in Section 2 *Roadway Conditions*, of this report.

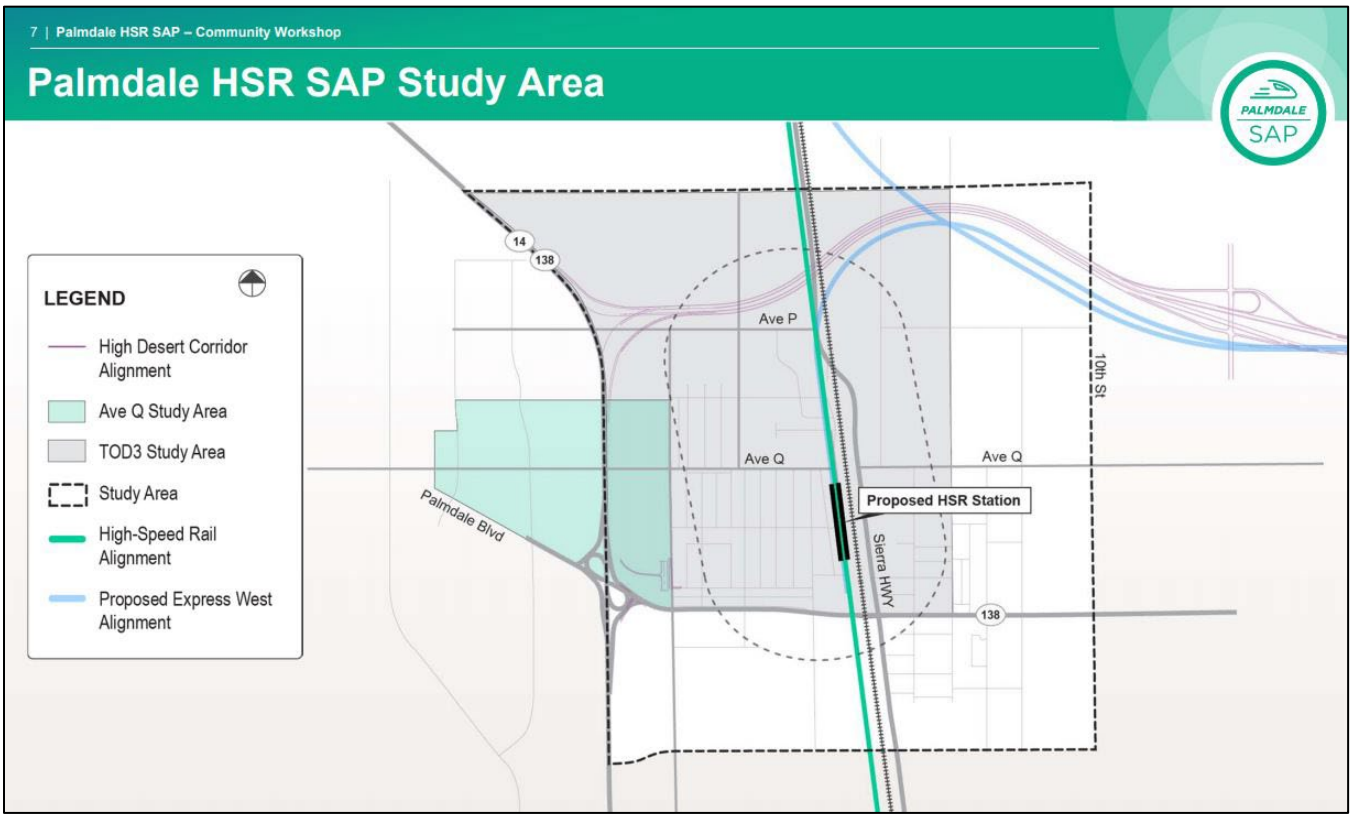
Figure 2 - General Plan Land Use Designations



Palmdale High-Speed Rail Station Area Plan and Transit Area Specific Plan (2020)

The City of Palmdale is planning for the arrival of the California High-speed Rail System which will include a multimodal transportation center and station near the existing Palmdale Transportation Center. This transit hub will include service for Metrolink, Amtrak, Greyhound, local bus service, and other emerging mobility options. The Station Area Plan has engaged the local community since 2016 and covers a small portion of the western Avenue Q Complete Street boundary from Sierra Highway to 10th Street.

Figure 3 - High Speed Rail Station Area Plan - Study Area



To compliment the Station Area Plan, the Palmdale Transit Area Specific Plan (PTASP) proposes a framework and development strategy for a pedestrian-oriented mixed-use district surrounding the Palmdale Transportation Center with the future high-speed rail station. The PTASP focuses on the area surrounded by Technology Drive to the north, SR-14 to the west, East Avenue Q-9 to the south and 10th Street to the east. The PTASP incorporates findings from the Avenue Q Feasibility Study (illustrated in green in Figure 3) and is intended as a tool for developers, property owners, City staff and decision makers, providing a vision for land use decisions, form-based development and design standards, infrastructure improvements, and economic development strategies, and it maximizes development potential around Palmdale Station. The Avenue Q study area covers a segment of Avenue Q west of Sierra Highway and the proposed High-Speed Rail station.

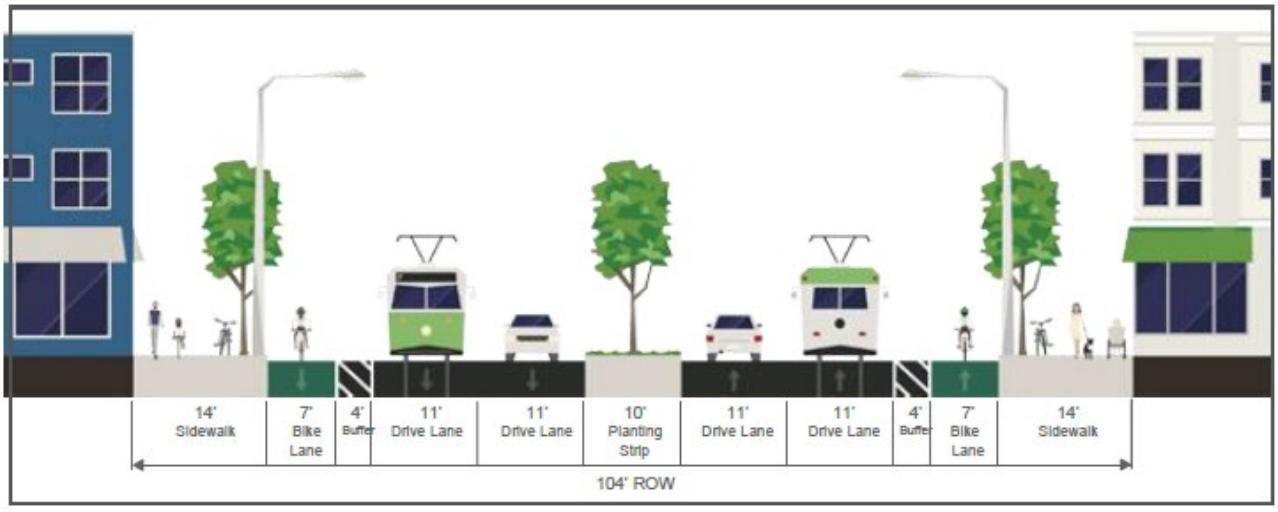
Plan elements and recommendations that relate to this segment of Avenue Q are summarized below:

- **Complete streets**: Avenue Q should transform into a “Complete Street” that primarily supports local traffic, providing people with a shared space to travel safely regardless of mode. Avenue Q

is the primary pedestrian and bicycle corridor in the PTASP plan area, and a circulator-type trolley is being considered on the street.

  - **Street furniture**: The plan specifies a street furniture palette, with recommended amenities for Avenue Q including benches, trash receptacles, bicycle racks, tree grates, shade structures, and pedestrian-scaled lighting.
  - **Signage and Wayfinding**: Gateway signage should be installed at eastern and western ends of Avenue Q, and the city should explore a banner program along Avenue Q.
- **Land Use**: Residential or mixed-use buildings with active ground floor pedestrian-oriented commercial uses are required along Avenue Q.
  - **Future Development**: One of the PTASP's first priorities is to focus on new infill development on the blocks on either side of Avenue Q to capitalize on the planned developments and revitalization of Downtown.
- **Circulation**: Transit-oriented mixed-use districts should be developed along Avenue Q, and transit stops will be enhanced with amenities that improve rider comfort and safety. The plan supports the Avenue Q Feasibility Study's recommendation to develop shorter block lengths to facilitate pedestrian and bicycle connectivity. The plan also includes a proposed cross section for Avenue Q west of Sierra Highway (see Figure 4).

Figure 4 - Avenue Q Proposed Cross-Section (west of Sierra Highway)



Avenue Q Feasibility Study (2016)

The Avenue Q Feasibility Study reviewed the potential success of Avenue Q as a transit-oriented development (TOD) mixed-use corridor. The study found that TOD along Avenue Q would create a natural extension of TOD planned for the area surrounding the future multimodal stations, and it recommends that TOD is feasible and recommended for the corridor. Key recommendations as they relate to this plan are summarized below:

- **Facilitate the development of mixed-use buildings on Avenue Q** with active, sidewalk-oriented uses on the ground floor and apartments and condominiums above.
- **Build complete, attractive, safe, and multi-modal** streets that provide for the needs of diverse members of the community, promote physical activity and support environmental sustainability.
- **Allow for a well-connected pedestrian and bicycle network** with safe and pleasant routes for walks and cyclists of all ages to easily move about.

- **Manage, price, and set requirements for parking** to:
    - Maximize transit, cycling and walking trips, while minimizing motor vehicle trips;
    - Increase social equity and housing affordability by charging separately for parking; and
    - Minimize paved surfaces and their associated environmental costs (e.g. heat island effects, air and water pollution, and storm water runoff).
- **Promote the use of structure parking garages, underground parking and surface lots located behind buildings**, so as not to detract from a pedestrian-oriented streetscape. Where appropriate, permit shared parking for adjacent uses with different operating hours.
- **Utilize unified design standards for sidewalks, parkways, curbs, street trees, landscaping and amenities.**
- **Design with local and climate-appropriate plant materials** and incorporate water conservation strategies to reflect the character and ecology of the area.

City of Palmdale Complete Streets Plan (2019)

The Complete Streets Plan is a guide for the city to utilize when evaluating multimodal opportunities, and creates a framework to implement multimodal goals, objectives and policies in Palmdale. The document provides design guidelines for future streets and aims to achieve the following goals:

- Improved community health, safety, and economic vitality
- Safe and convenient access for a variety of mobility types
- A circulation network that enables travel to and from destinations in a safe and efficient manner
- Mobility for multiple modes of transportation, not just vehicles
- Reduced vehicle emissions from increased use of alternative transportation modes

The plan recommends the following key design principles for designing complete streets in Palmdale:

- **User Safety:** Providing safety for each type of user is essential to the success of a Complete Street. Without safety, users will not be encouraged to utilize and experience the benefits of their Complete Street. Appropriate speeds for all users should also be addressed in regard to safety and efficiency.
- **Pedestrian Accessibility:** Complete Streets are primarily about providing convenient access to adjacent land uses for users of all abilities and for multiple modes of transportation (bicyclists, motor vehicles, pedestrians, freight, public transit, etc.).
- **Efficiency:** The location of a Complete Street network, where people are traveling to and from, and the timeliness of trips for each user should all be factored into the design process. Timeliness corresponds to the capacity and level of service for each type of user.
- **Costs/Benefits:** The cost of building and maintaining a Complete Street, and any street for that matter, should be considered during the design phase. Complete Streets should also facilitate the local economy through its accessibility.
- **Mobility and Accessibility:** Mobility can be defined as the ability to move freely (ie: get somewhere quickly). Accessibility is defined as the ability to reach destinations (ie: can you get there). Balancing mobility and accessibility will likely be determined by the local context of the street.
- **Emergency Vehicle Accessibility:** Emergency vehicle accessibility should be considered when designing Complete Streets.
- **Adjacent Buildings:** The placement and orientation of buildings adjacent to Complete Streets should be considered when designing a Complete Street. Providing space to accommodate different modes of transportation and pedestrian-oriented design elements should strengthen the relationship of buildings to the public right-of-way.

The Complete Streets Plan categorizes Avenue Q as a major arterial, and it is recommended as a complete street for the city. The plan's engagement process found that pedestrian safety and pavement / sidewalk conditions were the top two transportation challenges faced by stakeholders.

City of Palmdale Safe Routes to School Plan (2019)

The Safe Route to School (SRTS) Plan provides a guideline for physical improvements and programs for implementation for schools in Palmdale. The goals of the SRTS plan are:

- To make it safer for students to walk and bicycle to school
- To increase the number of students walking and bicycling to school.

The SRTS Plan found that 12% of students walk to school, 0% ride a bike, 10% take the school bus, 1% take public transit, and 76% drive or are driven. There are no schools directly along Avenue Q in the project area, although Tamarisk Elementary School, R Rex Parris High School, and Sierra Paloma High School are located within walking or bicycling distance to the study area.

The Safe Routes to School Plan includes a standalone Design Toolbox document that includes minimum design standards and other recommended support items for bike facilities and safe routes to school improvements. These improvement types shall be considered and included as part of the Avenue Q Complete Street study.

Table 1 - Bicycle Design Guidelines

Design element / facility	Guidelines
Class 1 Bike Path	Design as a separate facility away from parallel streets. Minimum of 8' of pavement, with 2' of unpaved shoulder.
Class II Bike Lane	Designate with striping, signage and pavement markings. Minimum of 5' width – 6'-8' preferred on busy arterial streets.
Buffered Bike Lanes	Can have a single or double buffer, and should be used on wide, busy streets.
Class III Bike Route, sharrow	Simple signed route along street corridors. "Bike Route" signage should be posted after every intersection along the route. Sharrows designated with stencils enhance the visibility and safety of Class III Bike routes.
Class IV Separated Bike Lanes	Design using physical barrier between bike lane and adjacent travel lane. Vertical separation can vary. Minimum width for one-way protected bike lane is 5', although 6' is preferred; minimum width for a two-way protected bike lane is 8', with 12' preferred and 3' for a parking buffer.
Colored pavement markings	Pavement colors can differentiate specific portions of the travel way and highlight conflict areas between bicycle lanes and turn lanes.
Bikeway intersection	Bikeway intersections facilitate the interchange between bicyclists, pedestrians, and motorists. Design and level of treatment depends on the bicycle facility type used.
Bikeway marking at intersections	Continuing marked bicycle facilities at intersections (up to the crosswalk) ensures that separation, guidance on proper positioning, and awareness by motorists are maintained. Right-turn only lanes should have a bike lane pocket between the right-turn lane and the right-most through lane. Sharrows are an option for marking a bikeway through an intersection where a bike lane pocket cannot be accommodated.
Bicycle signals	Bicycle signal heads may be installed at signalized intersections, and only used in combination with an existing conventional or hybrid beacon. A Leading Bicycle Interval can be implemented in conjunction with a bicycle signal head.
Bicycle parking	Bicycle parking is not standardized in any state or municipal code. Bike racks provide short-term parking and should offer adequate support for the bicycles and should be easy to lock to. Long-term parking should be provided for those needing all day storage or enhanced safety. Bicycle lockers offer good long-term storage. Bicycle parking should be clearly identified by signage and located close to the front door of buildings.

Table 2 - Safe Routes to School Design Guidelines

Design element / facility	Guidelines
Audio pedestrian signals	A device that communicates information to pedestrians in nonvisual format such as audible tones, verbal messages, and/or vibrating surfaces. Use audible beaconing only where necessary. Two poles should be installed for APS speakers, located close to departure location and crosswalk.
Advance stop bars	Vehicle stop line should be moved 4 to 6 feet further back from the pedestrian crossing.
Advance yield lines	Advance yield lines should be placed 20 to 50 feet in advance of crosswalks along with "Yield here to pedestrians" sign placed adjacent to the markings. Use at crosswalks on streets with uncontrolled approaches, right-turn slip lane crossings, and midblock marked crosswalks.
Countdown signals	Should be placed for each crossing leg at signalized intersections. Ensure that signals are visible to pedestrians and when possible, provide a walk interval for every cycle.
Crosswalk markings	Marked crossings are necessary at marked midblock and uncontrolled crossing locations.
Curb extensions	Site at corners or midblock. Extend out to align with parking (typically 1' to 2' less than the parking lane width), and can be tapered where there is no on-street parking. Use at areas with high pedestrian traffic.
Curb ramps	Must be installed at all intersections and midblock locations where pedestrian crossings exist.
Intersection geometry modification	Geometry should be as close to 90 degrees possible. If skewed, consider removing one or more legs from the major intersection and creating a minor intersection further up or downstream (if there are more than two streets intersecting); close one or more of the approach lanes to motor vehicle traffic, while still allowing access for pedestrians and bicyclists; and/or introduce pedestrian islands if the crossing distance exceeds three lanes (approximately 44 feet)
LED flashing lights on stop signs	Use individually within the face of a sign. Use at stop sign locations with sight visibility limitations.
Lighting	Vertical illumination of 20 lux in front of the crosswalk, measured at a height of 5' from the road surface, provided adequate detection distances in most circumstances.
Medians	Minimum of 6' wide, usually as wide as center-turn lane. Apply between intersections when blocks are long, sight distances are poor, streets and/or traffic volumes are high, or sight distances are poor. Median noses should be as wide as the existing median.
Midblock crossings	Marking a crosswalk at an uncontrolled intersection should be guided by an engineering study, and markings should be high-visibility and include crossing islands, advanced markings and signage, or rapid-flash beacons as needed.
Neighborhood traffic circles	Central island size should achieve design speed of 15-20 mph. Should be used on lower-volume, neighborhood streets.
Pedestrian crossing islands	Preferred width of 6' (minimum 4'), can be applied on any bi-directional street with adequate width.
Pedestrian hybrid beacons	Minimum of 20 pedestrians per hour needed to warrant installation, and installation should be done according to MUTCD only at marked crosswalks.
Pedestrian-activated pushbuttons	Should be located as close as possible to top of curb ramps. Apply in areas with few pedestrians.
Rectangular rapid-flash beacons	Place at crosswalk and in center median/crossing island.
Removable pylons	Can be used to create temporary curb extensions or to delineate protected bike lanes.
Reduced curb radius	Use passenger (P) vehicle as default design vehicle, with initial corner radius between 15-25 feet. Larger design vehicles should only be used when they are known to regularly make turns at the intersection.
Right-turn channelization islands	Provide a yield sign for the slip lane, and at least a 60-degree angle between vehicle flows. Typical layout involves creating an island that is roughly twice as long as it is wide. Apply where heavy volumes of right turns are seen (200+ vehicles per hour)
Roundabouts	Can replace traffic signals. Before designing, determine the number and type of lanes on each approach/departure based on capacity analysis, design vehicle for each movement, presence of on-street bike lanes, and right-of-way and its availability for acquisition if needed.

Scramble/exclusive pedestrian phases	Use where turning vehicles conflict with very high pedestrian volumes and pedestrian crossing distances are short.
Signal timing/phasing	Signal progression should be at speeds that support the target speed of a corridor. Pedestrian phases should be on automatic recall, and place pedestrian pushbuttons where few pedestrians are expected. Leading Pedestrian Intervals allow people walking to cross while all directions of traffic have a red signal. Protected left-turn phases are preferable to permissive movements. Follow standard California MUTCD warrants.
Signs	Place with adequate sight distance and according to MUTCD standards.
Speed feedback signs	Place in conjunction with speed limit sign and should flash “SLOW DOWN” message if driver is going above speed limit. Place in school zones or corridors where speeding is a known issue.
Access management	Minimize new driveways and eliminate or consolidate driveways when possible.
Streetscape features	Street furniture should not obstruct pedestrian paths or sight lines. Include landscape irrigation and maintenance plans. Focus improvements in downtown areas and commercial districts and focus landscaping on native plants.

City of Palmdale Municipal Code

The City of Palmdale’s Municipal Code contains local ordinances and regulations specifically pertaining to bicyclists and pedestrians that shall be considered as the Avenue Q project develops.

Chapter 8.32 Skateboards, roller skates, and bicycles

- It is unlawful for any person to skate, use, ride or otherwise operate any skateboard or roller skates within, upon or over any public transportation parking lot, building or facility.
- It is unlawful for any person to skate, use, ride or otherwise operate any skateboard, roller skates, or bicycle upon or over private property posted by the property owner, tenant or manager, with clearly legible and visible signs prohibiting such activity. (Ord. 1319 § 2, 2007; Ord. 1305 § 1, 2007; Ord. 693 § 1, 1987)

Chapter 17.87.210 Bicycle Parking Facilities

- All non-residential developments containing twenty or more automobile parking spaces shall be required to provide bicycle parking facilities in conformance to this Section:
    - Number of spaces. Every non-residential development containing over twenty parking spaces shall provide a minimum of two bicycle rack spaces for the first fifty parking spaces, and one additional bicycle rack space for each additional fifty parking spaces. Fractional requirements of .5 or greater shall be considered as a full bicycle rack space.
    - In no case shall the number of bicycle racks accommodate less than 4 bicycles for the first 50,000 square feet of non-residential development, and 1 bicycle per each additional 50,000 square feet of non-residential development.
    - Location. Bicycle racks shall be located in such a manner as not to interfere with pedestrian or vehicular traffic and shall be conveniently placed near front and employee entrances. Location of bicycle racks should provide for surveillance of the area from the primary building parking and pedestrian access areas, to provide for security of the bicycle parking area. (Zoning Ordinance Amendment 97-5, adopted by City Council July 9, 1997.)
    - Access. Safe and convenient access shall be provided from the external circulation system to the bicycle parking facilities on-site.
    - Bicycle racks. The required bicycle rack spaces shall consist of a rack or other secure device for storing and protecting bicycles from theft.

Chapter 17.88. Signs

- Make the city attractive to residents, visitors and commercial, industrial and professional businesses while maintaining economic stability through an effective and high-quality signing program.
- Reduce and, to the extent permissible and practicable, eliminate traffic and safety hazards posed to motorists and pedestrians by outdoor advertising structures and other signs that may distract motorists and pedestrians.
- Except where approved or required by a government agency or as otherwise expressly permitted under this Chapter, no sign may be stuck, glued, painted, pasted, posted, nailed, stapled or otherwise affixed or attached to or upon any public street, walkway, cross walk or other right of way, curb, lamp post, transit bench or shelter, trash receptacle, fire hydrant, tree, telephone booth or pole, lighting system or any fixture of the police or fire alarm system, any existing sign, or upon any other public property.

Maintenance Policies, Programs and Equipment

Maintenance is a division of the City's Public Works department and is a key consideration for streetscape features along Avenue Q such as landscaping, waste management, flood management, and lighting.

- **Street Maintenance:** The Street Maintenance division provides pavement maintenance; snow plowing; street sanding; pavement and curb painting, storm damage, concrete, and drainage maintenance and repair; illegal dumping removal; traffic sign maintenance, alley maintenance; and pothole repair. Avenue Q is not included on the city's street sweeping schedule.
- **Fleet Maintenance:** The Fleet Maintenance Division maintains and repairs vehicles and more than 300 pieces of equipment, including power tools, emergency generators, blowers, edgers, and weed whips.
- **Landscaping Maintenance:** The Landscape Maintenance division is responsible for City parks and facility grounds, general benefit landscapes, park and rides, and the Palmdale Transportation Center.

STUDY AREA CONTEXT

Mode Share

The project area is made up of three census tracts: 9101.01, 9105.01, and 9105.02, with a working population of 3,678. Census tract 9101.01 includes the area directly north of Avenue Q, while tracts 9105.01 and 9105.02 include the areas south of Avenue Q. American Community Survey data from 2019 (Tables 3 and 4) illustrates that workers in the project area rely heavily on driving for their work trips, with only 3.3% of commuters walking or biking and 3.7% taking transit. Most workers live in households with one or more vehicles available, but 6.3% of workers do not live in a household with a vehicle available to them. American Community Survey data does not account for trips made for errands, leisure, or school, which could tend more multimodal than work trips.

Table 3 - Means of Transportation to Work (Workers 16 years and over)

Census Tract	Driving (including carpooling)	Public Transit	Biking	Walking	Other
Tract 9101.01 (664 total)	96.4% (621)	1.7% (11)	0.0% (0)	0.0% (3)	1.4% (9)
Tract 9105.01 (1467 total)	74.2% (1088)	6.4% (94)	0.0% (0)	5.7% (83)	4.3% (63)

Tract 9105.02 (1547 total)	93.0% (1440)	2.0% (32)	0.7% (11)	1.7% (26)	0% (0)
All tracts (3678 total)	85.6% (3149)	3.7% (137)	0.3% (11)	3.0% (112)	2.0% (72)

Source: American Community Survey (2019)

Table 4 - Vehicles Available (Workers 16 years and over in households)

Census Tract	No vehicles	1 vehicle	2 vehicles	3 vehicles	4 vehicles	5 or more vehicles
Tract 9101.01 (664 total)	2.3% (15)	11.9% (79)	33.6% (223)	41.1% (273)	1.1% (7)	10.1% (67)
Tract 9105.01 (1467 total)	10.3% (151)	56.8% (833)	24.0% (352)	8.9% (131)	0.0% (0)	1.2% (17)
Tract 9105.02 (1547 total)	4.3% (66)	14.5% (224)	50.9% (788)	13.6% (210)	14.8% (229)	3.3% (51)
All tracts (3678 total)	6.3% (232)	30.9% (1136)	37.1% (1363)	16.7% (614)	6.4% (236)	3.7% (135)

Source: American Community Survey (2019)

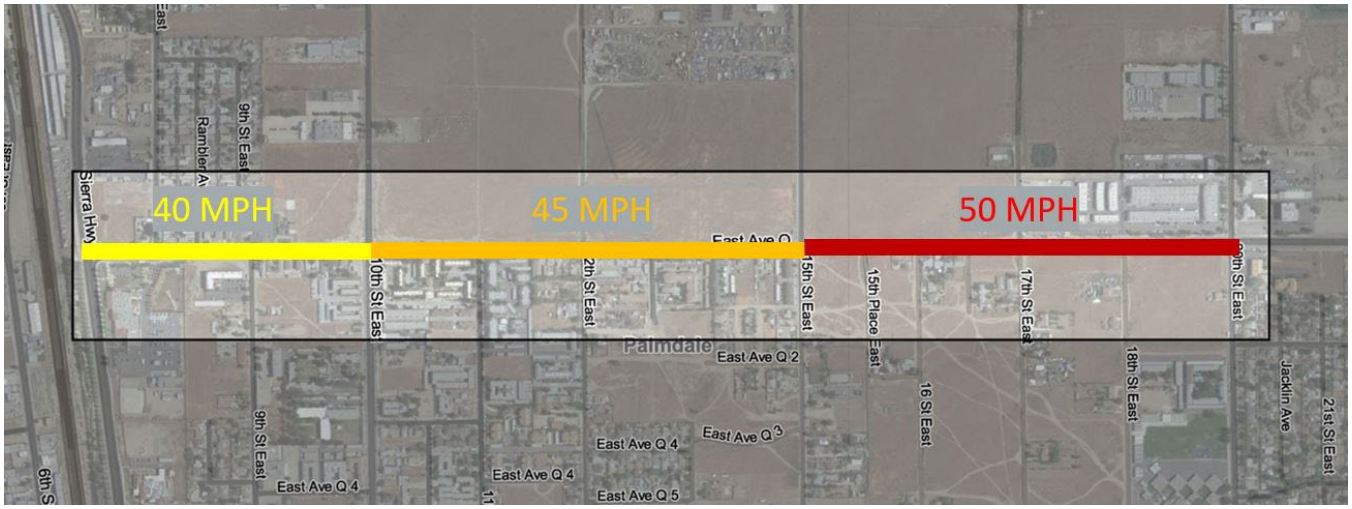
Roadway Conditions

Avenue Q is classified as a Major Arterial in the City's Current General Plan. Major Arterials intend to carry the majority of vehicle traffic throughout Palmdale and have design specifications that include either three travel lanes in each direction with a median for left-turning traffic, or two travel lanes in each direction with a median for left-turning traffic and curbside parking lanes. The posted speed limit of the project area varies from 50 MPH (from 20th Street to 15th Street), 45 MPH (from 15th Street to 10th Street), to 40 MPH (from 10th Street to Sierra Highway), as illustrated in Figure 5.

Today, Avenue Q has one travel lane in each direction, on-street parking lanes in a few areas along the corridor, and vehicle turn lanes at key intersections. Sierra Highway and 10th Street are the only signalized intersections within the project area, while 15th Street and 20th Street are all-way stop controlled. According to the Los Angeles County GIS parcel data, the right-of-way boundaries vary in width along the corridor, with conditions as narrow as approximately 40 feet, to the widest point of approximately 104 feet near 10th Street. **Appendix A** illustrates the varying right of way widths that will be referenced as we move into the design process.

Designing a complete street that balances all modes and serves as a destination for residents requires a re-evaluation of the capacity needs and profile of Avenue Q. The General Plan Update that is currently in progress has addressed how streets can better serve people in Palmdale. The General Plan Update will recommend moving from the traditional definitions of functional classification to Mobility Categorizations, with the intent to classify streets based on their purpose in the community in a context appropriate manner. Avenue Q is tentatively classified as a Multimodal street to accommodate all users with a typical profile of two travel lanes in each direction, a median for left-turning traffic, and bicycle faculties that are separated from traffic. Our study and design for the proposed geometry of Avenue Q will include alternatives for maintaining two to four travel lanes in each direction with separated bicycle facilities and wide sidewalks to establish a slower, predictable street for all users.

Figure 5 - Posted Speed Limit



Land Use

The success of a complete street on Avenue Q will largely depend on the variety, convenience, and attractiveness of development to serve the local community and encourage short walking and bicycling trips. As noted in the General Plan review section of this report, the Avenue Q study area includes 134 acres, which are largely (55%) vacant, as shown in Figure 6. The remaining study area is currently home to public, industrial and office, commercial, private institutions, multifamily and single family residential, and warehouse uses.

The study area is bound by two public facilities, the Palmdale Sheriff Station at the corner of Sierra Highway and East Avenue Q to the west and the Palmdale Water District at the corner of 20th Street East and East Avenue Q to the east. Other key land use types include:

- The Palmdale Sheriff Station–ran and operated by the Los Angeles County Sheriff's Department—serves the City of Palmdale and surrounding communities. The Palmdale Sherriff's Station is a state-of-the-art facility constructed in 2006 that includes a 47,000 square-foot main building, 7,800 square-foot jail, and 8,400 square-foot motor pool and storage building.[1]
- The Palmdale Water District (PWD) has provided water services in the Antelope Valley since 1918. PWD serves the City of Palmdale and approximately 187 square miles of land in northeastern Los Angeles County, including several non-contiguous areas of the Antelope Valley.[2]
- Mixed residential uses within the Project Area include single family residential homes, and primarily two-story apartment complexes ranging in size and density with surface parking lots that face Avenue Q. There are approximately 77 single family residential units within the project area, many of which are clustered on a singly parcel. These single-family units are characterized by front-facing and front-loading garages at either the front of the building or in a detached structure at the back of the parcel. Single-family residential front setbacks range from approximately 25-60 feet on Avenue Q. The study area contains approximately 376 multifamily residential units. The orientation of buildings and parking lots across multifamily structures varies, with smaller multifamily structures oriented facing Avenue Q with front-loading parking lots, while larger multifamily structures feature several buildings oriented around the

[1] Palmdale Sherriff's Station, (n.d.) Los Angeles County Sherriff's Department. Retrieved from: http://shq.lasdnews.net/pages/patrolstation.aspx?id=PLM

[2] History of PWD, (n.d.) Palmdale Water District. Retrieved from: https://www.palmdalewater.org/about/history-of-pwd/

perimeter of a parcel with parking lots at the center. Table 5 includes a breakdown of the existing land uses within the study area.

Table 5 - Existing Land Use Breakdown

Existing Uses	Total Acreage	Percent of total Project Area	Parcel Count	Residential Unit Count
Public Facilities	13	10%	3	-
Industrial	3	2%	1	-
Multifamily	18	13%	12	376
Office	1	1%	1	-
Private Institutions	4	3%	5	-
Retail/Commercial	7	5%	3	-
Single Family Attached	3	2%	21	77
Single Family Detached	10	7%	28	
Vacant	73	55%	34	-
Wholesale/Warehousing	2	2%	1	-
Total	134	100%	109	453

Environmental Context

Our team assessed the impacts of the built environment using the CalEnviroScreen 3 tool which uses several factors to measure inequity for each census tract in California. Some of the factors include exposure to pollutants (such as ozone, pesticides, and even traffic), as well as educational attainment, poverty levels, and linguistic isolation. Although no census tracts in the project area are considered Disadvantaged Communities (disadvantaged communities must score at or above 75%), the entire project area has a relatively high pollution burden compared to the immediate surrounding area, with pollution burden in the 50th percentile or higher. A more comprehensive breakdown of demographic characteristics is detailed in the *Avenue Q Usage* section of this report. Refer to Figure 7 for a map of environmental burden on Avenue Q.

Figure 6 – Vacant Parcels

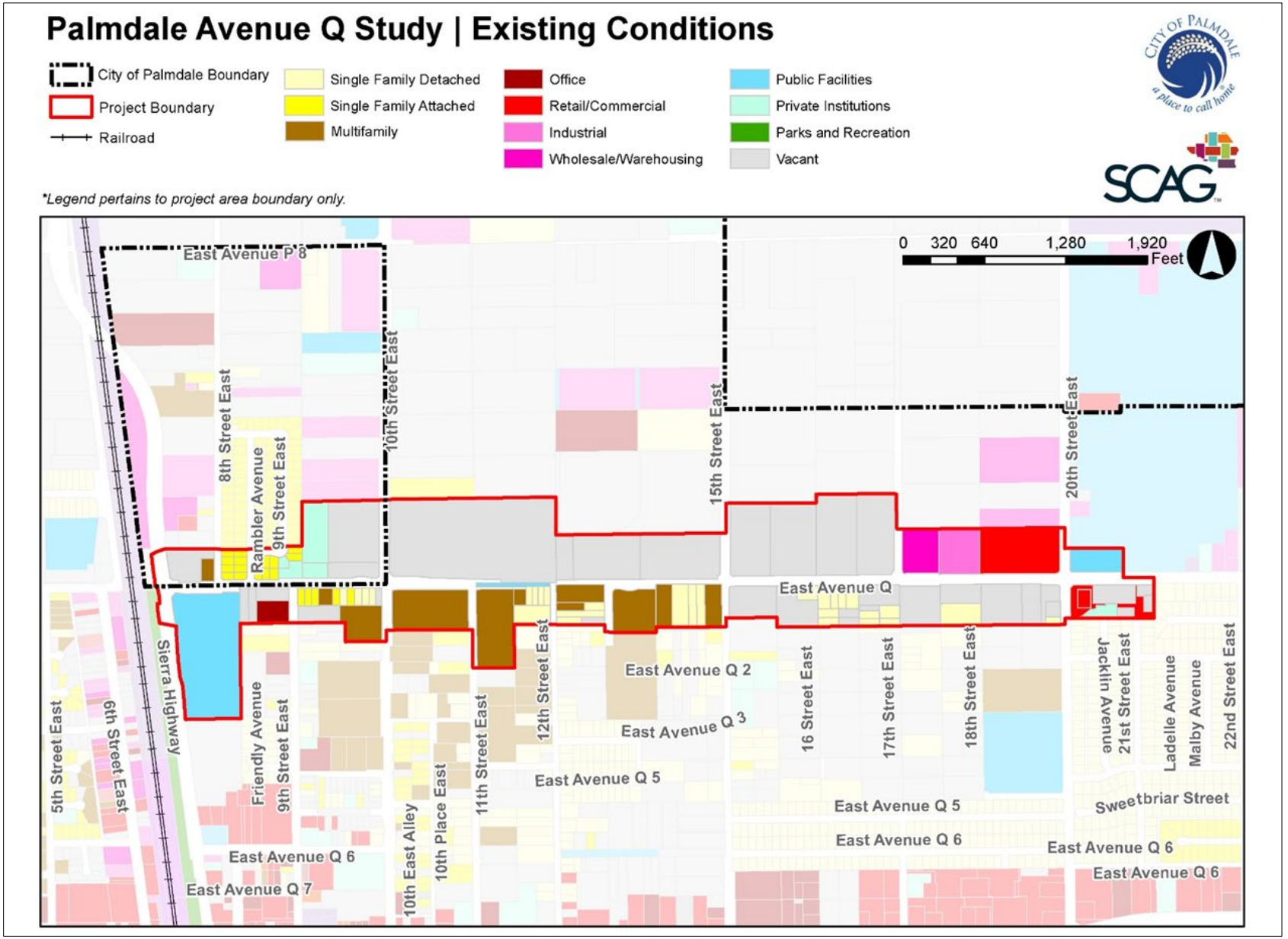
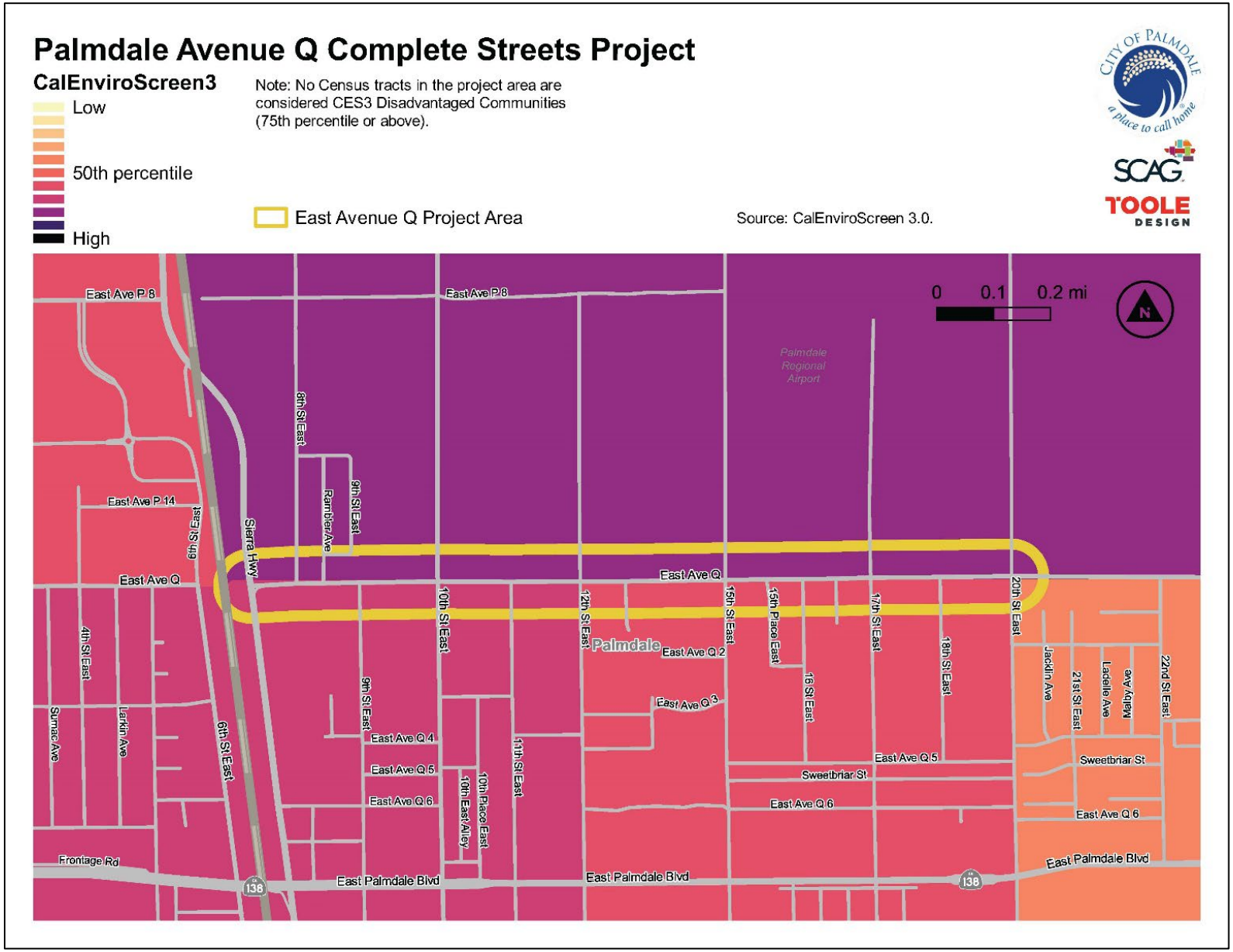


Figure 7 - CalEnviroScreen 3.0 Index



AVENUE Q USAGE

To better understand who is impacted by existing conditions along Avenue Q, our team analyzed the three project census tracts that compose our project area. One of the tenets of a complete street includes a street that functions for people of all ages and abilities. Our demographic breakdown focuses on age since young people and older adults may be less likely to drive alone or may be transit dependent. Lower income residents may also rely on walking, bicycling, and taking transit and is another focus demographic for our initial investigation.

Demographic Breakdown

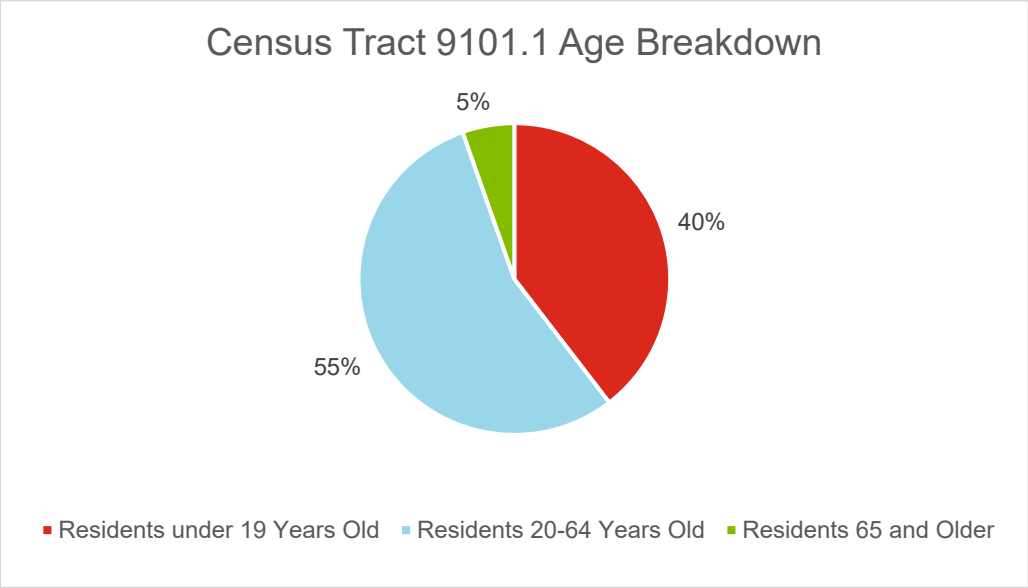
Age

Demographic data demonstrate that the project area's population skews toward younger age groups. Chart 1, Chart 2, and Chart 3 provide an age breakdown within the three following age groups:

1. Residents under 19 years old
2. Residents between 20 and 64 years old
3. Residents 65 years old and older

Age groups were broken under these three categories to identify potential barriers to mobility for younger children/ teenagers and older adults.

Chart 1 - Age Breakdown of Census Tract 9101.01



All three project census tracts saw young adults constitute the majority of their population. However, census tract 9101.01 had the most percentage of young residents with 40% of the tract's population being 19 years old or younger. Census tract 9105.01 had a higher share of older adults relative to the other census tracts, although the difference is rather marginal at a 2% difference compared to both census tracts 9101.01 and 9105.02.

The data show that teenagers and young children constitute a significant share of the population for each of the project census tracts' population, respectively. With this in mind, the mobility needs of younger people and families without access to a car should be prioritized as the Avenue Q project further develops.

Chart 2 - Age Breakdown of Census Tract 9105.01

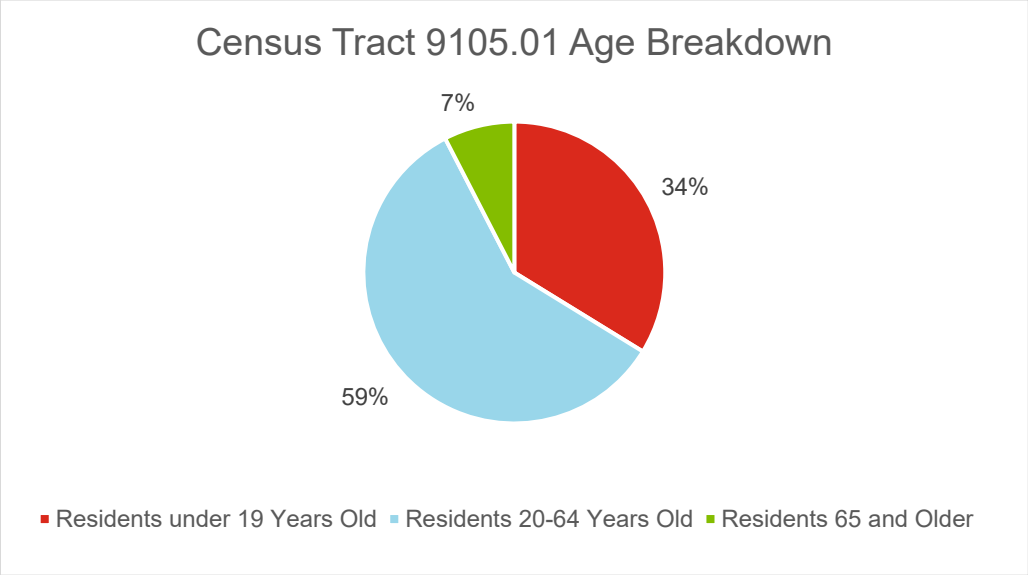
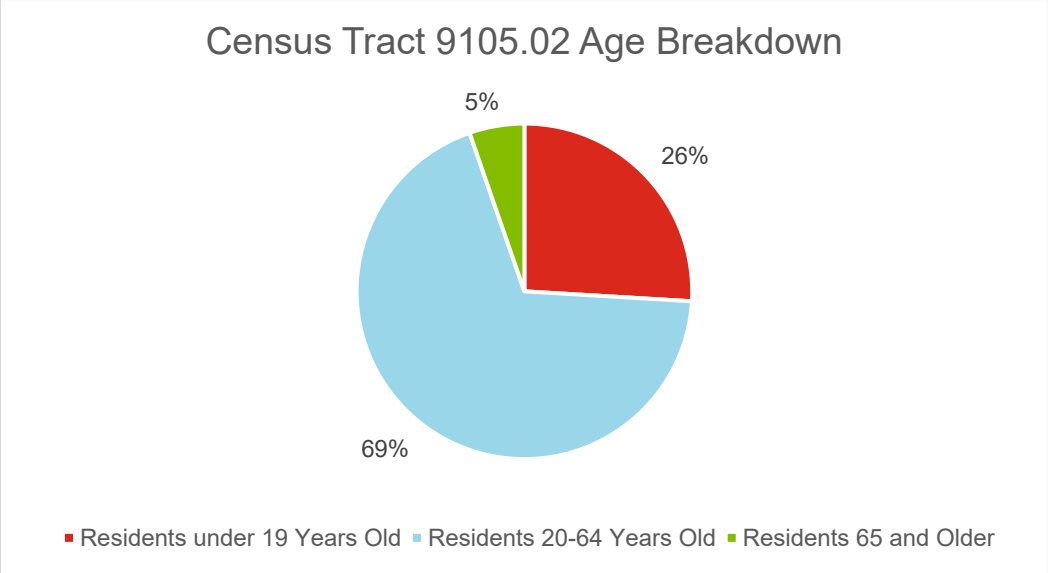


Chart 3 - Age breakdown of Census Tract 9105.02



Median Annual Household Income

The Project Team collected median annual household income data to analyze whether any potential mobility challenges that residents may experience due to income. We used the City of Palmdale's median annual household income to normalize/ provide a baseline comparison for the census tracts' data (see Table 7). Using this as a baseline demonstrates that the project area census tracts are relatively lower income when compared to the rest of the city.

Census tract 9105.01 has the lowest median annual household income of the three census tracts at $17,500.00, which in turn is only 29% of the City's median annual household income. Census tract 9105.02's median annual household income makes 57% of the City's median annual household income at $34,150.00. The highest earning

tract is 9101.1 ($41,481.00), but it is still lower than the City's median (69% of City's median annual household income).

Table 6 Median Annual Household Income in Project Tracts and City

Census Tract	Median Annual Household Income	Percent of City Median Annual Household Income
9101.01	$41,481.00	69%
9105.01	$17,750.00	29%
9105.02	$34,150.00	57%
City of Palmdale	$60,428.00	

Source: American Community Survey (2018)

Walking, Biking, and Taking Transit

During a December 2020 site visit, the Project Team observed two (2) people biking, three (3) people walking and 1 person skateboarding over a two-hour period. While this is not indicative of regular walking and biking patterns, it gives us a snapshot of the conditions for people traveling, where people are walking and bicycling, and destinations they head to. To further investigate how often people walk, bike, and take transit, our team led a citywide survey and received 543 responses about how residents use Avenue Q. Of these respondents, 51 percent walk around Avenue Q a few times a year or more, 21 percent bike around Avenue Q a few times a year or more, and only 18 percent take transit around the project area a few times a year or more. Pedestrian and bicyclist count data collected on a weekday during Spring 2021 also finds a low number of people walking and bicycling along the project area.

Post evaluation counts for the project area may help create a better understanding of who walks and bikes along Avenue Q, and how walking and bicycling trips can increase once improvements are made. As described in more detail under the Connectivity section of this report, there are few transit riders today and recent service cuts to AVTA lines along Avenue Q have discouraged people to regularly take the bus. There are also few households that have zero vehicle ownership as shown in Table 7, indicating that may people may have access to a vehicle are may not be transit dependent. Young people and older adults, however, may be more dependent on non-automobile commuting and can benefit from balancing modes and improved transit service along Avenue Q.

Table 7 - Vehicles Available (Workers 16 years and over in households)

Census Tract	No vehicles	1 vehicle	2 vehicles	3 vehicles	4 vehicles	5 or more vehicles
Tract 9101.01 (664 total)	2.3% (15)	11.9% (79)	33.6% (223)	41.1% (273)	1.1% (7)	10.1% (67)
Tract 9105.01 (1467 total)	10.3% (151)	56.8% (833)	24.0% (352)	8.9% (131)	0.0% (0)	1.2% (17)
Tract 9105.02 (1547 total)	4.3% (66)	14.5% (224)	50.9% (788)	13.6% (210)	14.8% (229)	3.3% (51)
All tracts (3678 total)	6.3% (232)	30.9% (1136)	37.1% (1363)	16.7% (614)	6.4% (236)	3.7% (135)

Source: American Community Survey (2019)

Driving

Multimodal Traffic Volumes

Multimodal turning movement counts were collected at five (5) Avenue Q study intersections on March 4, 2021 – Sierra Highway, 10th Street, 12th Street,15th Street, and 20th Street – on March 4, 2021. The counts included motor vehicles, pedestrians, and bicyclists and were completed during the AM and PM peak periods (7-9 AM, 4-6 PM). The count data is summarized in Figure 8 and Figure 9. While Avenue Q is a major arterial, volumes were relatively low with the highest directional motor vehicle volumes less than 500 vehicles per hour. Additionally, pedestrian and bicycle volumes were also very low with no intersection experiencing more than 5 total during a peak hour. Weather was also likely not a factor in walking and bicycling volumes as there was no precipitation that day with a high temperature of 67 degrees.

The COVID-19 pandemic no doubt had some impact on roadway utilization in March, although the team delayed collecting data as long as possible and were originally scoped to collect it several months before they were ultimately collected. When assessing future conditions, the Project Team will adjust the volumes two ways to offset pandemic conditions:

1. Review historic volumes in the area to assess a baseline factor that may be applied to collect traffic volumes.
2. Apply a growth factor based on existing and future travel demand model volumes from the SCAG regional demand model.

Figure 8 - Study Area Volumes (AM Peak Hour)

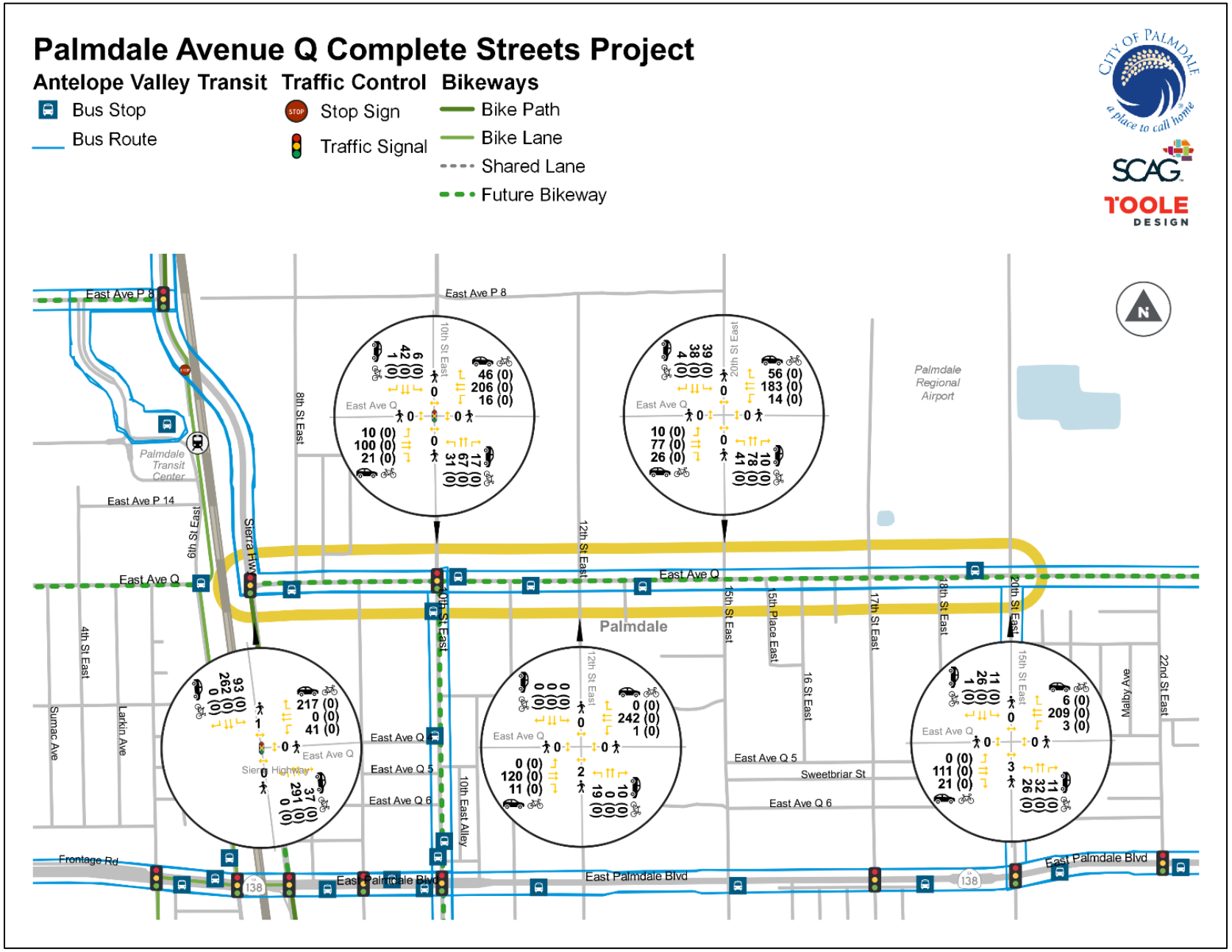
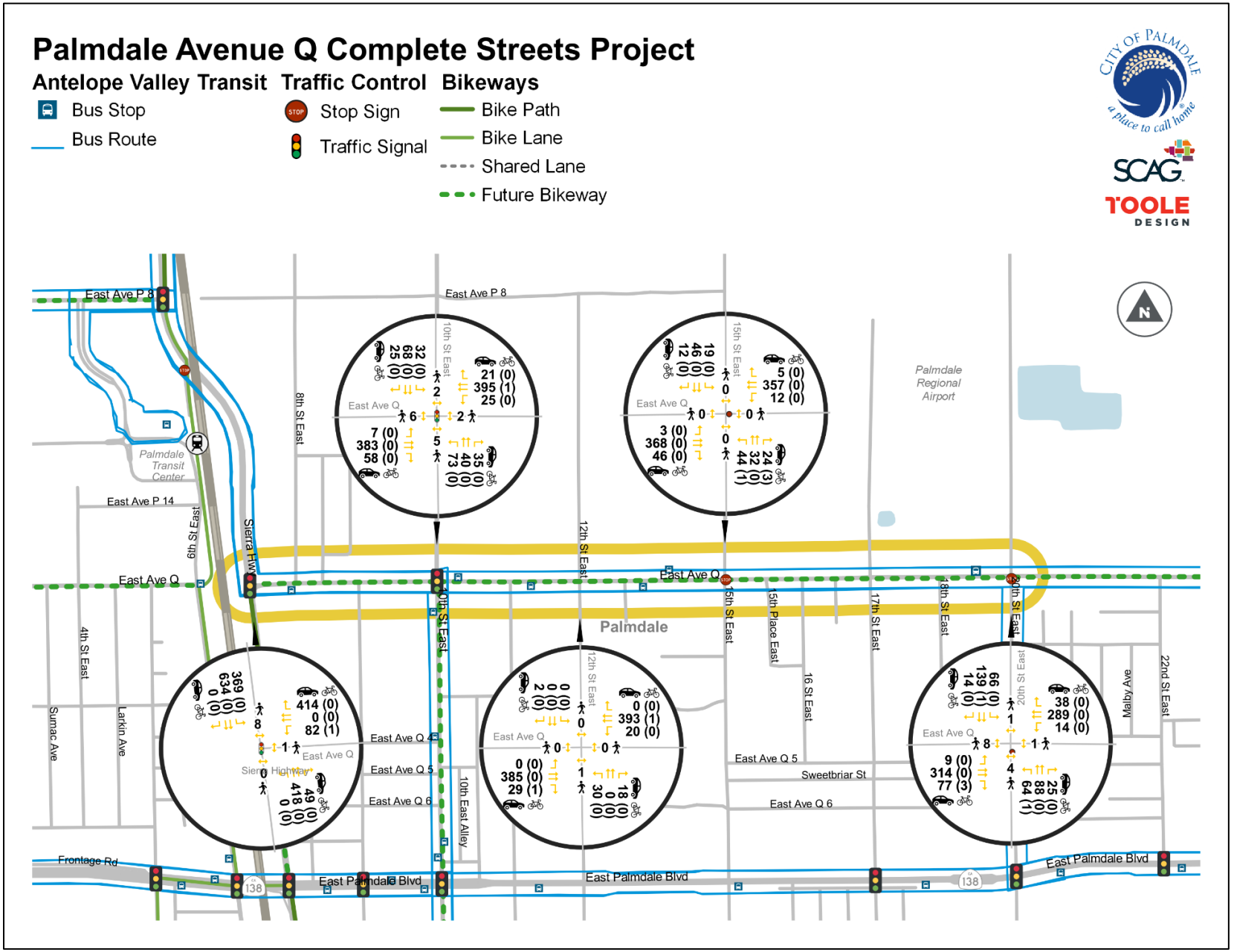


Figure 9 Study Area Volumes (PM Peak Hour)



Traffic Operations

Five (5) total signalized and unsignalized intersections were evaluated on Avenue Q between Sierra Highway and 20th Street using the Highway Capacity Manual (HCM) 6th Edition. The study area was modeled in Synchro 10 software to calculate delays and level of service (LOS). Existing signal timing plans at the two signalized intersections – Sierra Highway/Avenue Q and 10th Street/Avenue Q – obtained by the City of Palmdale were used to model the signalized intersections. Measured traffic operations conditions show very little delay during AM and PM peak hour conditions and suggests some current intersections are overbuilt and additional right- and left-turn lanes are not warranted. A summary of the Synchro results is provided in Table 8.

Table 8 – Traffic Operations Summary: Existing Conditions

Intersection	Delay/LOS	NB	SB	EB	WB	Total
Sierra Hwy	AM	14.3/B	15.3/B	-	12.9/B	14.2/B
	PM	21.2/C	25.8/C	-	18.6/B	20.8/C
10th Street	AM	25.4/C	24.9/C	16.9/B	16.4/B	19.2/B
	PM	42.2/D	32.8/C	21.8/C	20.0/B	25.9/C
12th Street*	AM	11.8/B	0.0	-	-	1.1/A
	PM	18.6/C	11.0/B	-	-	1.5/A
15th Street*	AM	8.8/A	8.6/A	8.4/A	10.4/B	9.5/A
	PM	11.1/B	10.8/B	16.1/C	16.5/C	15.2/C
20th Street*	AM	8.6/A	8.6/A	8.9/A	11.0/B	9.7/A
	PM	10.9/B	12.7/B	39.2/E	21.2/C	24.7/C

*Unsignalized

Parking

Parking along the project area is primarily on-street, with a few exceptions where the residential apartments have assigned off-street parking, and at commercial locations with surface parking lots. Figure 10, Figure 11, and Figure 12 demonstrate parking information. Parking options along Avenue Q can be summarized as:

1. People park on-street where there are no restrictions and at places that are most convenient to them. This includes curbside areas with and without time restrictions; symbolized as “Curb Parking” (green) in the parking figures.
2. People also park in areas that lack a physical curb but where there is unpaved roadside shoulder space. This is illustrated in the parking figures as “Unregulated Roadside Parking” (dashed purple).
3. Other unpaved shoulder areas along Avenue Q were not observed to have occupied parking. These areas are either too narrow for vehicles to safely park in or are inconvenient for people to park in because they are not close to any destinations. These areas are labeled as “Unregulated Roadside, Unoccupied” (dashed yellow) in the parking figures.
4. The remaining areas are restricted with either red curb, no parking regulation, or a combination of both. These areas are symbolized as “No Parking” (red) in the parking figures and are located near intersections, driveways, and bus stops.

Our observations of on-street parking along Avenue Q is that it is underutilized and likely associated with the lack of developed parcels. As Avenue Q develops with more housing and commercial destinations, the demand for parking will grow. Curbside parking is some of the most valuable space in cities, and regulating curbside use through the Avenue Q Complete Streets project can help balance space for people who choose not to drive. This can include more dedicated space for expanded sidewalks, parkways, separated bicycle facilities, and dedicated transit stops. The curbside should also support new mobility services, such as passenger loading zones for ride hailing services (Lyft, Uber), and micromobility options like bike share and scooter share.

Figure 10 - Parking from Sierra Highway to 10th St East

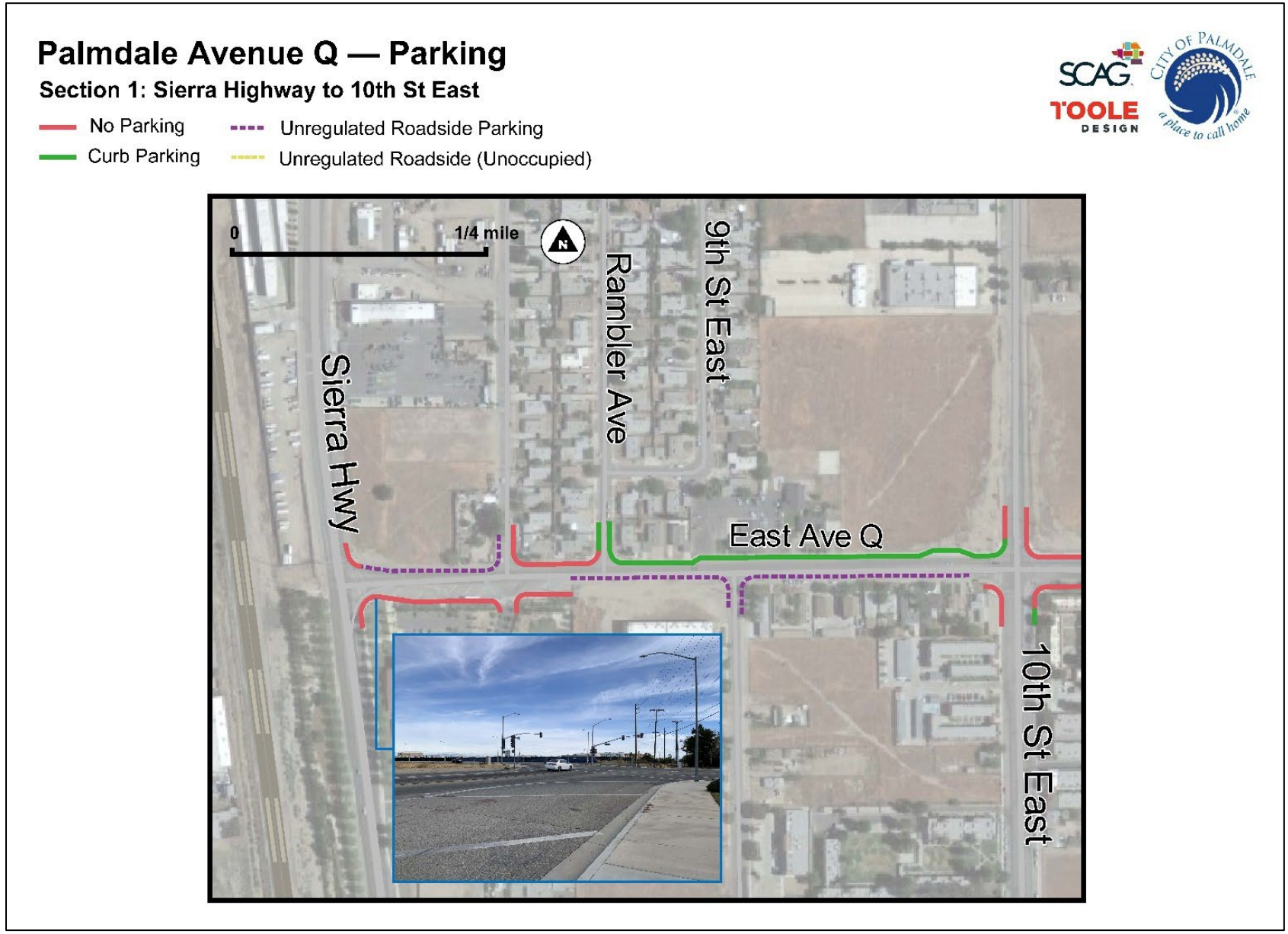


Figure 11 - Parking from 10th St East to 15th St East

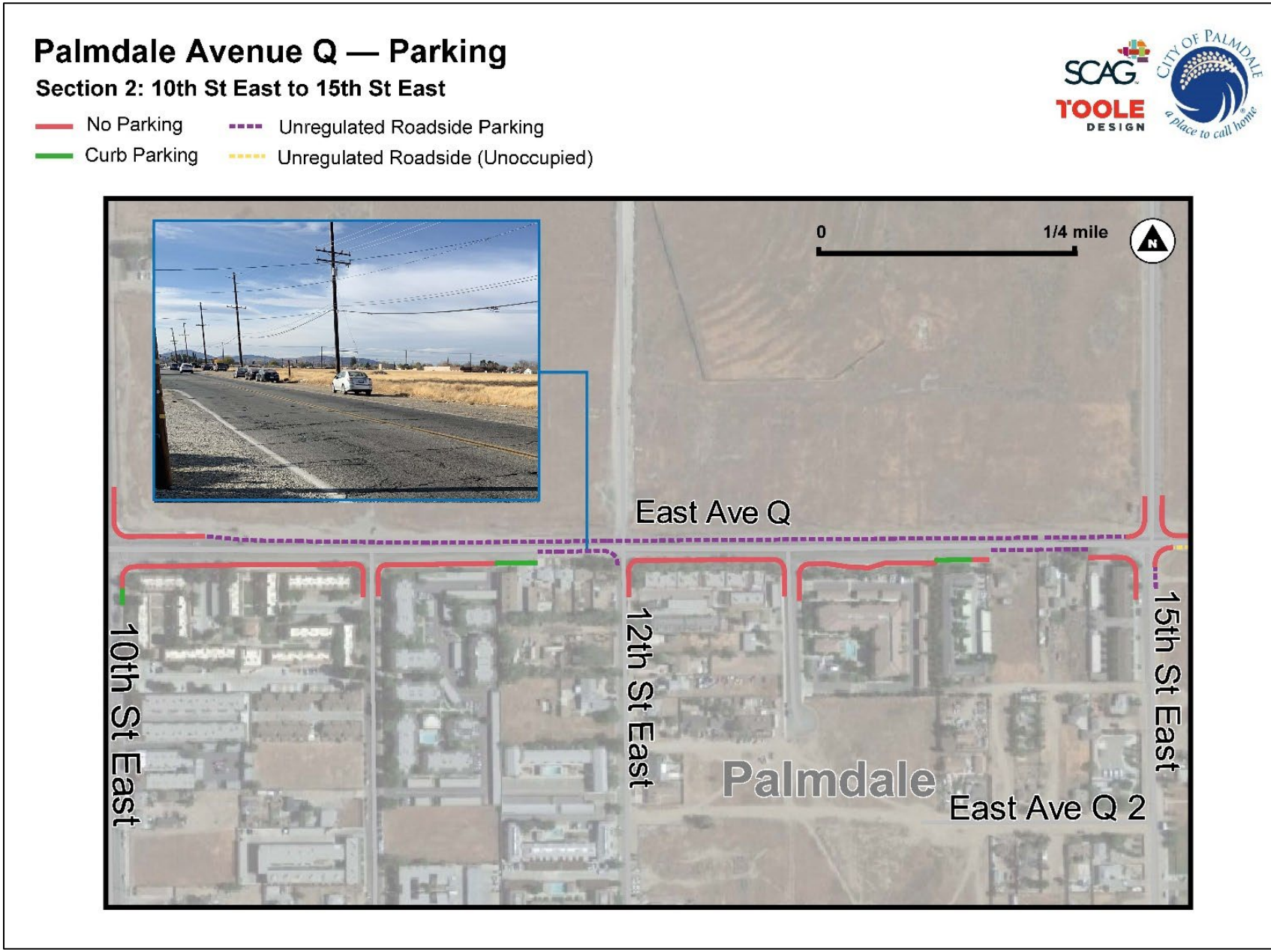


Figure 12 – Parking from 15th St East to 20th St East



AVENUE Q CONNECTIVITY

Avenue Q provides a critical opportunity for improved connectivity in Palmdale – the corridor connects or is in close proximity to important destinations like the Palmdale Transportation Center, schools, hospitals, and the future high-speed rail. Avenue Q is also an alternate route to Palmdale Boulevard for access to CA Highway -14, Sierra Highway, and key regional destinations. A map showing the street, bicycle, and transit network, as well as traffic control devices, can be found in Figure 13.

Bicycle and Pedestrian Connectivity

The location of Avenue Q positions it as an opportune connector for multimodal travel, but the existing conditions on the ground do not yet reflect its potential as a key connective corridor. There are no bicycle facilities along the study area, but Avenue Q intersects with the Doctor Robert C. St. Clair Parkway, a shared-use off-street path adjacent to Sierra Highway. Bike facilities are proposed for the entire project area, as well as 10th Street (which intersects with Avenue Q) as part of the City's Bicycle Master Plan, and will be a key feature for the complete street design of this study.

For pedestrian connectivity, Avenue Q has inconsistent sidewalks, with gaps throughout the project area that may discourage walking to nearby destinations or connecting to transit stops. A more detailed pedestrian crossing analysis can be found in the *Safety and Comfort* section of this report.

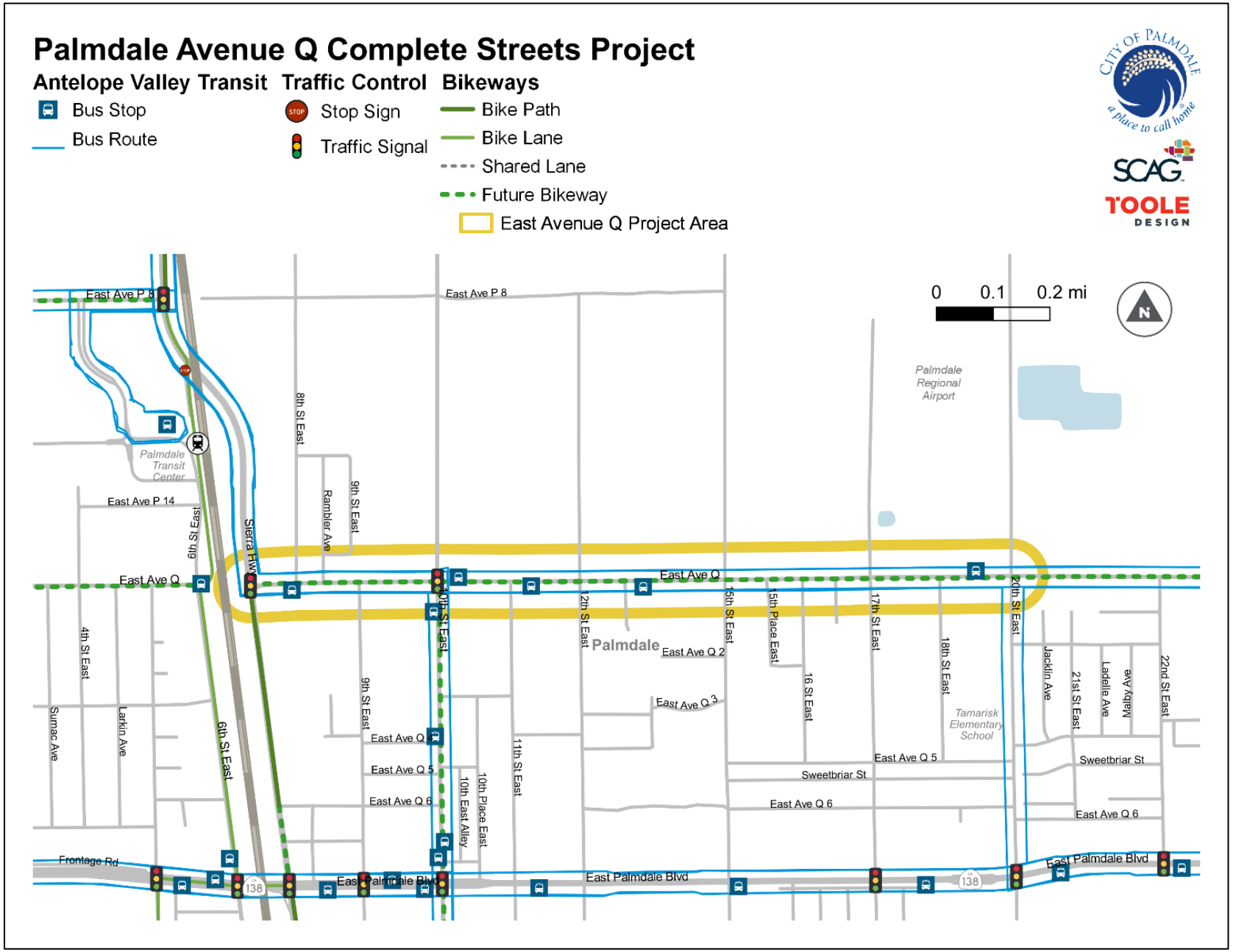
Transit Connectivity

The project area is in close proximity to the Palmdale Transportation Center, which serves regional transportation needs and offers multiple transit services: Antelope Valley Transit Authority (AVTA) and Santa Clarita Transit bus service, Amtrak bus service, Greyhound bus service, and Metrolink commuter rail service. Avenue Q hosts several AVTA transit lines, but as investigated through Census commute to work data and through boarding/alighting data from AVTA, there are few people who primarily use transit to commute to work near the project area when compared to other modes. The most prominent AVTA stop along the project area is line 98 which hosts a total of six bus stops (three stops in each direction). This line is a special circulator route for commuters between the Palmdale Transportation Center and Pete Knight High School, and runs in the eastbound direction during weekday mornings and westbound in the afternoon. Due to this, boarding data from January 2019 to January 2020 shows low ridership, with the highest stop along the Avenue Q project area being the eastbound 11th Street stop (55 boardings for the year), and westbound 10th Street stop (46 alightings for the calendar year). COVID-19 has impacted service along Avenue Q and AVTA recently closed operation of line 98, creating even fewer transit options for residents along Avenue Q. This project should serve to re-imagine transit options for residents, particularly because there are established stops along Avenue Q.

Motor Vehicle Connectivity

Avenue Q is a major arterial in the City's functional classification system. Functional classification is an auto-centric grouping of streets based on connections to other street types and services they provide. Higher order facilities like arterials generally carry higher volumes of traffic and have direct connections to limited access highways like Sierra Highway while also connecting to areas of regional importance. Today the motor vehicle connectivity of Avenue Q is somewhat limited because it is bisected by the rail lines in Palmdale and is therefore not continuous. With a future connection under the railway in this area, it can be expected that the overall use of Avenue Q, especially east of Sierra Highway, would increase and the overall roadway connectivity would improve. Today, anyone living along Avenue Q east of Sierra Highway would need to travel at least a full mile out of direction to reach some of these key regional facilities, but connecting the gap at the railway would open up Palmdale to a larger number of residents, including those that could more easily walk, bike, or take transit to their destination.

Figure 13 -Study Area Transportation Network



Opportunities and Constraints for Improved Connectivity

The city's existing streetscape within the project area has multiple opportunities for improved connectivity, both within the project area and by providing better connections to nearby destinations and other multimodal facilities.

- **Undeveloped parcels:** The project area is made up of many vacant undeveloped parcels fronting Avenue Q. Complete Streets guidelines could require future developments to build out pedestrian and bicyclist improvements to support short trips along Avenue Q. (See Exhibit 1)

- **Existing street widths**: The street has variable widths throughout the corridor, which creates constraints on creating consistent, linear improvements throughout the length of Avenue Q. However, many segments have enough width to provide opportunities for spot infrastructure improvements like pedestrian refuge islands, medians, or curb extensions. An investigation of the public right of way will outline how bicycle facilities can fit into the proposed design of Avenue Q.

- **Unsignalized intersections**: Only two intersections within the project area are signalized, and the other intersections throughout the corridor present opportunities for installing new signals or other forms of traffic calming devices to control speed and improve safety. (See Exhibit 2)

- **Incomplete sidewalks**: Sidewalks are inconsistent throughout the project area, varying from 8'-5' wide, to missing entirely. Although a current constraint, existing sidewalk gaps provide an opportunity to consider the width, material, and quality of sidewalks. Sidewalks may also include improved comfort for people walking through new curb extensions, pedestrian-level lighting, seating, and other pedestrian amenities. Incorporating bioswales and landscaped parkways to sidewalk construction is another potential consideration for sidewalks along Avenue Q to help with stormwater infiltration. (See Exhibit 3)

- **Lack of signage**: Many streets intersecting with Avenue Q lack street signage, creating an opportunity for a holistic wayfinding approach to the corridor. This can help guide residents to key destinations and support bicycle route wayfinding to connect to other bicycle facilities as proposed by the Bicycle Master Plan.

- **Rail line easement:** The rail line easement west of Sierra Highway cuts off connectivity between the intersection of Avenue Q/Sierra Highway and Avenue Q/6th St E, forcing detours for people traveling west on Avenue Q. To access the Palmdale Transportation Center, people walking or bicycling must detour north on Sierra Highway and turn back south on 6th Street E (which has no sidewalks). People driving must travel north on Sierra Highway and then turn left onto Transportation Center Drive to access the Palmdale Transportation Center. The High-Speed Rail project proposes to better connect Avenue Q to the Transportation Center.

Exhibit 1- Undeveloped Parcels near the intersection of Avenue Q and 10th Street



Exhibit 2- Unsignalized Intersection at Avenue Q and 17th Street



Exhibit 3 - Missing Sidewalks on Avenue Q



AVENUE Q SAFETY AND COMFORT

Safety

A future Avenue Q must be safe, comfortable, and reimagined as a place for more than just moving vehicles- Avenue Q should serve as a pleasant destination in Palmdale. Our investigation of safety and comfort focuses on pedestrian and bicyclist separation from moving vehicles, safety at crosswalks, and comfort from the natural elements of the high-desert.

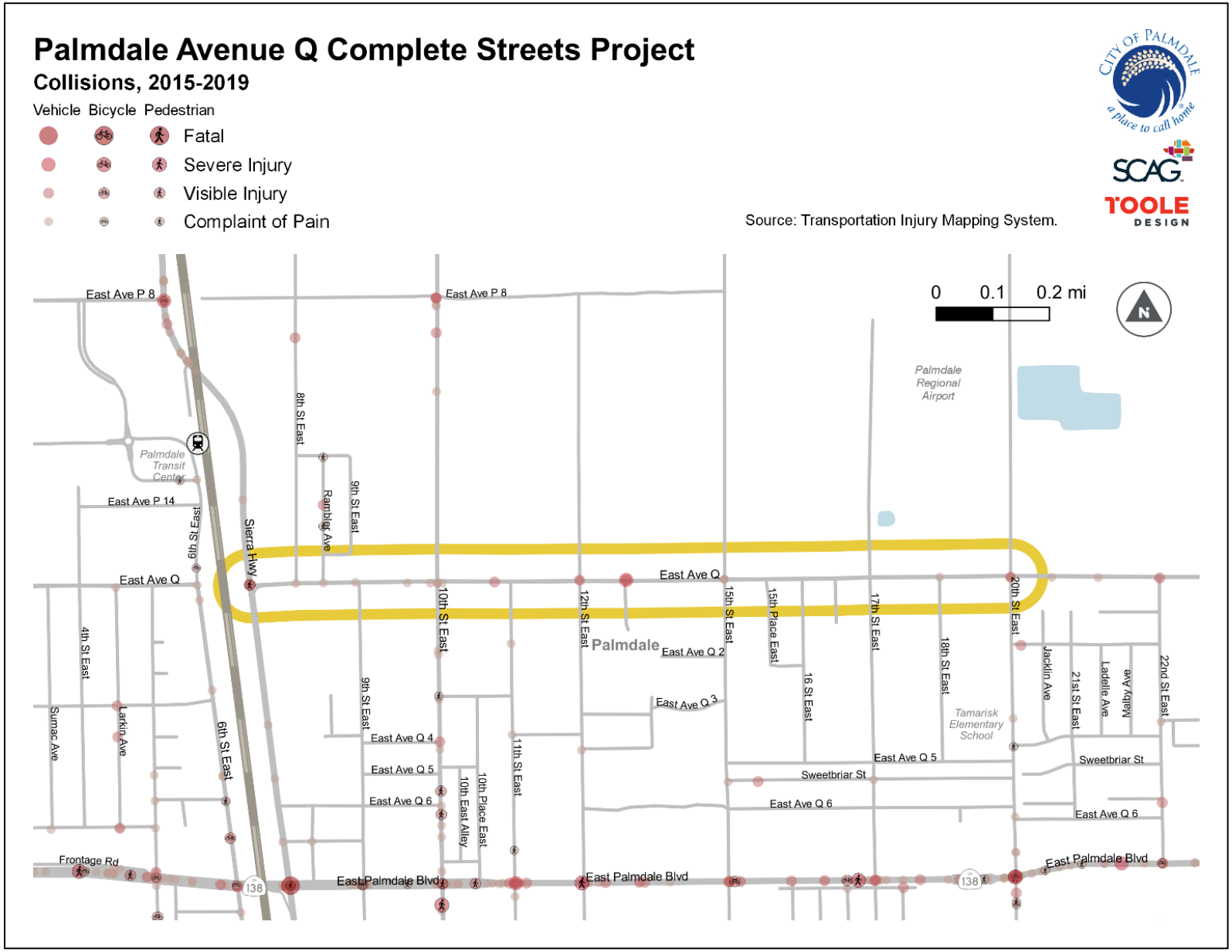
Collision History and Areas of Conflict

From 2015 to 2019, there were 12 collisions within the project area on Avenue Q. Eleven of the twelve collisions did not involve bicyclists or pedestrians – the one collision involving a pedestrian at the intersection of Avenue Q and Sierra Highway resulted in a severe injury as outlined on Figure 14. Reviewing collision history is one approach to understanding street safety, but a more proactive approach looks at the systemic factors that may cause conflicts in the future. This may include long distances between marked crosswalks, high posted speed limits, permissive turning movements, and low visibility for people driving. Along the corridor, there are multiple potential conflict zones between drivers and people walking and bicycling. Table 9 details the locations and potential conflicts within the project area.

Table 9 - Potential Areas of Conflict along Avenue Q

Location	Description of conflict
Intersection of Sierra Highway and Avenue Q	The missing south crosswalk leg at this intersection limits direct connection to the existing trail and may encourage people to cross where there is no marked crosswalk.
Intersection of 10th St and Avenue Q	This intersection has protected left turns and signal phasing for pedestrians, but there is a potential conflict between drivers making eastbound right turns from Avenue Q onto 10th Street. The geometry at the southwest corner of the intersection is not well defined today.
Intersection of 15th St and Avenue Q	In addition to a long east-west crossing distance across 15th St, this intersection's complex roadway geometry is unpredictable for all modes and can cause conflicts between drivers, pedestrians and bicyclists.
Intersection of 17th St and Avenue Q	The lack of traffic control devices at this uncontrolled intersection creates potential conflicts between drivers and people walking or biking.
Intersection of 20th St E and Avenue Q	This 4-way stop controlled intersection does not have marked crosswalks, which impacts pedestrian visibility and presence.
Along Avenue Q	Large spacing between marked crosswalks and high posted speed limits create a street that encourages speeding. Paired with low levels of street lighting, this can me a significant safety issue at night.

Figure 14 – Roadway Collisions (2015-2019)



Pedestrian Crossing Assessment

Today, there are very few marked crosswalks along Avenue Q which include the intersections of Sierra highway (signalized intersection), 10th Street East (signalized intersection) and 15th Street East (all-way stop intersection). The distances between the marked crosswalks are high (see Table 10). Studies show that people are more likely to cross at an intersection with a traffic signal or a pedestrian signal head (Walk/Don't Walk signs). People are also more likely to cross at any location with a marked crosswalk than at those without.[3] Although the current, low traffic volumes and undeveloped land use may justify the infrequency of marked crossings, a complete street must allow people walking the opportunity to safely cross Avenue Q, particularly at intersections and along desire lines. The National Association of City Transportation Officials (NACTO) recommends marked crossings at 200' intervals for dense city areas. Examining the context of Avenue Q, a marked crossing at every major intersection equates to roughly 650', which offers more frequent crossing opportunities for people walking. This approach shall be further investigated as part of the community engagement and recommendations of this project to assess projected pedestrian demand, concentration of housing density, and presence of transit stops.

Table 10 – Existing Marked Crosswalks along Avenue Q

Intersections (from – to)		Distance (ft)
Sierra Hwy	10th St	1,635
10th St	15th St	2,595

Opportunities and Constraints

As part of the complete street recommendations phase of this project (Task 4), new pedestrian crossings on Avenue Q shall include treatments to increase visibility and safety for people walking. The FHWA has developed guidance for the application of safety countermeasures by roadway feature (Figure 15). As a roadway with two travel lanes, posted speed limits over 40 mph, and annual average daily traffic volumes of fewer than 9,000, the minimum recommended improvement types along Avenue Q include:

- High visibility crosswalk markings
- Parking restrictions at crosswalk approach
- Adequate lighting at nighttime
- Advance yield lines and signage
- Curb Extensions
- Pedestrian refuge islands (if roadway geometry permits)
- Pedestrian Hybrid Beacon

The consideration of new traffic signals should be further investigated with the Project Team as the warrants for new signals may not be fulfilled at the present time given the low traffic and pedestrian volumes.

[3] NCHRP Report 562: *Improving Pedestrian Safety at Unsignalized Crossings.* https://nacto.org/wp-content/uploads/2010/08/NCHRP-562-Improving-Pedestrian-Safety-at-Unsignalized-Crossings.pdf

Figure 15 – FHWA Countermeasure Selection Table[4]

Roadway Configuration	Speed Limit								
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
2 lanes*	❶ 2 3 4 5 6	❶ ❸ 5 6 7	❶ ❸ 5 6 ❼	❶ 3 4 5 6	❶ ❸ 5 6 7	❶ ❸ 5 6 ❼	❶ 3 4 5 6 7	❶ ❸ 5 6 7	❶ ❸ 5 6 ❼
3 lanes with raised median*	❶ 2 3 4 5	❶ ❸ 5 7	❶ ❸ 5 ❼	❶ 3 4 5 7	❶ ❸ 5 ❼	❶ ❸ 5 ❼	❶ ❸ 4 5 7	❶ ❸ 5 ❼	❶ ❸ 5 ❼
3 lanes w/o raised median†	❶ 2 3 4 5 6 7	❶ ❸ 5 6 7	❶ ❸ 5 6 ❼	❶ 3 4 5 6 7	❶ ❸ 5 6 ❼	❶ ❸ 5 6 ❼	❶ ❸ 4 5 6 7	❶ ❸ 5 6 ❼	❶ ❸ 5 6 ❼
4+ lanes with raised median‡	❶ ❸ 5	❶ ❸ 5 7	❶ ❸ 5 ❼	❶ ❸ 5 7	❶ ❸ 5 ❼	❶ ❸ 5 ❼	❶ ❸ 5 ❼	❶ ❸ 5 ❼	❶ ❸ 5 ❼
4+ lanes w/o raised median‡	❶ ❸ 5 6 7 8	❶ ❸ 5 ❻ 7 8	❶ ❸ 5 ❻ ❼ 8	❶ ❸ 5 ❻ 7 8	❶ ❸ 5 ❻ ❼ 8	❶ ❸ 5 ❻ ❼ 8	❶ ❸ 5 ❻ ❼ 8	❶ ❸ 5 ❻ ❼ 8	❶ ❸ 5 ❻ ❼ 8

*One lane in each direction †One lane in each direction with two-way left-turn lane ‡Two or more lanes in each direction

Given the set of conditions in a cell,

❶ Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.

\# Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

1 High-visibility crosswalk markings, parking restriction on crosswalk approach, adequate nighttime lighting levels
2 Raised crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
4 In-Street Pedestrian Crossing sign
5 Curb extension
6 Pedestrian refuge island
7 Pedestrian Hybrid Beacon
8 Road Diet

This table was developed using information from: Zegeer, C. V., Stewart, J. R., Huang, H. H., Lagerwey, P. A., Feaganes, J., & Campbell, B. J. (2005), Safety effects of marked versus unmarked crosswalks at uncontrolled locations: Final report and recommended guidelines (No. FHWA-HRT-04-100); Manual on Uniform Traffic Control Devices, 2009 Edition, Chapter 4F. Pedestrian Hybrid Beacons; the Crash Modification Factors (CMF) Clearinghouse website (http://www.cmfclearinghouse.org/); and the Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE) website (http://www.pedbikesafe.org/PEDSAFE/).

[4] *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations* (FHWA-SA-17-072). https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf

Comfort

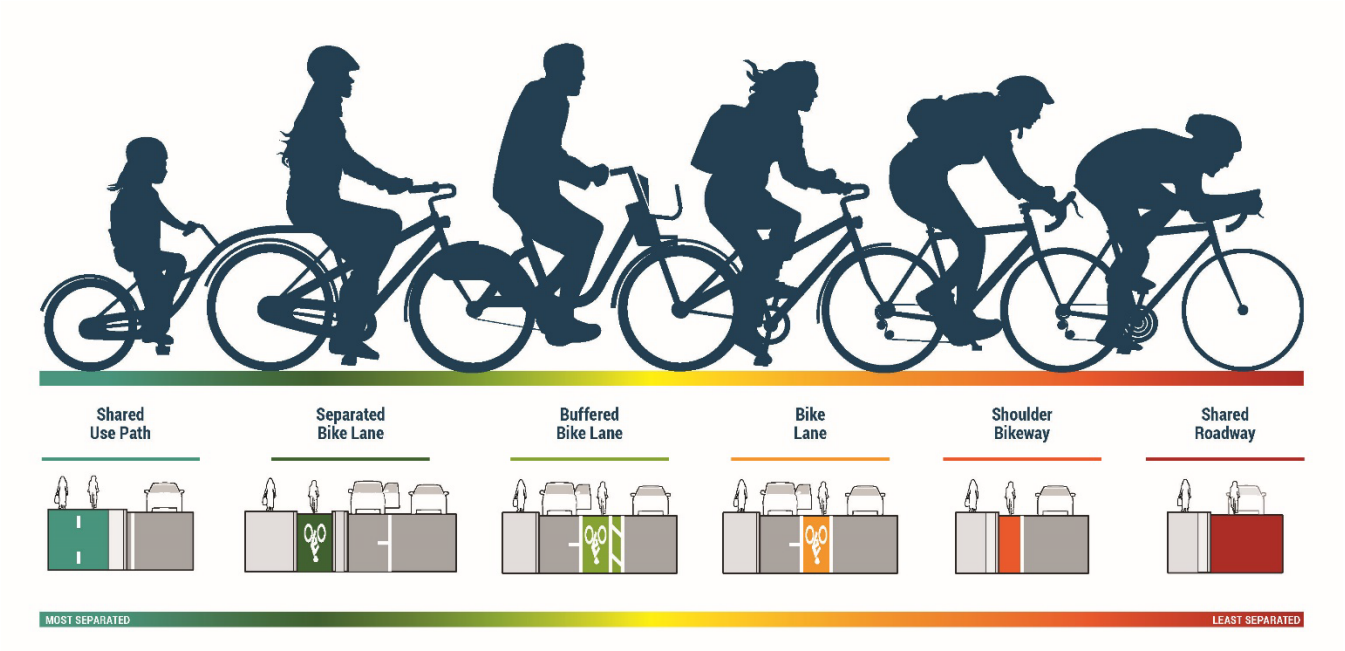
Bicycling Level of Traffic Stress (LTS)

Our team conducted a Level of Traffic Stress (LTS) assessment for people bicycling around the study area (see Figure 17). LTS analysis identifies the stress of street networks for bicycling based on built-environment, speed, and volume characteristics. The methodology used by the Project Team is adapted from criteria published by the Mineta Transportation Institute (MTI).[5] The LTS analysis scores streets on a scale from 1 to 4 LTS streets range from 1 to 4 as follow:

- **LTS 1**: Strong separation from all except low speed, low volume traffic. Simple crossings. Suitable for children.
- **LTS 2**: Except in low speed / low volume traffic situations, cyclists have their own place to ride that keeps them from having to interact with traffic except at formal crossings. Physical separation from higher speed and multilane traffic. Crossings that are easy for an adult to negotiate. Corresponds to design criteria for Dutch bicycle route facilities. A level of traffic stress that most adults can tolerate, particularly those sometimes classified as "interested but concerned."
- **LTS 3**: Involves interaction with moderate speed or multilane traffic, or close proximity to higher speed traffic. A level of traffic stress acceptable to those classified as "enthused and confident."
- **LTS 4**: Involves interaction with higher speed traffic or close proximity to high speed traffic. A level of stress acceptable only to those classified as "strong and fearless."

Figure 16 illustrates the different bicyclist type and associated bicycle facility for each rider. Shared use paths are more comfortable and less stressful for children, while shared roadways may only encourage advanced bicyclists.

Figure 16 – Bicycle Facilities Continuum Chart



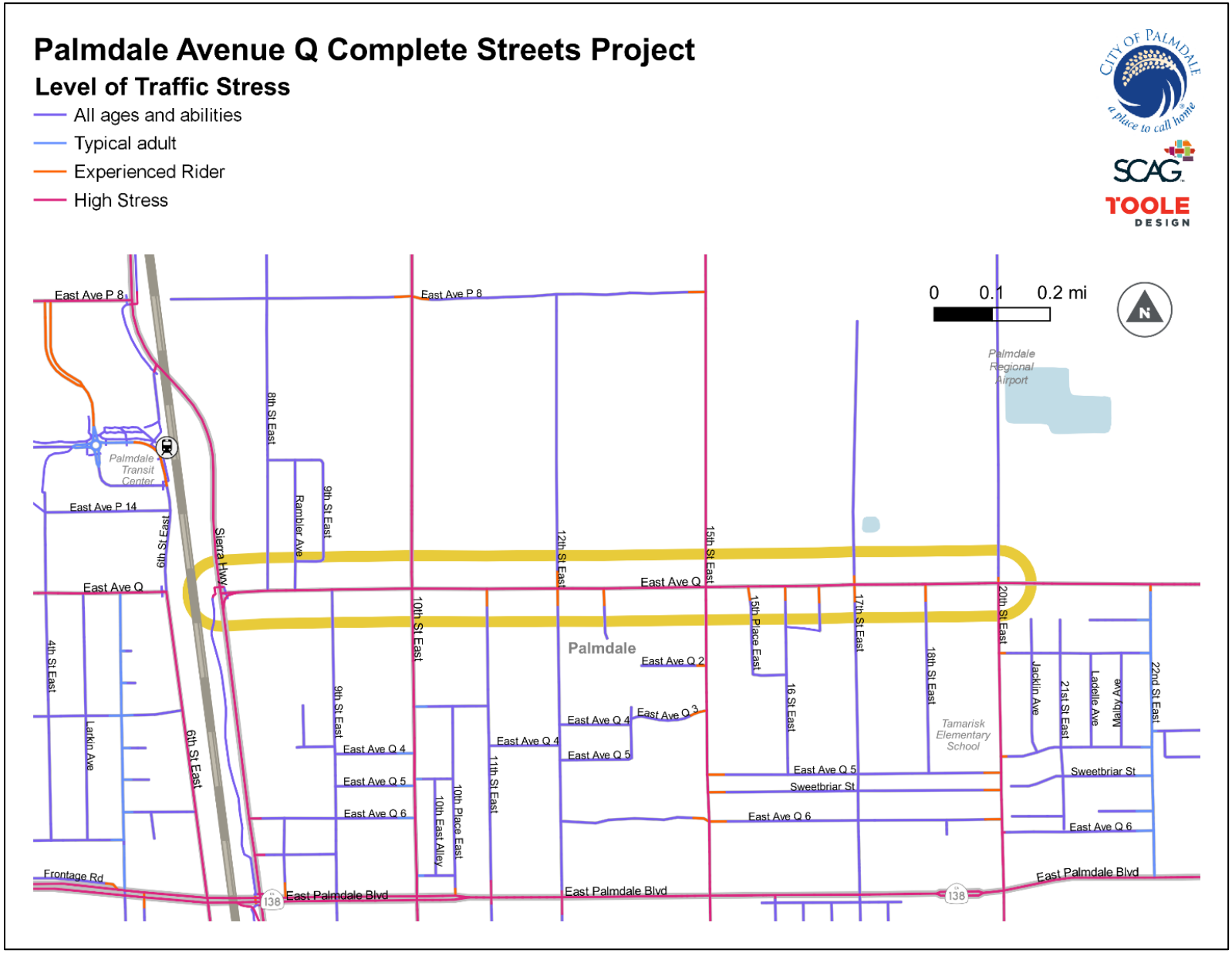
[5] *Low Stress Bicycling and Network Connectivity*. https://transweb.sjsu.edu/sites/default/files/1005-low-stress-bicycling-network-connectivity.pdf

Level of Traffic Stress for bicyclists along streets is influenced by numerous factors. The generally accepted method for measuring LTS includes a limited set of these factors: traffic speed, traffic volume (sometimes using estimated volumes, sometimes using number of lanes as a proxy), and type of existing bicycle facility. These factors were used to assess streets throughout the project area both for the existing and planned networks. Trails are given a default low-stress score, since they are by their nature separated from traffic stress, and the only present trail within the project area is the Dr. Robert St. Clair Parkway adjacent to Sierra Highway.

Avenue Q is a high stress corridor for people walking and bicycling today. The street has a varying profile but high posted speed limits for segment that only has one trave lane in each direction. The absence of continuous sidewalks also contributes to the high stress nature of the street, though missing sidewalks was not a factor incorporated into the LTS analysis. Avenue Q hosts many destinations, such as the (church/business park, etc.), and can help improve small walking and biking trips to access services. Today, residents may not feel comfortable bicycling beyond the limits of their immediate neighborhood because it is hemmed in by larger, high-stress streets like Sierra Highway,10th Street, 15th Street, 20th Street, and East Palmdale Boulevard, or cut off from the adjacent neighborhood by a high-stress crossing of a major street.

In general, collector and arterial streets with bicycle facilities are less stressful than those without, but many streets with bicycle facilities can still be high stress. This is the result of bike lanes and bike routes existing in places with higher speeds and volumes. Bicycle facility planning and design thinking over the past decades has not included consideration of riders who may feel uncomfortable in these situations. Avenue Q has the opportunity to serve as a low stress east-west connection and create a more comfortable way to connect neighborhoods to services.

Figure 17 - Level of Traffic Stress



Transit Facilities

As previously outlined, AVTA bus stops are located along Avenue Q. Most bus stops today have accompanying facilities like seating and a shelter, which offers refuge from the heat and rain. There are other bus stops, however, that lack these amenities, creating an uncomfortable waiting environment for transit riders (see Exhibit 4). One bus stop location in particular (the westbound line 98 stop at 10th Street) has a cut out for buses to pull into, complete with a concrete pad. This cut out is located at the far side of the intersection, although the actual bus zone is located at the nearside of the intersection (east of 10th Street) within a dedicated right turn lane. Further investigation and recommendation to relocate bus stops to the far side of intersections may be recommended as part of this study to improve safety and visibility for transit users.

Exhibit 4 - Example Bus Stop Lacking Amenities



Shade Analysis

The city's high-desert climate warrants special focus on shade elements to enhance the thermal comfort of people walking, biking, and taking transit. Developing a shade analysis for Avenue Q helps illustrate shadow diagrams projected from existing canopies and identifies areas in need of additional shade along the corridor throughout the year.

Methodology

The Project Team created a 3D model of buildings and trees lining the corridor. For building height information, the team assigned building heights based on the maximum allowable height defined by the current Palmdale zoning code. The team then backchecked all estimated building and tree heights using Google Streetview. After geolocating the model at the correct latitude and longitudinal coordinates to ensure accurate solar path, the team generated shadow diagrams for three dates: March 21st, June 21st, and December 21st. These dates provide the

longest yearly shadows (December), the shortest yearly shadows (June), and the median shadow length (March). For each date, the team developed diagrams for 9 am, 12 pm, and 3 pm to illustrate which areas will be shady or sunny throughout the day. All shade diagrams can be found in **Appendix B.**

Findings

The full corridor is organized into three distinct sections for the shade analysis and for easily showcasing our findings to the community at-large. As typical for most California geographies, the northern section of the corridor is mostly exposed to direct sunlight and lacks sufficient shade. This largely undeveloped part of the corridor lacks sidewalk facilities and mature canopy trees, making it a prime area for shade investment as the area experiences new development. The northwestern portion of Section 1, with the single-family units, has no street trees and therefore lacks sufficient shade throughout the year. The south side of the Sections 1 and 2 from 9th street to 12th street lacks sufficient shade during hotter months due to inconsistent tree spacing. The south side of Section 2 from 12th Street to 15th Street provides sufficient shade throughout the year because mature canopy trees have been planted within 8' of the back of the sidewalk. The north side of Section 3, where the commercial development adjacent to 20th Street is located, provides pockets of sufficient shade; one of which includes a bus stop with a shade structure. While the tree spacing in this section is seemingly inconsistent, additional tree wells along the sidewalk create shade coverage that encompasses the entire sidewalk in specific pockets, one of which includes a bus stop without a shelter.

Two bus stops out of the six along the corridor are completely exposed and lack any shade from canopy trees or shade structures. These two bus stops are found in Section 2 of the analysis. The first stop sits on the south side of the Avenue Q between 11th and 12th Streets. The other can be found on the north side of Avenue Q between Orchard View Place and 15th Street. The remaining four bus stops are in areas that maintain sufficient shade throughout the year, thanks to the presence of shelters and densely planted canopy trees.

Opportunities for Improving Shade

For areas of the corridor that lack sufficient shade, canopy trees should be planted at a consistent spacing, reasonably close to the sidewalk to ensure that shade is cast onto the sidewalk. Typical spacing for large canopy trees would be 30' on center, while 25' on center for medium trees and 20' for small ornamental trees. On the northern portion of the corridor in Section 3, existing trees planted adjacent to the back of curb work well in providing shade. Future plantings should echo this tree placement to provide sufficient shade throughout the year. While much of the northern portion of the corridor is constrained by overhead utility lines, careful selection of appropriate tree species along with shade structures can contribute to providing sufficient shade as the corridor continues to develop. Two areas that perform well with these conditions are the blocks in Section 1 from Sierra Highway to 9th Street on the south side and blocks in Section 3 from 17th Street to 20th Street, where overhead utilities coexist with purposeful planting.



Figure 18 December Shade Analysis for Avenue Q from Sierra Highway to 10th Street East

Show next page (Right Arrow)

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: December
Section 2 : from 10th St. East to 15th St. East

CITY OF PALMDALE
SCAG
TOOLE DESIGN

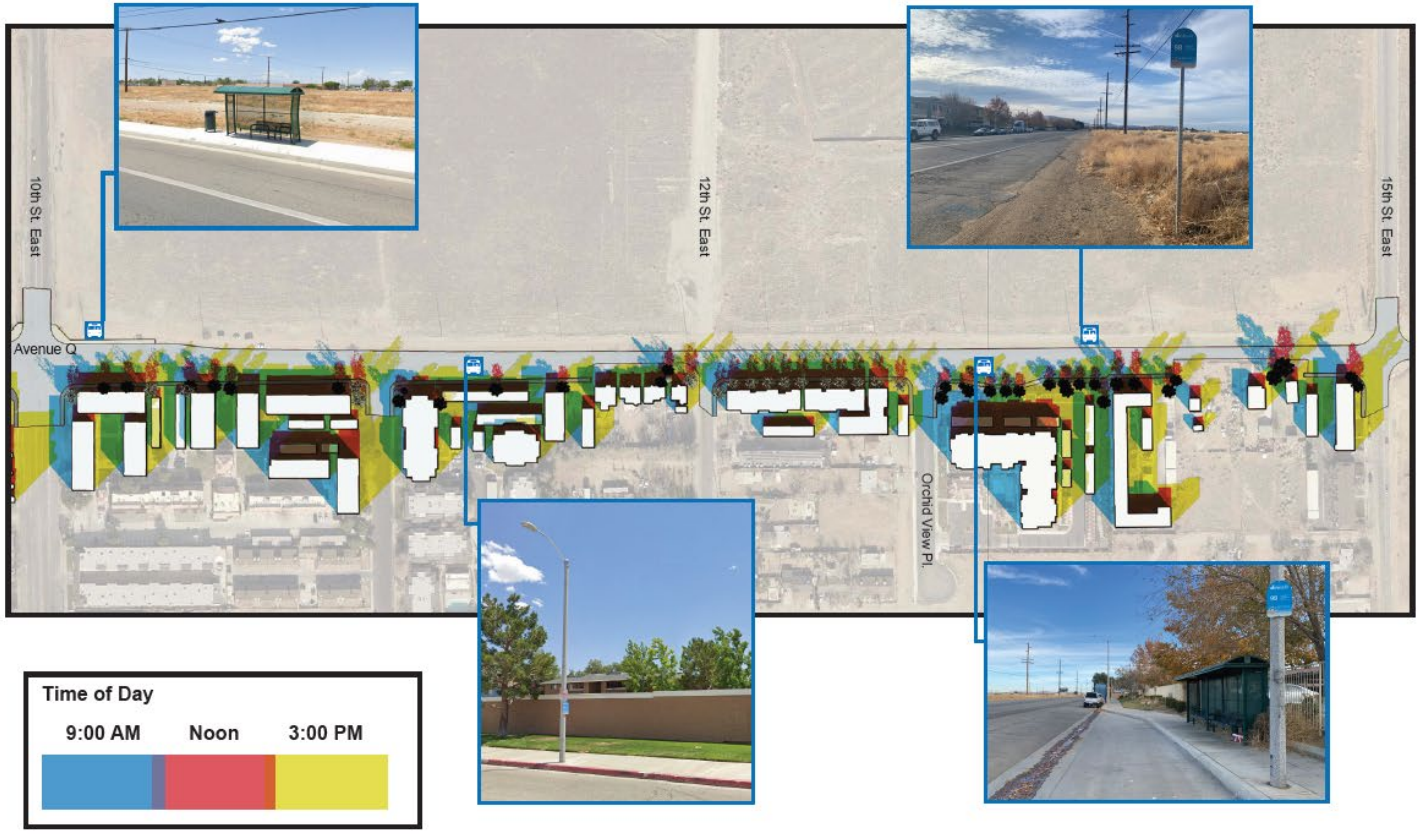


Figure 19 December Shade Analysis for Avenue Q from 10th Street East to 15th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: December
Section 3 : from 15th St. East to 20th St. East

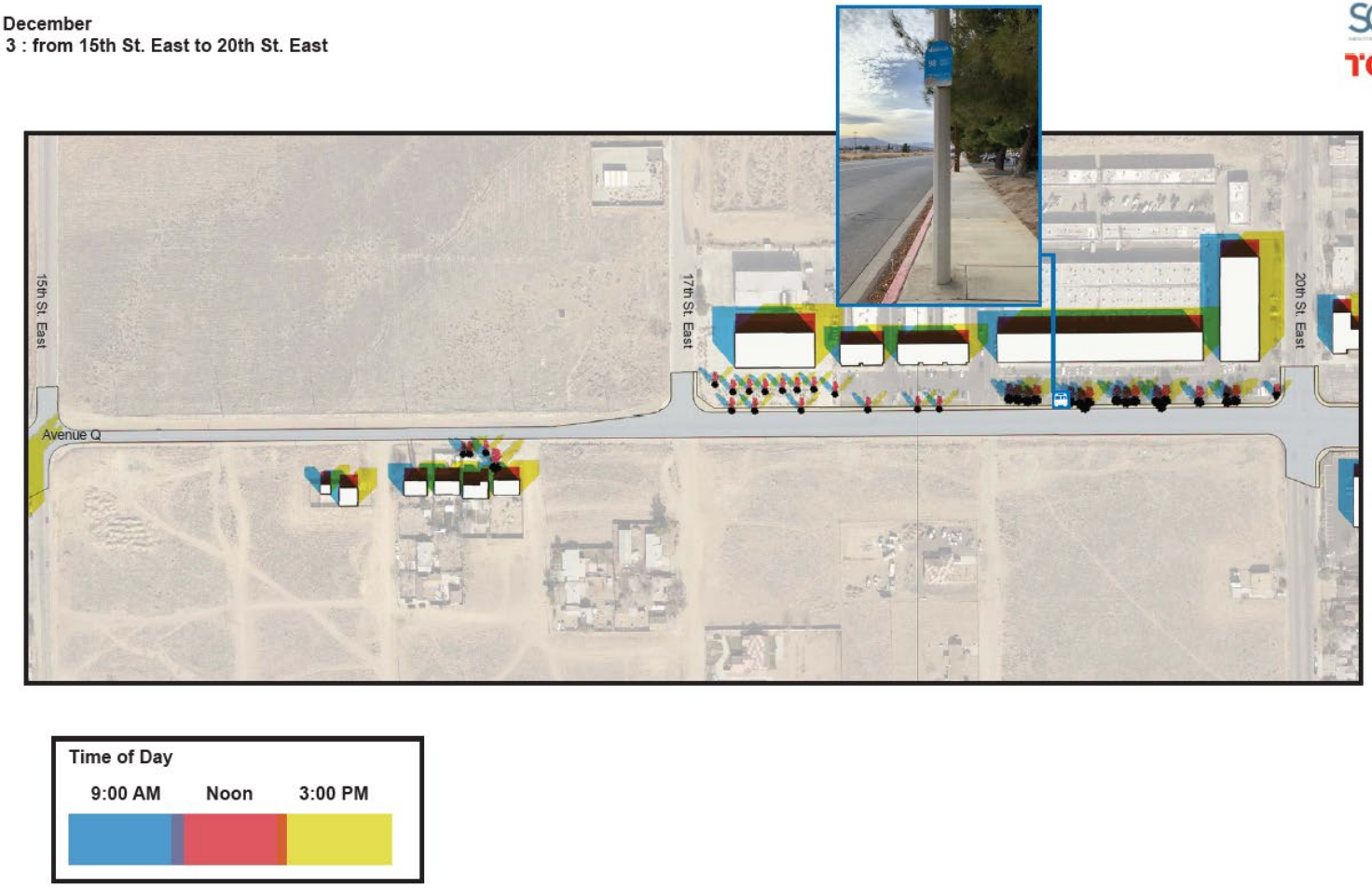


Figure 20 December Shade Analysis on Avenue Q from 15th Street East to 20th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: June
Section 1 : from Sierra Hwy. to 10th St. East

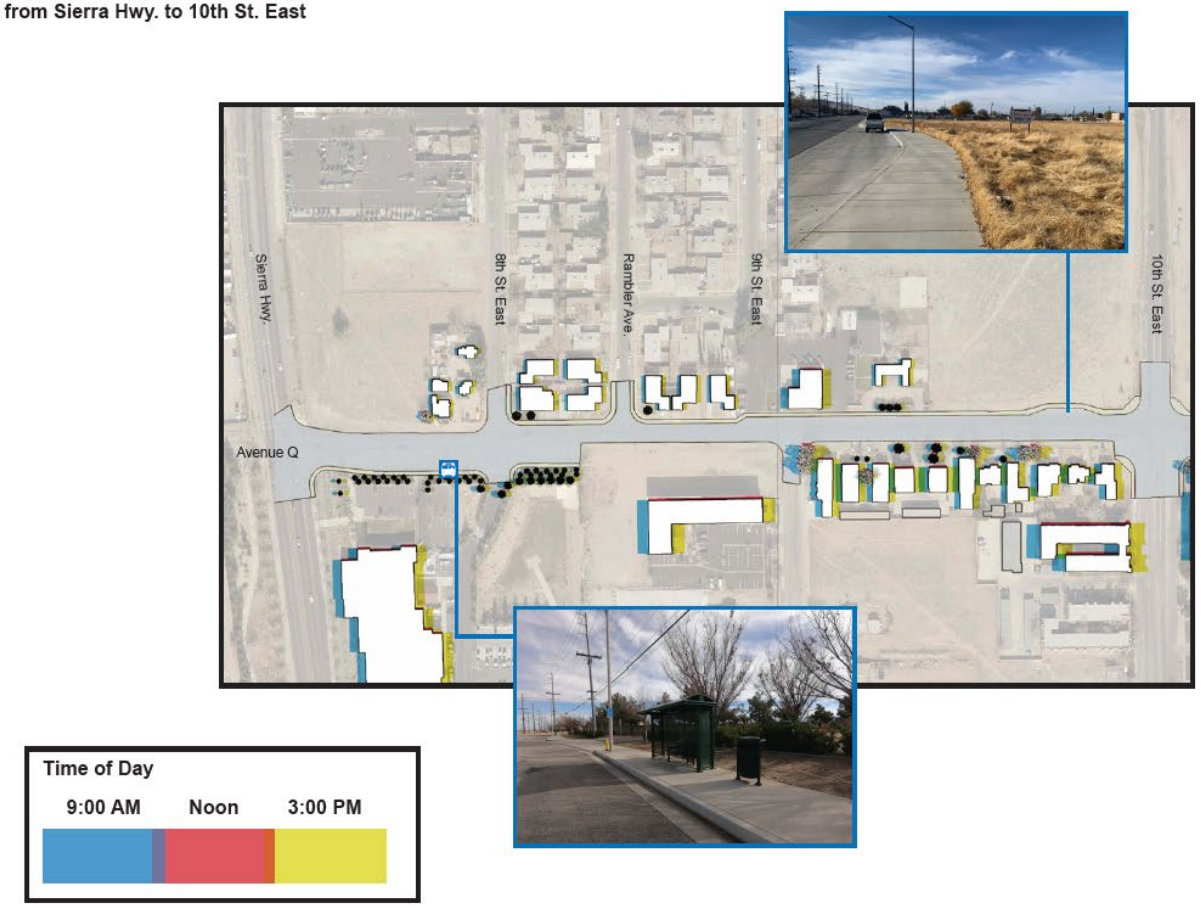


Figure 21 June Shade Analysis on Avenue Q from Sierra Highway to 10th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: June
Section 2 : from 10th St. East to 15th St. East

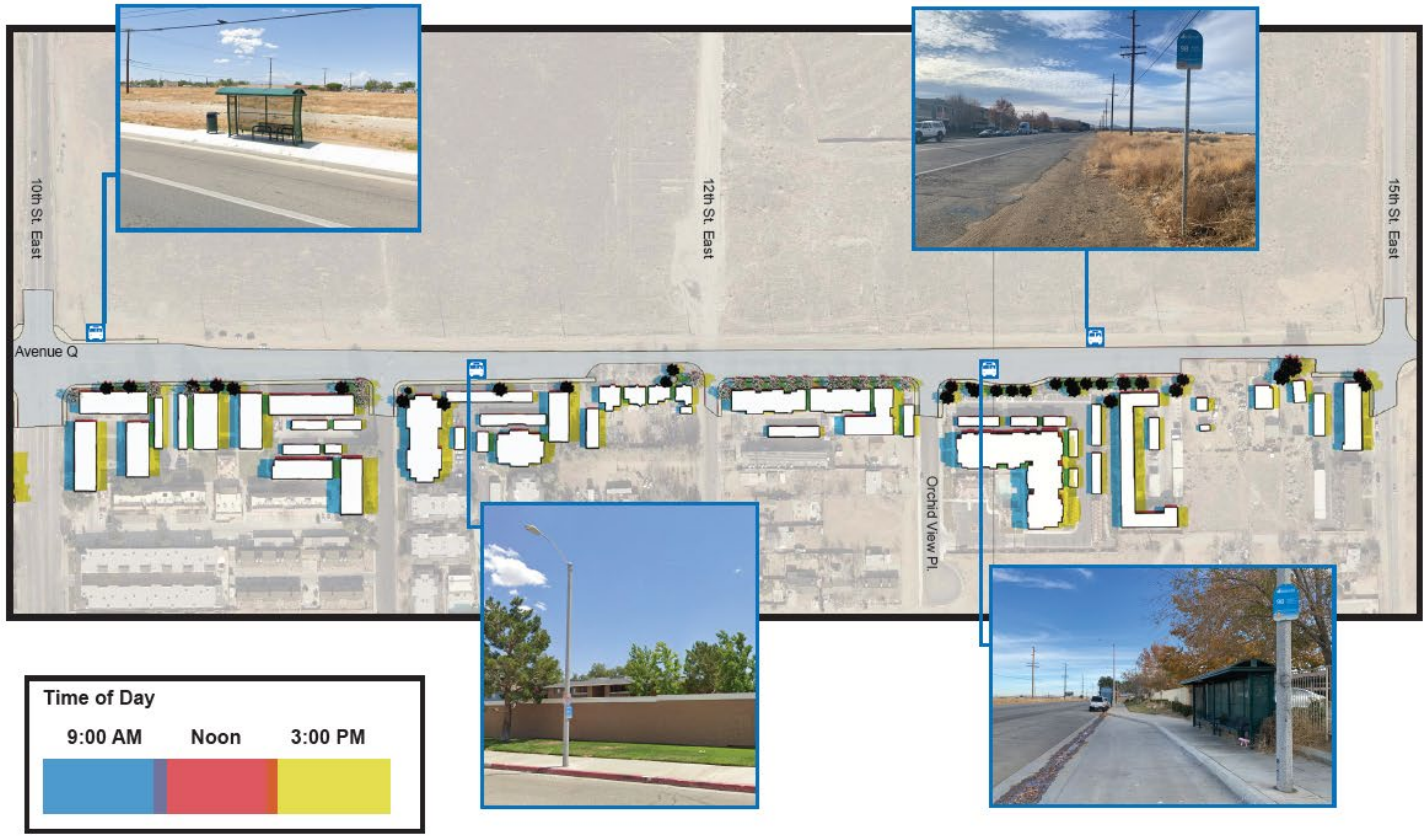


Figure 22 June Shade Analysis on Avenue Q from 10th Street East to 15th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: June
Section 3 : from 15th St. East to 20th St. East





Figure 23 June Shade Analysis on Avenue Q from 15th Street East to 20th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: March
Section 1 : from Sierra Hwy. to 10th St. East

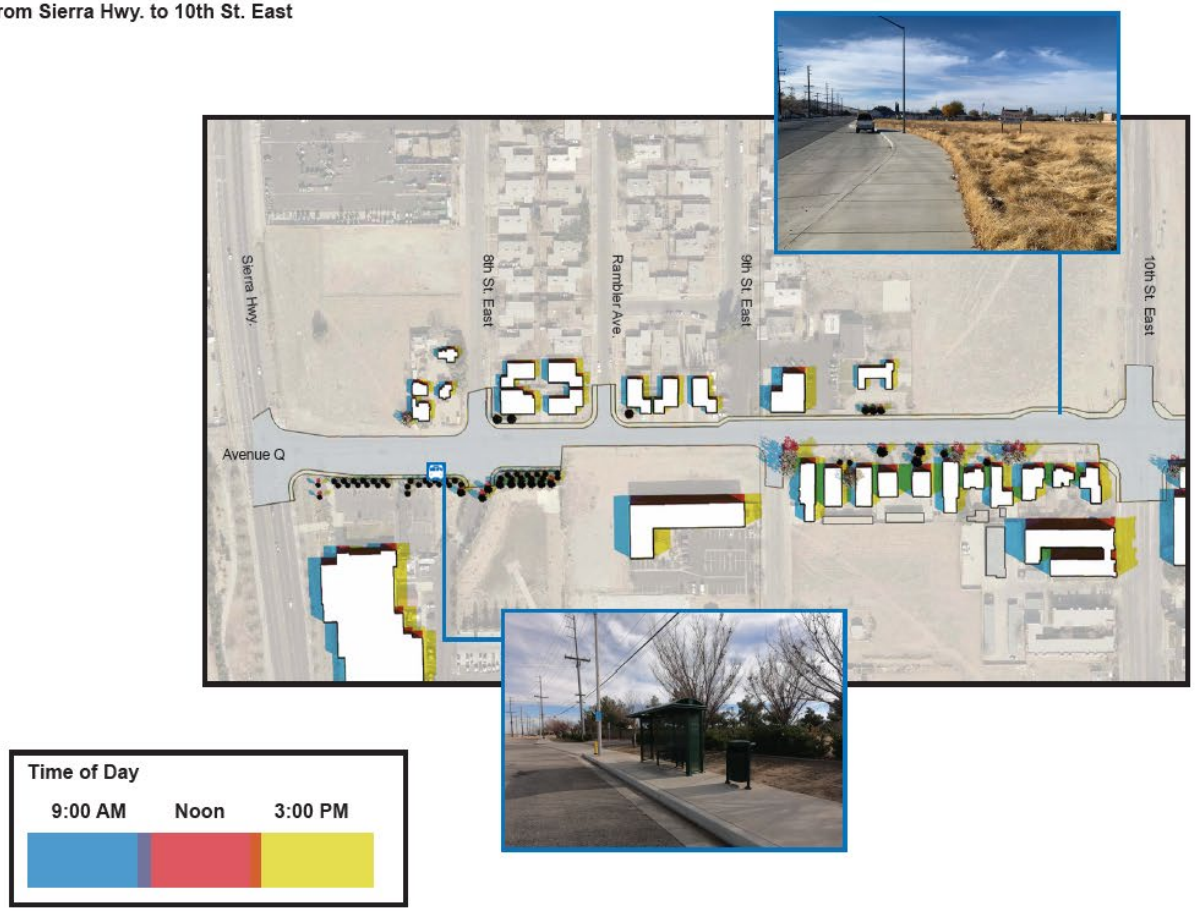


Figure 24 March Shade Analysis on Avenue Q from Sierra Highway to 10th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: March
Section 2 : from 10th St. East to 15th St. East



Figure 25 March Shade Analysis on Avenue Q from 10th Street East to 15th Street East

Palmdale Avenue Q Complete Streets Project
Shade Analysis

Period: March
Section 3 : from 15th St. East to 20th St. East



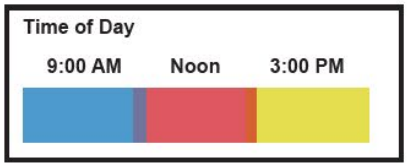


Figure 26 March Shade Analysis on Avenue Q from 15th

Public Engagement Summary Report

Overview

This document provides a recap of the community engagement efforts for both phases of the Avenue Q Complete Streets Project in the City of Palmdale. This includes both how stakeholder input and feedback was gathered and how it was factored into the technical plan. General conclusions and key takeaways for both phases of outreach is also included, along with the two separate outreach summaries created for each respective phase, which recaps the notification activities and input from the two virtual public meetings.

Overall, the goal of the community engagement for this project was to leverage a transparent and inclusive set of outreach activities that provide ample opportunities for meaningful engagement from the City's diverse community. The intention was to foster a sense of participation, contribution, and ownership among local corridor residents and business owners, as well as the City at-large.

Outreach Timeline & Milestones

Two notification phases were conducted and were driven by the schedule of the technical work. Both phases consisted of the same notification activities, however, both were tailored to engage the public for different purposes and at different stages of the project. Phase one was geared to introduce the project to the community and provide a general overview of the process, while phase two focused on providing a project status update, summary of outreach results to date and a draft of project findings with proposed plans. Notification and collateral designed throughout both phases were strategized to inform and include as many community members as possible and to support the team in meeting their participation targets. Below are some of the project milestones:

1. The project team received a total of 551 survey responses in English and Spanish. This surpassed our goal of 250 responses.
2. Both virtual workshops totaled more than 115 views.
3. The project team engaged more than 330 community members throughout two pop-up events.

COVID-19 Virtual Approach

The Project Team decided on implementing 100 percent virtual public meetings to remain in compliance with state restrictions for in-person gatherings. This meeting format allowed the project to achieve attendance numbers that perhaps may have not been reachable using traditional in-person meetings. Views for both meetings exceeded 115 participants. Requests for special accommodations were also made available to reach community members with special needs.

Communications Planning

The diverse range of community stakeholders for this project required a multi-level outreach approach and a well-defined process for capturing and analyzing public feedback. Arellano Associates (AA) coordinated with Toole Design and the City at the start of the project to develop a Public Participation Plan (PPP) to articulate the strategies and methodologies that would be employed to support the notification for this technical planning. The PPP served as a guiding blueprint for all supporting engagement activities throughout the projects technical process. Notification strategies were designed to reach all levels of stakeholders, including non-English speakers. Spanish translations were provided for all project materials and public workshops. Notification tools and techniques included:

- Print notification
    - Flyers and posters
    - Postcards
- Digital notification
    - Social media posts
    - Geofencing
    - Press releases
    - Newsletters
    - Eblasts
    - Billboards
    - Extended outreach toolkit
    - City magazine

The project's database of 1,400 plus contacts was a key resource for disseminating project information and soliciting participation. The stakeholder database encompassed a broad range of categories, including City officials and staff, major employers, academic institutions, business associations, and community groups/members.

Sources of Public Input

In order to keep community input on the forefront, the Project Team coordinated a variety of methods to solicit and receive public input needed to support the technical team's development of project recommendations. Public input contributed to defining a shared vision for the corridor and the future transportation uses and needs for the City. Outreach activities to gather community feedback were conducted in both project phases and were in part designed to reach people without internet or computer access. These activities included:

- Project survey
- Two virtual workshops with Q&A
- Two Pop-Ups

- Stakeholder interview

Key Findings

A majority of respondents to the survey confirmed that they primarily travel through Avenue Q using a car with a minority responding that they rarely if ever walk. A primary reason was concern for safety based on lighting, sidewalk conditions and other physical amenities missing in the corridor. Participants also indicated they would be willing to bike and/or walk in the corridor if improvements were made that created a safe and well-lit corridor. The following table summarizes the inputs received through the various outreach efforts:

1. Survey *Complete survey responses can be found on the appendices of the Spring 2021 Outreach Summary Report		
Topic	**Question**	**Key Findings**
Getting to Know You (Questions 1-5)	1. What are the main reasons you travel in and around this portion of the Avenue Q corridor?	• 58.9% of respondents travel through Avenue Q to run errands/go to doctor's appointments • 30% of respondents travel through Avenue Q to visit friends/family • 27.5% of respondents live on or near Avenue Q
	2. On average, how often do you walk in and around the project area of Avenue Q?	• 48.7% of respondents said “never” • 12.9% of respondents said “once or twice a week” • 11.6% of respondents said “a few times a year”
	3. On average, how often do you walk in and around the project area of Avenue Q?	• 78.5% of respondents said “never” • 9.3% of respondents said “a few times a year” • 5% of respondents said “once or twice a month”
	4. On average, how often do you take public transit in and around the project area of Avenue Q?	• 81.8% of respondents said “never” • 9.3% of respondents said “a few times a year” • 3% of respondents said “once or twice a month”

	5. On average, how often do you drive on Avenue Q?	• 30.4% of respondents said “once or twice a week” • 24.9% of respondents said “daily” • 19.5% of respondents said “once or twice a month”
Concerns/Priorities for Avenue Q (Questions 6-7)	6. What are your primary concerns within this corridor?	• 54.3% of respondents have said “maintenance (vandalism, trash dumping, potholes)” • 51.9% of respondents said “missing sidewalks or crosswalks to get to my destinations” • 50.6% of respondents said “walking is not safe” • 43.7% of respondents said “street is too dark/visibility issues” • 43.1% of respondents said “personal safety” • 33.9% of respondents said “bicycling is not safe”
	7. Select the top features that you feel would most improve the experience for people traveling on Avenue Q.	• 66.2% of respondents said “lighting” • 61.7% of respondents said “continuous sidewalks” • 55.3% of respondents said “improved pavement quality” • 34.2% of respondents said “street trees/shade” • 28.1% of respondents said “bike paths away from cars”
Demographics – Voluntary (Questions 8-10)	8. What is your age?	• 32.9% of respondents said “50-64” • 30.7% of respondents said “35-49” • 15.5% of respondents said “25-34”
	9. What race or ethnic group do you identify with?	• 42.9% of respondents said “White/Caucasian” • 41% of respondents said “Hispanic/Latino/Latinx” • 10.4% of respondents said “two or more races”
	10. What is your annual household income?	• 47.9% of respondents said “over $75,000” • 21.4% of respondents said “$25,000-$50,000” • 19.3% of respondents said “50,000-$75,000”
2. Virtual Workshops		
Workshop	**Topic/Question**	**Key Findings**
	General	• Question about how this project would affect 12th Street East

Virtual Workshop #1 Q&A		• Question about the completion date of the project • Question about the project boundary
	Bike Lanes	• A bike trail is desperately needed along Avenue Q
	Bus Stops	• Question about an increased number of bus stops
	Development	• Question about whether the project would address the types of development on north side of Avenue Q • Question about whether the City would use eminent domain to acquire houses
	Pedestrian Access	• Question about whether there will be a pedestrian bridge to connect to the transit station
	Safety	• Would like to see more crosswalks near schools for safety • Question about whether the project would address homelessness and drugs • Need for bike lane and vehicle lane separation
	Traffic Flow	• Comment about not wanting lane reduction • Question about whether street widening is being considered
Virtual Workshop #1 Poll ***Complete poll responses can be found on the appendices of the Spring 2021 Outreach Summary Report**	Poll 1, Question 1: How did you hear about this meeting? Select all that apply.	• 15 respondents said “none of the above” • 2 respondents said “both”
	Poll 1, Question 2: To which destinations do you walk or bike?	• 11 respondents said “none of the above” • 4 respondents said “for exercise” • 2 respondents said “for fun”

	Select all that apply.	
	Poll 2, Question 1: The Avenue Q Corridor needs improvements. Select one.	• 16 respondents said “strongly agree” • 2 respondents said “somewhat agree”
	Poll 2, Question 2: What are your major concerns when you try to walk, bike, or drive along Ave Q? Select all that apply.	• 14 respondents said “incomplete sidewalk network” • 12 respondents said “few safe crossing opportunities” • 12 respondents said “lack of lighting at night” • 8 respondents said “incomplete bike network” • 7 respondents said “few bus stop amenities”
	Poll 3, Question 1: Do you agree or disagree with the opportunities that have been identified? Select one.	• 12 respondents said “strongly agree” • 5 respondents said “somewhat agree”
	Poll 3, Question 2: What does a Complete Street on Avenue Q look like to you? Select all that apply.	• 15 respondents said “continuous sidewalks” • 14 respondents said “better lighting along the corridor” • 13 respondents said “more crossing options” • 11 respondents said “consistent shade” • 11 respondents said “better bus stop amenities”
	Poll 4, Question 1: Would improvements like	• 10 respondents said “more likely” • 5 respondents said “not sure” • 1 respondent said “less likely”

	these better connect you to a future High-Speed Rail and Metrolink station without the use of a car?	
	Poll 4, Question 2: Would you use the Avenue Q corridor more often if improvements like these were made? Select one.	• 12 respondents said “more likely” • 4 respondents said “not sure”
	Poll 5, Question 1: Have you taken the project survey yet?	• 11 respondents said “yes” • 6 respondents said “no”
	Poll 5, Question 2: How did you hear about this meeting? Select all that apply.	• 11 respondents said “email” • 5 respondents said “social media (Facebook, Instagram, Twitter, etc.)” • 4 respondents said “mail, postcards”
	Poll 5, Question 3: What are the most effective ways to reach your neighbors to ask for their input on this topic? Select all that apply.	• 10 respondents said “social media (Facebook, Instagram, Twitter, etc.)” • 8 respondents said “email” • 8 respondents said “mail, postcards” • 7 respondents said “Community/Neighborhood Organizations”
Virtual Workshop #2 Q&A	General	• When will the City have money to pay the project? • Question about future engagement opportunities and suggestion to distribute flyers in the amphitheater or mall

	Bike Lanes	• Would like to see raised bicycle paths for safety purposes • Concerns about height of bike buffers
	Development	• Question about development incentives • How will the City attract developers? • Question about including affordable housing in the new development
	Parking	• Question about having a public parking facility
	Safety	• Wondering is safety cameras would be installed along the corridor • Intersections need to be signaled • Request for a median for pedestrians
	Streetlights	• Question about streetlights having solar
	Traffic Flow	• Question about need of 2 lane each way versus 1 lane
	Zoning	• Concerns about when zoning designations will be changed
Virtual Workshop #2 Poll ***Complete poll responses can be found on the appendices of the Summer 2021 Outreach Summary Report**	1. Do you live or work in Palmdale? (Select all that apply)	• 10 respondents neither live or work in Palmdale • 7 respondents live in Palmdale • 6 respondents work in Palmdale
	2. How often do you walk, bike, or take transit on Avenue Q?	• 16 respondents said “once a month or less” • 1 respondent said “a few times a week” • 1 respondent said “a few times a month”
	3. Describe Avenue Q in one word	• Some of the responses included the words unsafe, scary, neglected, isolated, and rundown
	4. Rate the complete streets elements in order of most	• The number one response was “safe crossing opportunities” • The second response was “new, wide sidewalks”

	important to least important	• The third response was “landscaping and tree canopy”
	5. What kind of bike facility would you feel more comfortable using?	• 100% of respondents selected “sidewalk-level bike lane” (16 respondents)
	6. Which would you prefer?	• 16 respondents selected “landscaped median with a few breaks in it for key locations” • 3 respondents selected “center turn lanes into every property”
	7. Would you be willing to spend a little more time while driving on Avenue Q to ensure a safer environment for people walking and biking?	• 100% of respondents said “yes” (20 respondents)
	8. Is this wider street more appealing to you than the previous options?	• 10 respondents said “yes” • 5 respondents said “no”
	9. Key highlights from short response questions	• People want to see wide sidewalks with two lanes in each direction; 4 lanes would encourage faster speeds • People want to see public seating and art • People want to see more landscaping and trees • Remove designs with more traffic lanes and no medians • People want to see diagonal crosswalks • People want play areas for children

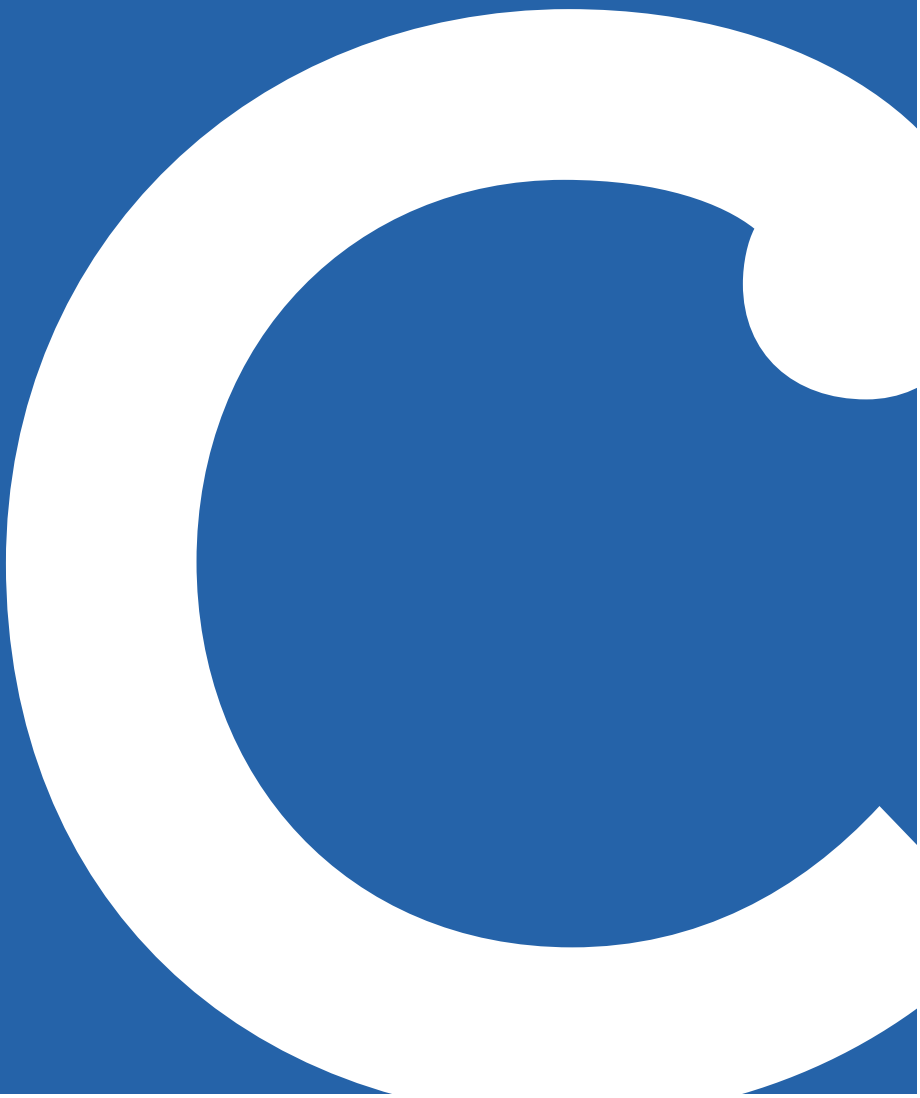
3. Pop-Ups		
Pop-Up #1	Activity Results	Participants were asked to select the top three improvements that would make it safer to walk and bike along the Avenue Q Corridor: • 9 votes for sidewalk level bike lane • 9 votes for street lightening • 7 votes for shade and tree canopy
	General Comments	Participants were asked to select the top three improvements that would make it safer to walk and bike along the Avenue Q Corridor: • Appreciation for team's efforts to engage the community in the project development. • Expressed interest in participating in the 8/25 virtual public meeting. • Would like to see improvements such as lighting, wide sidewalks, and sidewalk-level bike lanes.
Pop-Up #2	Activity Results	• 123 votes for street lighting • 102 votes for sidewalk level bike lane • 95 votes for wide sidewalks
	General Comments	• No comments related to the Avenue Q project area
4. Stakeholder Interview		
Antelope Valley Youth Build ***Complete interview responses can be found on the appendices of the Summer 2021**	1. What are one or two words you'd use to describe the experience of traveling on Avenue Q?	• Fast and reckless, there are not a lot of people walking and they would rather wait for a bus on a different street with shade • Dry and dangerous due to the reckless driving • Lots of trash with no shade

Outreach Summary Report	2. Do you walk or bike on Avenue Q? Why or why not? What about other places in Palmdale?	• People don't walk or bike since there are no sidewalks or bike lanes, they prefer to take the bus
	3. Are there places in Palmdale or Lancaster that you walk and bike to?	• Eastside Park • A new apartment complex and affordable housing near the public pool
	4. Think about how Avenue Q can change in the next twenty years to be safer and more comfortable for people walking, biking, or taking transit. What should Avenue Q look like in 20 years?	• More trees and bike trails with good pavement conditions • More crosswalks and sidewalks • Medians on the streets • Gentrified • A river
	5. Cross-section options (shared 90' two lane and four lane options)	• People like the trees, medians, and sidewalks • There was a comment about preferring the 4-lane option since the speed limits are high • There was a comment about preferring the 2-lane option
	6. Biking on the street or sidewalk	• There was a comment about not riding a bike in years
	7. Experience riding the bus	• Riding the bus is confusing and some stops don't have shelters and benches
	8. #1 Priority for Avenue Q	• Sidewalks • Fixing the road pavement • Bus shelters and benches • Water

General Conclusions

- The Project followed an equitable outreach process including both distribution of digital notification and development of print materials for groups with less access or inclination to use technology
- Each element of the outreach process required adequate time for internal stakeholder vetting, including branding the project, developing key messages, and logistics to support the public meetings
- Public input was received using a wide variety of outlets, including in-person conversations via pop-ups and canvassing, as well as via digital means such as virtual meetings and digital surveys
- Key findings from the various outreach activities included the need for a higher sense of street safety for all users and dedicated bike lanes with buffers

Turning Movement Counts



National Data & Surveying Services

Intersection Turning Movement Count

Location: Sierra Hwy & E Ave Q
City: Palmdale
Control: Signalized

Project ID: 21-020058-001
Date: 3/4/2021

Total

NS/EW Streets:	Sierra Hwy				Sierra Hwy				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	37	9	0	15	48	0	0	0	0	0	0	16	0	27	0	152
7:15 AM	0	49	6	0	13	45	0	0	0	0	0	0	13	0	43	0	169
7:30 AM	0	84	11	0	19	66	0	0	0	0	0	0	14	0	37	0	231
7:45 AM	0	74	11	0	25	78	0	0	0	0	0	0	13	0	82	0	283
8:00 AM	0	77	10	0	20	63	0	0	0	0	0	0	5	0	52	0	227
8:15 AM	0	56	5	0	29	55	0	0	0	0	0	0	9	0	46	0	200
8:30 AM	0	68	11	0	18	63	0	0	0	0	0	0	11	0	53	0	224
8:45 AM	0	63	8	1	41	93	0	0	0	0	0	0	14	0	56	0	276
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	508	71	1	180	511	0	0	0	0	0	0	95	0	396	0	1762
APPROACH %'s :	0.00%	87.59%	12.24%	0.17%	26.05%	73.95%	0.00%	0.00%					19.35%	0.00%	80.65%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	291	37	0	93	262	0	0	0	0	0	0	41	0	217	0	941
PEAK HR FACTOR :	0.000	0.866	0.841	0.000	0.802	0.840	0.000	0.000	0.000	0.000	0.000	0.000	0.732	0.000	0.662	0.000	0.831
		0.863				0.862								0.679			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	114	14	0	70	121	0	0	0	0	0	0	15	0	91	0	425
4:15 PM	0	82	8	0	67	119	0	0	0	0	0	0	15	0	104	0	395
4:30 PM	0	103	15	0	103	175	0	0	0	0	0	0	28	0	124	0	548
4:45 PM	0	114	11	0	87	157	0	0	0	0	0	0	17	0	117	0	503
5:00 PM	0	120	14	0	90	163	0	0	0	0	0	0	20	0	111	0	518
5:15 PM	0	81	9	0	89	139	0	0	0	0	0	0	17	0	62	0	397
5:30 PM	0	91	15	0	78	128	0	0	0	0	0	0	13	0	75	0	400
5:45 PM	0	87	10	0	59	125	0	0	0	0	0	0	21	0	71	0	373
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	792	96	0	643	1127	0	0	0	0	0	0	146	0	755	0	3559
APPROACH %'s :	0.00%	89.19%	10.81%	0.00%	36.33%	63.67%	0.00%	0.00%					16.20%	0.00%	83.80%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	418	49	0	369	634	0	0	0	0	0	0	82	0	414	0	1966
PEAK HR FACTOR :	0.000	0.871	0.817	0.000	0.896	0.906	0.000	0.000	0.000	0.000	0.000	0.000	0.732	0.000	0.835	0.000	0.897
		0.871				0.902								0.816			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sierra Hwy & E Ave Q
City: Palmdale
Control: Signalized

Project ID: 21-020058-001
Date: 3/4/2021

Bikes

NS/EW Streets:	Sierra Hwy				Sierra Hwy				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
APPROACH %'s :					0.00%	100.00%	0.00%	0.00%									
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	1	2	0	0	0	0	0	0	1	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	0	0	0	2	0	1	0	4
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%					66.67%	0.00%	33.33%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.250
														0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sierra Hwy & E Ave Q
City: Palmdale

Project ID: 21-020058-001
Date: 3/4/2021

Pedestrians (Crosswalks)

NS/EW Streets:	Sierra Hwy		Sierra Hwy		E Ave Q		E Ave Q		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	1	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	1	0	0	0	0	1	0	0	2
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	0	0	0	1	0	0	3
APPROACH %'s :	50.00%	50.00%			0.00%	100.00%			
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	1	0	0	0	0	0	0	1
PEAK HR FACTOR :		0.250							0.250
	0.250								

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	1
5:15 PM	1	0	0	0	0	0	0	0	1
5:30 PM	1	0	0	0	0	0	0	0	1
5:45 PM	4	0	0	0	0	0	0	0	4
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	6	2	0	0	1	0	0	0	9
APPROACH %'s :	75.00%	25.00%			100.00%	0.00%			
PEAK HR :	**04:30 PM - 05:30 PM**								TOTAL
PEAK HR VOL :	1	2	0	0	1	0	0	0	4
PEAK HR FACTOR :	0.250	0.500			0.250				0.500
	0.750				0.250				

Prepared by National Data & Surveying Services

Sierra Hwy & E Ave Q

Peak Hour Turning Movement Count

ID: 21-020058-001
City: Palmdale

Day: Thursday
Date: 03/04/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:30 PM - 05:30 PM	04:00 PM - 06:00 PM

SOUTHBOUND — Sierra Hwy

	L	T	R	U	
AM	0	262	93	0	508
NOON	0	0	0	0	0
PM	0	634	369	0	832

EASTBOUND — E Ave Q

	L	T	R	U
AM	0	0	0	0
NOON	0	0	0	0
PM	0	0	0	0

WESTBOUND — E Ave Q

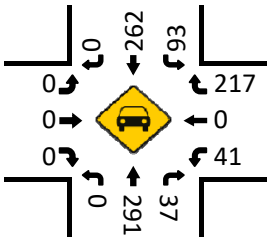
	L	T	R	U
PM	414	0	217	1
NOON	0	0	0	0
AM	82	0	41	1
	0	0	0	0
	418	0	130	

NORTHBOUND — Sierra Hwy

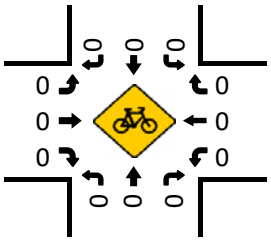
	L	T	R	U	
PM	716	0	0	418	49
NOON	0	0	0	0	0
AM	303	0	0	291	37

CONTROL			
Signalized			
TEV	941	0	1966
	AM	NOON	PM
PHF	0.83		0.90

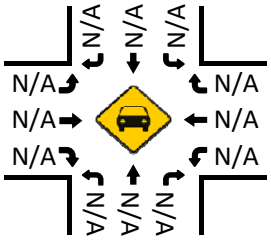
Total Vehicles (AM)



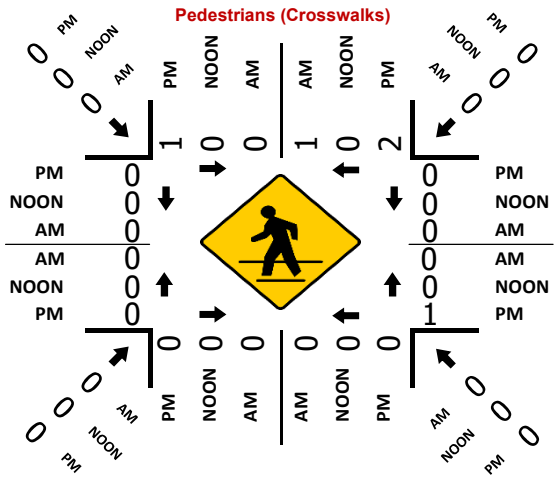
Bikes (AM)



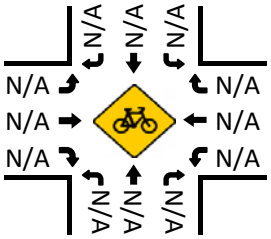
Total Vehicles (NOON)



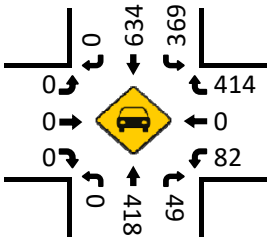
Pedestrians (Crosswalks)



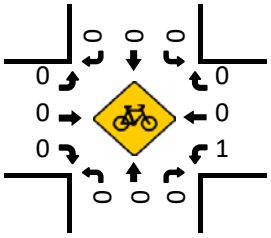
Bikes (NOON)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: 10th St & E Ave Q
City: Palmdale
Control: Signalized

Project ID: 21-020058-002
Date: 3/4/2021

Total

NS/EW Streets:	10th St				10th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	5	10	1	0	2	3	0	0	0	17	5	0	1	31	4	0	79
7:15 AM	6	13	0	0	4	8	1	0	0	19	1	0	1	48	6	0	107
7:30 AM	10	24	5	0	1	11	0	0	1	13	6	0	3	45	9	0	128
7:45 AM	7	27	4	0	4	11	0	0	5	35	8	0	4	70	18	0	193
8:00 AM	11	12	3	0	1	10	1	0	2	17	2	0	7	46	10	0	122
8:15 AM	3	4	5	0	0	10	0	0	2	35	5	0	2	45	9	0	120
8:30 AM	13	14	2	0	5	6	1	0	0	21	8	0	1	45	9	0	125
8:45 AM	4	12	4	0	8	9	1	0	3	21	10	0	1	54	6	0	133
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	59	116	24	0	25	68	4	0	13	178	45	0	20	384	71	0	1007
APPROACH %'s :	29.65%	58.29%	12.06%	0.00%	25.77%	70.10%	4.12%	0.00%	5.51%	75.42%	19.07%	0.00%	4.21%	80.84%	14.95%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	31	67	17	0	6	42	1	0	10	100	21	0	16	206	46	0	563
PEAK HR FACTOR :	0.705	0.620	0.850	0.000	0.375	0.955	0.250	0.000	0.500	0.714	0.656	0.000	0.571	0.736	0.639	0.000	0.729
	0.737				0.817				0.682				0.728				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	17	9	18	0	13	18	9	0	1	68	11	0	6	69	9	0	248
4:15 PM	13	8	6	0	9	14	7	0	3	86	14	0	8	106	6	0	280
4:30 PM	17	8	8	0	16	23	11	0	3	101	19	0	7	108	6	0	327
4:45 PM	14	14	6	0	3	15	7	0	1	88	12	0	5	95	4	0	264
5:00 PM	29	10	15	0	4	16	0	0	0	108	13	0	5	86	5	0	291
5:15 PM	8	7	13	0	12	21	3	0	1	87	10	0	5	62	4	0	233
5:30 PM	13	10	3	0	7	12	1	0	0	79	6	0	7	83	4	0	225
5:45 PM	9	18	4	0	9	11	3	0	2	74	12	0	6	71	7	0	226
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	120	84	73	0	73	130	41	0	11	691	97	0	49	680	45	0	2094
APPROACH %'s :	43.32%	30.32%	26.35%	0.00%	29.92%	53.28%	16.80%	0.00%	1.38%	86.48%	12.14%	0.00%	6.33%	87.86%	5.81%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	73	40	35	0	32	68	25	0	7	383	58	0	25	395	21	0	1162
PEAK HR FACTOR :	0.629	0.714	0.583	0.000	0.500	0.739	0.568	0.000	0.583	0.887	0.763	0.000	0.781	0.914	0.875	0.000	0.888
	0.685				0.625				0.911				0.911				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 10th St & E Ave Q
City: Palmdale
Control: Signalized

Project ID: 21-020058-002
Date: 3/4/2021

Bikes

NS/EW Streets:	10th St				10th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
APPROACH %'s :									0.00%	50.00%	50.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	1	0	0	0	0	1	0	0	0	2	0	0	4
APPROACH %'s :					100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250
														0.250			

National Data & Surveying Services

Intersection Turning Movement Count

Location: 10th St & E Ave Q
City: Palmdale

Project ID: 21-020058-00
Date: 3/4/2021

Pedestrians (Crosswalks)

NS/EW Streets:	10th St		10th St		E Ave Q		E Ave Q		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	3	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	2	0	1	1	0	1	2	4	11
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	2	0	1	4	1	1	2	4	15
APPROACH %'s :	100.00%	0.00%	20.00%	80.00%	50.00%	50.00%	33.33%	66.67%	
PEAK HR :	**04:15 PM - 05:15 PM**								TOTAL
PEAK HR VOL :	0	0	0	3	1	0	0	0	4
PEAK HR FACTOR :				0.250	0.250				0.333
			0.250		0.250				

Prepared by National Data & Surveying Services

10th St & E Ave Q

Peak Hour Turning Movement Count

ID: 21-020058-002
City: Palmdale

Day: Thursday
Date: 03/04/2021

PEAK HOURS	COUNT PERIODS
07:30 AM - 08:30 AM	07:00 AM - 09:00 AM
NONE	NONE
04:15 PM - 05:15 PM	04:00 PM - 06:00 PM

SOUTHBOUND (10th St)

AM	1	42	6	0	123	AM
NOON	0	0	0	0	0	NOON
PM	25	68	32	0	68	PM

EASTBOUND (E Ave Q)

AM	NOON	PM		
238	0	493	⇦	
0	0	0	↶	0
10	0	7	↱	1
100	0	383	→	1
21	0	58	↷	0
AM	NOON	PM		

WESTBOUND (E Ave Q)

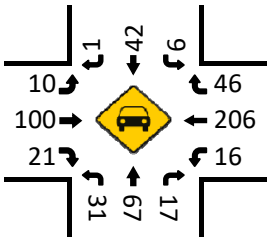
PM	NOON	AM		
			⇨	1
21	0	46	↰	1
395	0	206	←	1
25	0	16	↰	0
0	0	0	↶	
450	0	123	⇨	
PM	NOON	AM		

NORTHBOUND (10th St)

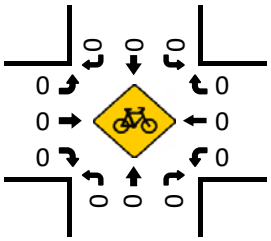
PM	151	0	73	40	35	PM
NOON	0	0	0	0	0	NOON
AM	79	0	31	67	17	AM

CONTROL			
Signalized			
TEV	563	0	1162
	AM	NOON	PM
PHF	0.73		0.89

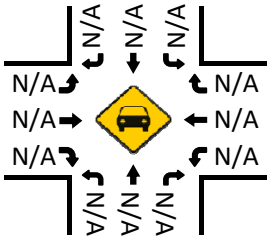
Total Vehicles (AM)



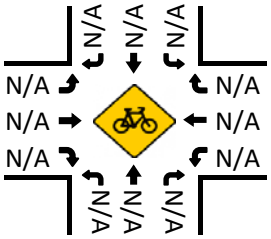
Bikes (AM)



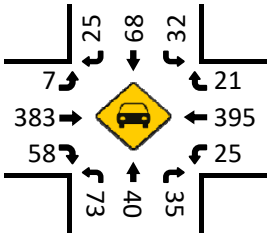
Total Vehicles (Noon)



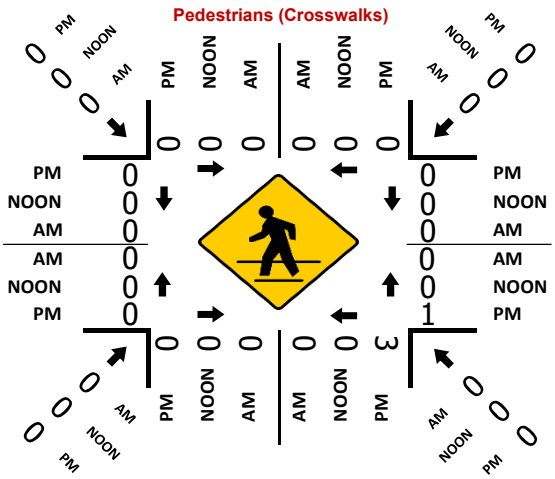
Bikes (NOON)



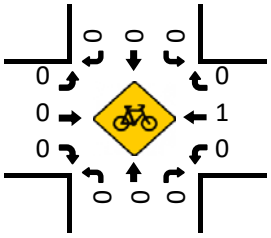
Total Vehicles (PM)



Pedestrians (Crosswalks)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: 12th St & E Ave Q
City: Palmdale
Control: 1-Way Stop (NB)

Project ID: 21-020058-003
Date: 3/4/2021

Total

NS/EW Streets:	12th St				12th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	0	1	0	0	0	0	0	0	28	0	0	1	36	0	0	70
7:15 AM	3	0	1	0	0	0	0	0	0	19	0	0	0	36	0	0	59
7:30 AM	3	0	3	0	0	0	0	0	0	20	4	0	0	50	0	0	80
7:45 AM	10	0	2	0	0	0	0	0	0	26	2	0	1	76	0	0	117
8:00 AM	1	0	2	0	0	0	0	0	0	42	3	0	0	61	0	0	109
8:15 AM	5	0	3	0	0	0	0	0	0	32	2	0	0	55	0	0	97
8:30 AM	1	0	3	0	0	0	0	0	0	25	0	0	2	39	0	0	70
8:45 AM	2	0	2	0	0	0	0	0	0	28	3	0	2	54	0	0	91
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	0	17	0	0	0	0	0	0	220	14	0	6	407	0	0	693
APPROACH %'s :	63.04%	0.00%	36.96%	0.00%					0.00%	94.02%	5.98%	0.00%	1.45%	98.55%	0.00%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	19	0	10	0	0	0	0	0	0	120	11	0	1	242	0	0	403
PEAK HR FACTOR :	0.475	0.000	0.833	0.000	0.000	0.000	0.000	0.000	0.000	0.714	0.688	0.000	0.250	0.796	0.000	0.000	0.861
	0.604				0.000				0.728				0.789				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	8	0	1	0	0	0	0	0	0	84	6	0	2	79	0	0	180
4:15 PM	6	0	4	0	0	0	0	0	0	95	6	0	5	94	0	0	210
4:30 PM	9	0	4	0	0	0	0	0	0	100	7	0	6	112	0	0	238
4:45 PM	9	0	5	0	0	0	0	0	0	96	8	0	7	100	0	0	225
5:00 PM	6	0	5	0	0	0	2	0	0	94	8	0	2	87	0	0	204
5:15 PM	4	0	3	0	0	0	0	0	0	110	7	0	1	74	0	0	199
5:30 PM	4	0	2	0	0	0	0	0	0	110	9	0	4	80	0	0	209
5:45 PM	7	0	2	0	0	0	0	0	0	70	7	0	1	80	0	0	167
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	53	0	26	0	0	0	2	0	0	759	58	0	28	706	0	0	1632
APPROACH %'s :	67.09%	0.00%	32.91%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	92.90%	7.10%	0.00%	3.81%	96.19%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	30	0	18	0	0	0	2	0	0	385	29	0	20	393	0	0	877
PEAK HR FACTOR :	0.833	0.000	0.900	0.000	0.000	0.000	0.250	0.000	0.000	0.963	0.906	0.000	0.714	0.877	0.000	0.000	0.921
	0.857				0.250				0.967				0.875				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 12th St & E Ave Q
City: Palmdale
Control: 1-Way Stop (NB)

Project ID: 21-020058-003
Date: 3/4/2021

Bikes

NS/EW Streets:	12th St				12th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
APPROACH %'s :									0.00%	100.00%	0.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	4
APPROACH %'s :									0.00%	50.00%	50.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	2
PEAK HR FACTOR :	0.00	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.250	0.000	0.000	0.500
									0.250				0.250				

National Data & Surveying Services
Intersection Turning Movement Count

Location: 12th St & E Ave Q
City: Palmdale

Project ID: 21-020058-00
Date: 3/4/2021

Pedestrians (Crosswalks)

NS/EW Streets:	12th St		12th St		E Ave Q		E Ave Q		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	3	0	0	0	0	0	3
APPROACH %'s :			100.00%	0.00%					
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	0	2	0	0	0	0	0	2
PEAK HR FACTOR :			0.500						0.500
			0.500						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	1	0	0	0	0	1
APPROACH %'s :			0.00%	100.00%					
PEAK HR :	**04:15 PM - 05:15 PM**								TOTAL
PEAK HR VOL :	0	0	0	1	0	0	0	0	1
PEAK HR FACTOR :				0.250					0.250
			0.250						

Prepared by National Data & Surveying Services

12th St & E Ave Q

Peak Hour Turning Movement Count

ID: 21-020058-003
City: Palmdale

Day: Thursday
Date: 03/04/2021

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

12th St — SOUTHBOUND

AM	0	0	0	0	0	AM
NOON	0	0	0	0	0	NOON
PM	2	0	0	0	0	PM

EASTBOUND — E Ave Q

AM	NOON	PM	
261	0	425	
0	0	0	0
0	0	0	0
120	0	385	1
11	0	29	0
AM	NOON	PM	

WESTBOUND — E Ave Q

PM	NOON	AM	
0	0	0	0
393	0	242	1
20	0	1	0
0	0	0	0
403	0	130	
PM	NOON	AM	

NORTHBOUND — 12th St

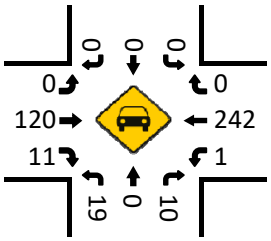
PM	49	0	30	0	18	PM
NOON	0	0	0	0	0	NOON
AM	12	0	19	0	10	AM

CONTROL: 1-Way Stop (NB)

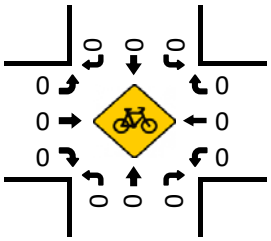
	AM	NOON	PM
TEV	403	0	877
PHF	0.86		0.92

Turning movements at the intersection: 0 1 0 0 | 0 0 1 0

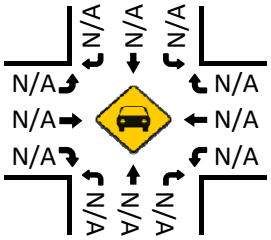
Total Vehicles (AM)



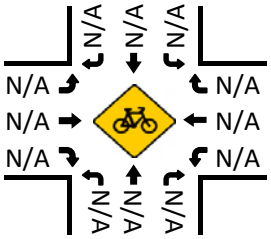
Bikes (AM)



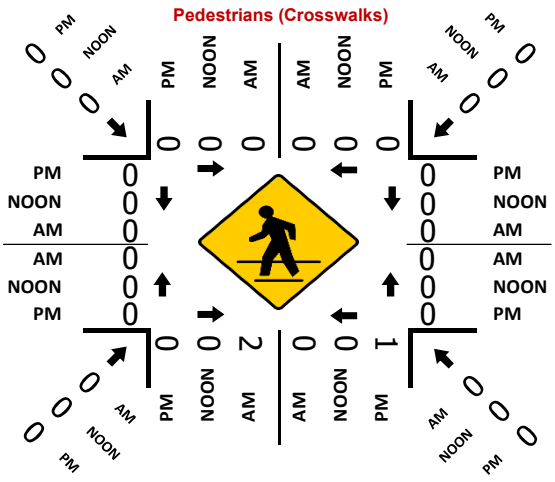
Total Vehicles (NOON)



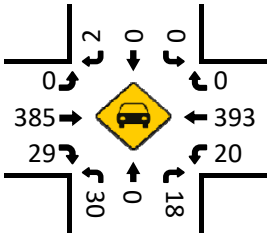
Bikes (NOON)



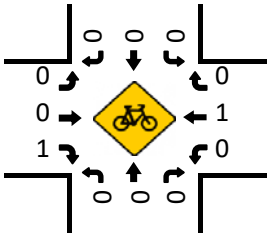
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



National Data & Surveying Services

Intersection Turning Movement Count

Location: 15th St & E Ave Q
City: Palmdale
Control: 4-Way Stop

Project ID: 21-020058-004
Date: 3/4/2021

Total

NS/EW Streets:	15th St				15th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	4	1	0	0	0	1	0	1	22	4	0	0	37	1	0	71
7:15 AM	5	8	2	0	0	5	0	0	0	17	1	0	1	39	0	0	78
7:30 AM	5	9	2	0	2	7	1	0	0	20	2	0	0	44	2	0	94
7:45 AM	3	9	5	0	5	7	0	0	0	25	4	0	1	78	1	0	138
8:00 AM	11	6	4	1	3	8	0	0	0	36	10	0	1	48	2	0	130
8:15 AM	7	8	0	1	1	4	0	0	0	30	5	0	1	39	1	0	97
8:30 AM	8	4	1	0	2	3	0	0	0	23	6	0	4	37	2	0	90
8:45 AM	7	8	3	0	3	7	0	0	0	25	7	0	1	48	0	0	109
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	46	56	18	2	16	41	2	0	1	198	39	0	9	370	9	0	807
APPROACH %'s :	37.70%	45.90%	14.75%	1.64%	27.12%	69.49%	3.39%	0.00%	0.42%	83.19%	16.39%	0.00%	2.32%	95.36%	2.32%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	26	32	11	2	11	26	1	0	0	111	21	0	3	209	6	0	459
PEAK HR FACTOR :	0.591	0.889	0.550	0.500	0.550	0.813	0.250	0.000	0.000	0.771	0.525	0.000	0.750	0.670	0.750	0.000	0.832
	0.807				0.792				0.717				0.681				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	10	8	5	0	9	12	2	0	0	68	18	0	4	65	1	0	202
4:15 PM	12	10	3	0	2	16	2	0	2	83	7	0	3	88	2	0	230
4:30 PM	15	5	9	0	9	10	5	0	1	109	13	0	4	100	1	0	281
4:45 PM	9	4	3	0	5	11	3	0	0	85	12	0	5	98	1	0	236
5:00 PM	8	13	9	0	3	9	2	0	0	91	14	0	0	71	1	0	221
5:15 PM	9	14	2	0	7	12	2	0	1	90	14	0	3	59	1	0	214
5:30 PM	9	10	5	0	4	14	2	0	0	86	13	0	1	71	2	0	217
5:45 PM	11	7	4	0	6	16	1	0	1	60	9	0	7	70	3	0	195
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	83	71	40	0	45	100	19	0	5	672	100	0	27	622	12	0	1796
APPROACH %'s :	42.78%	36.60%	20.62%	0.00%	27.44%	60.98%	11.59%	0.00%	0.64%	86.49%	12.87%	0.00%	4.08%	94.10%	1.82%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	44	32	24	0	19	46	12	0	3	368	46	0	12	357	5	0	968
PEAK HR FACTOR :	0.733	0.615	0.667	0.000	0.528	0.719	0.600	0.000	0.375	0.844	0.821	0.000	0.600	0.893	0.625	0.000	0.861
	0.833				0.802				0.848				0.890				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 15th St & E Ave Q
City: Palmdale
Control: 4-Way Stop

Project ID: 21-020058-004
Date: 3/4/2021

Bikes

NS/EW Streets:	15th St				15th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
APPROACH %'s :									0.00%	0.00%	100.00%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	3	0	0	0	0	0	0	0	1	0	0	1	0	0	6
APPROACH %'s :	25.00%	0.00%	75.00%	0.00%					0.00%	0.00%	100.00%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4
PEAK HR FACTOR :	0.25	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.333
			0.333														

National Data & Surveying Services
Intersection Turning Movement Count

Location: 15th St & E Ave Q
City: Palmdale

Project ID: 21-020058-00
Date: 3/4/2021

Pedestrians (Crosswalks)

NS/EW Streets:	15th St		15th St		E Ave Q		E Ave Q		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	1	1	0	0	0	0	0	0	2
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	1	0	0	0	0	0	1
8:00 AM	0	0	1	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	1	3	0	0	0	0	0	5
APPROACH %'s :	50.00%	50.00%	100.00%	0.00%					
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	0	3	0	0	0	0	0	3
PEAK HR FACTOR :			0.750						0.750
			0.750						

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	0	0	0	0	0	0	0	0	0
APPROACH %'s :									
PEAK HR :	**04:15 PM - 05:15 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

Prepared by National Data & Surveying Services

15th St & E Ave Q

Peak Hour Turning Movement Count

ID: 21-020058-004
City: Palmdale

Day: Thursday
Date: 03/04/2021

PEAK HOURS		COUNT PERIODS
07:30 AM - 08:30 AM	AM	07:00 AM - 09:00 AM
NONE	NOON	NONE
04:15 PM - 05:15 PM	PM	04:00 PM - 06:00 PM

15th St SOUTHBOUND

	Right	Through	Left	U-Turn	Departing
AM	1	26	11	0	38
NOON	0	0	0	0	0
PM	12	46	19	0	40
Lanes	0	1	0	0	

E Ave Q EASTBOUND

	AM	NOON	PM	Lanes
Departing	236	0	413	
U-Turn	0	0	0	0
Left	0	0	3	0
Through	111	0	368	1
Right	21	0	46	1

E Ave Q WESTBOUND

	PM	NOON	AM	Lanes
Right	5	0	6	0
Through	357	0	209	1
Left	12	0	3	0
U-Turn	0	0	0	0
Departing	411	0	133	

15th St NORTHBOUND

	Departing	U-Turn	Left	Through	Right
Lanes		0	0	1	0
PM	104	0	44	32	24
NOON	0	0	0	0	0
AM	52	2	26	32	11

CONTROL: 4-Way Stop

	AM	NOON	PM
TEV	459	0	968
PHF	0.83		0.86

Total Vehicles (AM)
SB: 1 (right), 26 (through), 11 (left)
EB: 0 (left), 111 (through), 21 (right)
WB: 6 (right), 209 (through), 3 (left)
NB: 26 (left), 32 (through), 11 (right)

Total Vehicles (Noon)
SB: N/A, N/A, N/A
EB: N/A, N/A, N/A
WB: N/A, N/A, N/A
NB: N/A, N/A, N/A

Total Vehicles (PM)
SB: 12 (right), 46 (through), 19 (left)
EB: 3 (left), 368 (through), 46 (right)
WB: 5 (right), 357 (through), 12 (left)
NB: 44 (left), 32 (through), 24 (right)

Bikes (AM)
SB: 0, 0, 0
EB: 0, 0, 0
WB: 0, 0, 0
NB: 0, 0, 0

Bikes (NOON)
SB: N/A, N/A, N/A
EB: N/A, N/A, N/A
WB: N/A, N/A, N/A
NB: N/A, N/A, N/A

Bikes (PM)
SB: 0, 0, 0
EB: 0, 0, 0
WB: 0, 0, 0
NB: 1, 0, 3

Pedestrians (Crosswalks)

Crosswalk	PM	NOON	AM	AM	NOON	PM
North	0	0	0	0	0	0
South	0	0	3	0	0	0

Crosswalk	PM	NOON	AM	AM	NOON	PM
West	0	0	0	0	0	0
East	0	0	0	0	0	0

Diagonal: NW PM 0, NOON 0, AM 0; NE PM 0, NOON 0, AM 0; SW AM 0, NOON 0, PM 0; SE AM 0, NOON 0, PM 0

National Data & Surveying Services

Intersection Turning Movement Count

Location: 20th St & E Ave Q
City: Palmdale
Control: 4-Way Stop

Project ID: 21-020058-005
Date: 3/4/2021

Total

NS/EW Streets:	20th St				20th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	5	14	4	0	8	10	1	0	2	21	1	0	4	44	10	0	124
7:15 AM	7	11	1	0	2	9	1	0	1	15	5	0	1	21	12	0	86
7:30 AM	9	15	1	0	13	5	0	0	1	18	5	0	3	38	10	0	118
7:45 AM	9	30	3	0	5	17	2	0	3	12	2	0	2	53	13	0	151
8:00 AM	18	15	0	0	16	9	0	0	6	28	10	0	3	56	20	0	181
8:15 AM	5	18	6	0	5	7	2	0	0	19	9	0	6	36	13	0	126
8:30 AM	6	11	3	0	5	11	1	0	4	22	5	0	3	33	10	0	114
8:45 AM	11	24	0	0	8	8	1	0	1	20	4	0	3	45	6	0	131
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	70	138	18	0	62	76	8	0	18	155	41	0	25	326	94	0	1031
APPROACH %'s :	30.97%	61.06%	7.96%	0.00%	42.47%	52.05%	5.48%	0.00%	8.41%	72.43%	19.16%	0.00%	5.62%	73.26%	21.12%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	41	78	10	0	39	38	4	0	10	77	26	0	14	183	56	0	576
PEAK HR FACTOR :	0.569	0.650	0.417	0.000	0.609	0.559	0.500	0.000	0.417	0.688	0.650	0.000	0.583	0.817	0.700	0.000	0.796
	0.768				0.810				0.642				0.801				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	15	24	10	0	13	37	3	0	3	63	18	0	3	58	5	0	252
4:15 PM	16	17	3	0	17	39	4	0	2	79	14	0	4	56	11	0	262
4:30 PM	17	27	9	0	12	34	6	0	1	72	17	0	4	81	9	0	289
4:45 PM	20	27	9	0	24	31	1	0	4	95	26	0	5	79	7	0	328
5:00 PM	11	17	4	0	13	35	3	0	2	68	20	0	1	73	11	0	258
5:15 PM	13	33	7	0	9	32	5	0	1	88	18	0	7	44	5	0	262
5:30 PM	14	27	14	0	13	39	4	0	4	90	16	0	3	50	10	0	284
5:45 PM	18	31	6	0	13	30	3	0	0	67	17	0	3	57	6	0	251
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	124	203	62	0	114	277	29	0	17	622	146	0	30	498	64	0	2186
APPROACH %'s :	31.88%	52.19%	15.94%	0.00%	27.14%	65.95%	6.90%	0.00%	2.17%	79.24%	18.60%	0.00%	5.07%	84.12%	10.81%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	64	88	25	0	66	139	14	0	9	314	77	0	14	289	38	0	1137
PEAK HR FACTOR :	0.800	0.815	0.694	0.000	0.688	0.891	0.583	0.000	0.563	0.826	0.740	0.000	0.700	0.892	0.864	0.000	0.867
	0.790				0.913				0.800				0.907				

National Data & Surveying Services

Intersection Turning Movement Count

Location: 20th St & E Ave Q
City: Palmdale
Control: 4-Way Stop

Project ID: 21-020058-005
Date: 3/4/2021

Bikes

NS/EW Streets:	20th St				20th St				E Ave Q				E Ave Q				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%													
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	1	0	1	1	1	0	1	1	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	5
APPROACH %'s :	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	1	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	5
PEAK HR FACTOR :	0.25	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.417
	0.250				0.250				0.250								

National Data & Surveying Services
Intersection Turning Movement Count

Location: 20th St & E Ave Q
City: Palmdale

Project ID: 21-020058-00
Date: 3/4/2021

Pedestrians (Crosswalks)

NS/EW Streets:	20th St		20th St		E Ave Q		E Ave Q		
AM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
7:00 AM	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0
8:30 AM	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	0	0	0	0	0	0	1
APPROACH %'s :	100.00%	0.00%							
PEAK HR :	**07:30 AM - 08:30 AM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	0	0	0
PEAK HR FACTOR :									

PM	NORTH LEG		SOUTH LEG		EAST LEG		WEST LEG		
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
4:00 PM	0	0	3	0	0	0	0	3	6
4:15 PM	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	2
4:45 PM	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	2	0	2
5:15 PM	1	0	0	1	0	1	1	0	4
5:30 PM	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0
	EB	WB	EB	WB	NB	SB	NB	SB	TOTAL
TOTAL VOLUMES :	1	0	3	1	0	1	3	5	14
APPROACH %'s :	100.00%	0.00%	75.00%	25.00%	0.00%	100.00%	37.50%	62.50%	
PEAK HR :	**04:15 PM - 05:15 PM**								TOTAL
PEAK HR VOL :	0	0	0	0	0	0	2	2	4
PEAK HR FACTOR :							0.250	0.250	0.500
							0.500		

Prepared by National Data & Surveying Services

20th St & E Ave Q

Peak Hour Turning Movement Count

ID: 21-020058-005
City: Palmdale

Day: Thursday
Date: 03/04/2021

PEAK HOURS

AM: 07:30 AM - 08:30 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 07:00 AM - 09:00 AM
NOON: NONE
PM: 04:00 PM - 06:00 PM

20th St — SOUTHBOUND

AM	4	38	39	0	144	AM
NOON	0	0	0	0	0	NOON
PM	14	139	66	0	135	PM

EASTBOUND — E Ave Q

AM	NOON	PM		
228	0	367	⇦	
0	0	0	↶	0
10	0	9	↱	1
77	0	314	→	1
26	0	77	↷	0
AM	NOON	PM		

WESTBOUND — E Ave Q

PM	NOON	AM		
38	0	56	↰	1
289	0	183	←	1
14	0	14	↰	1
0	0	0	↶	0
405	0	126	⇨	
PM	NOON	AM		

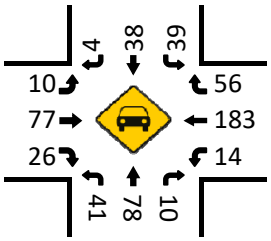
CONTROL: 4-Way Stop

TEV	576 AM	0 NOON	1137 PM
PHF	0.80		0.87

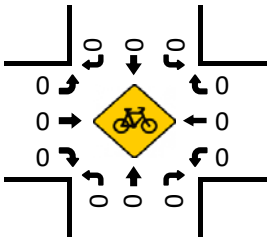
20th St — NORTHBOUND

PM	230	0	64	88	25	PM
NOON	0	0	0	0	0	NOON
AM	78	0	41	78	10	AM

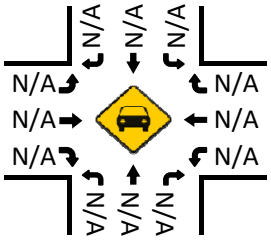
Total Vehicles (AM)



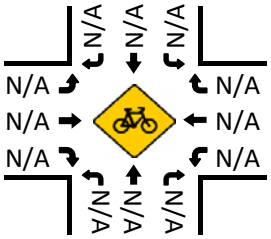
Bikes (AM)



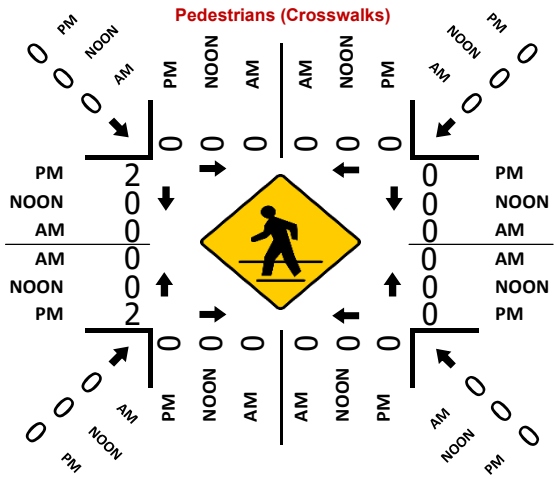
Total Vehicles (NOON)



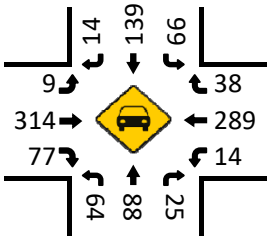
Bikes (NOON)



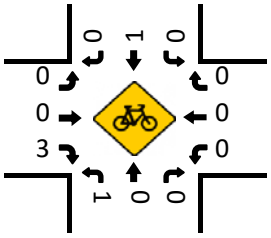
Pedestrians (Crosswalks)



Total Vehicles (PM)



Bikes (PM)



SCAG Travel Demand Model Volumes

SCAG TRAVEL DEMAND MODEL OUTPUTS - PALMDALE AVENUE Q EAST

	Daily Volumes			Growth Factor		Annual Growth Rate	
STREET	**2016**	**2030**	**2045**	**2016-2030**	**2016-2045**	**2016-2030**	**2016-2045**
Ave Q							
Sierra - 10th	10,652	14,070	15,123	1.32	1.42	2.0%	1.2%
10th - 12th	10,555	13,975	15,027	1.32	1.42	2.0%	1.2%
12th - 15th	10,556	13,974	15,028	1.32	1.42	2.0%	1.2%
15th - 20th	6,784	13,141	13,497	1.94	1.99	4.8%	2.4%
E of 20th	6,785	13,142	13,552	1.94	2.00	4.8%	2.4%
Sierra Hwy							
N of Ave Q	29,169	37,740	41,749	1.29	1.43	1.9%	1.2%
S of Ave Q	18,518	23,670	26,634	1.28	1.44	1.8%	1.3%
10th St							
N of Ave Q	561	989	1,180	1.76	2.10	4.1%	2.6%
S of Ave Q	657	1,084	1,274	1.65	1.94	3.6%	2.3%
15th St							
N of Ave Q	137	343	516	2.50	3.77	6.8%	4.7%
S of Ave Q	3,915	1,223	2,150	0.31	0.55	-8.0%	-2.0%

SCAG TRAVEL DEMAND MODEL OUTPUTS - PALMDALE AVENUE Q EAST

2016 MODEL OUTPUTS

							TOTAL		AM		PM		MID		EVE		NT	
STREET	SEGMENT	ID	DIR	LENGTH	ROAD_NAME	TOTAL	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA
Ave Q	Sierra - 10th	111265	0	0.14	E AVENUE Q	10,652	5,368	5,284	750	1,415	1,956	1,188	2,077	2,126	295	268	290	287
Ave Q	10th - 12th	111139	0	0.25	E AVENUE Q	10,555	5,319	5,236	744	1,409	1,948	1,180	2,065	2,114	290	264	272	269
Ave Q	12th - 15th	111140	0	0.26	E AVENUE Q	10,556	5,319	5,237	744	1,409	1,948	1,180	2,065	2,114	290	264	272	270
Ave Q	15th - 20th	110927	0	0.26	E AVENUE Q	6,784	3,405	3,379	360	1,043	1,410	659	1,283	1,349	182	136	170	192
Ave Q	E of 20th	110866	0	0.52	E AVENUE Q	6,785	3,406	3,379	360	1,043	1,410	659	1,283	1,349	182	136	171	192
Sierra Hwy	N of Ave Q	111553	0	0.38	SIERRA HIGHWAY	29,169	14,078	15,091	3,345	2,413	3,702	4,785	5,599	5,932	813	815	619	1,146
Sierra Hwy	S of Ave Q	111367	0	0.54	SIERRA HIGHWAY	18,518	8,798	9,720	1,930	1,662	2,518	2,830	3,472	3,852	545	520	333	856
10th St	N of Ave Q	111251	0	0.50	10TH ST E	561	244	317	70	65	28	89	126	140	5	5	15	18
10th St	S of Ave Q	111263	0	0.53	10TH ST E	657	293	364	77	70	36	97	138	152	9	9	33	36
15th St	N of Ave Q	111392	0	0.50	15TH ST E	137	70	67	33	0	0	23	28	35	3	6	6	3
15th St	S of Ave Q	111397	0	0.53	15TH ST E	3,915	1,932	1,983	398	384	521	561	794	818	133	114	86	106

2030 MODEL OUTPUTS

							TOTAL		AM		PM		MID		EVE		NT	
STREET	SEGMENT	ID	DIR	LENGTH	ROAD_NAME	TOTAL	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA
Ave Q	Sierra - 10th	111265	0	0.14	E AVENUE Q	14,070	7,973	6,097	1,114	1,461	2,278	1,400	2,909	2,209	723	561	949	466
Ave Q	10th - 12th	111139	0	0.25	E AVENUE Q	13,975	7,925	6,050	1,107	1,455	2,270	1,392	2,897	2,197	719	558	932	448
Ave Q	12th - 15th	111140	0	0.26	E AVENUE Q	13,974	7,925	6,049	1,107	1,455	2,270	1,392	2,897	2,197	719	558	932	447
Ave Q	15th - 20th	110927	0	0.26	E AVENUE Q	13,141	7,790	5,351	1,089	1,318	2,270	927	2,897	2,183	719	552	815	371
Ave Q	E of 20th	110866	0	0.52	E AVENUE Q	13,142	7,790	5,352	1,089	1,318	2,270	927	2,897	2,183	719	552	815	372
Sierra Hwy	N of Ave Q	111553	0	0.38	SIERRA HIGHWAY	37,740	16,429	21,311	3,782	3,132	4,226	6,182	6,299	8,344	1,124	1,537	998	2,116
Sierra Hwy	S of Ave Q	111367	0	0.54	SIERRA HIGHWAY	23,670	10,334	13,336	2,323	2,016	2,827	3,904	4,090	5,436	561	813	533	1,167
10th St	N of Ave Q	111251	0	0.50	10TH ST E	989	614	375	107	88	352	95	119	161	15	16	21	15
10th St	S of Ave Q	111263	0	0.53	10TH ST E	1,084	662	422	113	94	360	103	131	173	19	19	39	33
15th St	N of Ave Q	111392	0	0.50	15TH ST E	343	121	222	34	0	34	214	48	3	3	3	2	2
15th St	S of Ave Q	111397	0	0.53	15TH ST E	1,223	845	378	195	41	498	214	62	2	9	3	81	118

2045 MODEL OUTPUTS

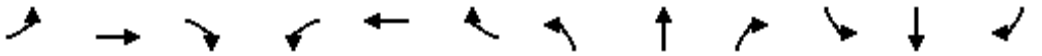
							TOTAL		AM		PM		MID		EVE		NT	
STREET	SEGMENT	ID	DIR	LENGTH	ROAD_NAME	TOTAL	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA	AB	BA
Ave Q	Sierra - 10th	111265	0	0.14	E AVENUE Q	15,123	8,421	6,702	1,199	1,650	2,370	1,526	3,051	2,423	743	546	1,058	557
Ave Q	10th - 12th	111139	0	0.25	E AVENUE Q	15,027	8,373	6,654	1,193	1,644	2,362	1,518	3,039	2,411	739	542	1,040	539
Ave Q	12th - 15th	111140	0	0.26	E AVENUE Q	15,028	8,373	6,655	1,193	1,644	2,362	1,518	3,039	2,411	739	542	1,040	540
Ave Q	15th - 20th	110927	0	0.26	E AVENUE Q	13,497	8,106	5,391	1,078	1,472	2,362	855	3,039	2,097	739	515	888	452
Ave Q	E of 20th	110866	0	0.52	E AVENUE Q	13,552	8,107	5,445	1,078	1,507	2,362	876	3,039	2,097	739	514	889	451
Sierra Hwy	N of Ave Q	111553	0	0.38	SIERRA HIGHWAY	41,749	18,503	23,246	4,159	3,396	4,664	6,582	7,195	9,098	1,184	1,803	1,301	2,367
Sierra Hwy	S of Ave Q	111367	0	0.54	SIERRA HIGHWAY	26,634	11,806	14,828	2,510	2,200	3,140	4,214	4,773	6,046	637	1,058	746	1,310
10th St	N of Ave Q	111251	0	0.50	10TH ST E	1,180	694	486	101	108	376	115	159	199	27	25	31	39
10th St	S of Ave Q	111263	0	0.53	10TH ST E	1,274	742	532	107	114	384	123	171	210	31	29	49	56
15th St	N of Ave Q	111392	0	0.50	15TH ST E	516	190	326	87	0	42	290	53	28	3	3	5	5
15th St	S of Ave Q	111397	0	0.53	15TH ST E	2,150	1,507	643	310	165	706	290	367	28	32	3	92	157

Traffic Analysis Reports (Synchro)



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	41	217	291	37	93	262
Future Volume (vph)	41	217	291	37	93	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	0.99	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1575	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1575	3539	1583	1770	3539
Peak-hour factor, PHF	0.68	0.68	0.86	0.86	0.86	0.86
Adj. Flow (vph)	60	319	338	43	108	305
RTOR Reduction (vph)	0	219	0	27	0	0
Lane Group Flow (vph)	60	100	338	16	108	305
Confl. Peds. (#/hr)		1				
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	6	7	8	6	7	4
Permitted Phases		6		8		
Actuated Green, G (s)	5.7	14.3	11.4	17.1	8.6	11.4
Effective Green, g (s)	5.7	14.3	11.4	17.1	8.6	11.4
Actuated g/C Ratio	0.12	0.31	0.25	0.37	0.18	0.25
Clearance Time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	216	721	867	582	327	867
v/s Ratio Prot	c0.03	0.03	c0.10	0.00	c0.06	0.09
v/s Ratio Perm		0.04		0.01		
v/c Ratio	0.28	0.14	0.39	0.03	0.33	0.35
Uniform Delay, d1	18.5	11.6	14.6	9.4	16.5	14.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.1	0.3	0.0	0.6	0.2
Delay (s)	19.2	11.7	14.9	9.4	17.0	14.7
Level of Service	B	B	B	A	B	B
Approach Delay (s)	12.9		14.3			15.3
Approach LOS	B		B			B

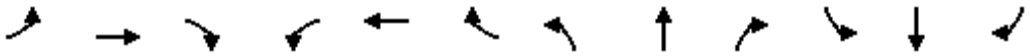
Intersection Summary			
HCM 2000 Control Delay	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	20.8
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	100	21	16	206	46	31	67	17	6	42	1
Future Volume (vph)	10	100	21	16	206	46	31	67	17	6	42	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.5		7.0	6.5	6.5	7.0	7.3	7.3	7.0	7.3	7.3
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1814		1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1814		1770	1863	1583	1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.68	0.68	0.68	0.73	0.73	0.73	0.74	0.74	0.74	0.82	0.82	0.82
Adj. Flow (vph)	15	147	31	22	282	63	42	91	23	7	51	1
RTOR Reduction (vph)	0	6	0	0	0	33	0	0	16	0	0	1
Lane Group Flow (vph)	15	172	0	22	282	30	42	91	7	7	51	0
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA	pt+ov	Prot	NA	pt+ov
Protected Phases	5	2		1	6	6 7	3	8	8 1	7	4	4 5
Permitted Phases												
Actuated Green, G (s)	2.9	20.4		2.9	20.4	29.8	2.9	8.2	18.4	2.9	8.2	18.4
Effective Green, g (s)	2.9	20.4		2.9	20.4	29.8	2.9	8.2	18.4	2.9	8.2	18.4
Actuated g/C Ratio	0.05	0.33		0.05	0.33	0.48	0.05	0.13	0.30	0.05	0.13	0.30
Clearance Time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	82	594		82	611	758	82	245	468	82	245	468
v/s Ratio Prot	0.01	0.09		c0.01	c0.15	0.02	c0.02	c0.05	0.00	0.00	0.03	0.00
v/s Ratio Perm												
v/c Ratio	0.18	0.29		0.27	0.46	0.04	0.51	0.37	0.01	0.09	0.21	0.00
Uniform Delay, d1	28.5	15.5		28.6	16.6	8.6	29.0	24.6	15.5	28.4	24.1	15.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	0.3		1.8	0.6	0.0	5.3	1.0	0.0	0.5	0.4	0.0
Delay (s)	29.6	15.8		30.4	17.1	8.6	34.3	25.6	15.5	28.8	24.5	15.4
Level of Service	C	B		C	B	A	C	C	B	C	C	B
Approach Delay (s)		16.9			16.4			26.4			24.9	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	62.2	Sum of lost time (s)	27.8
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

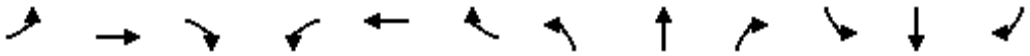
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	0	111	21	3	209	6	26	32	11	11	26	1
Future Volume (vph)	0	111	21	3	209	6	26	32	11	11	26	1
Peak Hour Factor	0.72	0.72	0.72	0.68	0.68	0.68	0.81	0.81	0.81	0.79	0.79	0.79
Hourly flow rate (vph)	0	154	29	4	307	9	32	40	14	14	33	1

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	154	29	320	86	48
Volume Left (vph)	0	0	4	32	14
Volume Right (vph)	0	29	9	14	1
Hadj (s)	0.03	-0.57	0.02	0.01	0.08
Departure Headway (s)	4.7	3.2	4.5	5.1	5.2
Degree Utilization, x	0.20	0.03	0.40	0.12	0.07
Capacity (veh/h)	739	1121	781	643	618
Control Delay (s)	8.8	6.3	10.4	8.8	8.6
Approach Delay (s)	8.4		10.4	8.8	8.6
Approach LOS	A		B	A	A

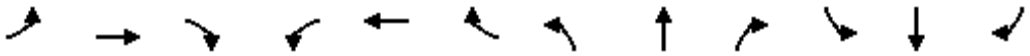
Intersection Summary				
Delay	9.5			
Level of Service	A			
Intersection Capacity Utilization	29.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	120	11	1	242	0	19	0	10	0	0	0
Future Volume (Veh/h)	0	120	11	1	242	0	19	0	10	0	0	0
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.73	0.73	0.73	0.79	0.79	0.79	0.60	0.60	0.60	0.25	0.25	0.25
Hourly flow rate (vph)	0	164	15	1	306	0	32	0	17	0	0	0
Pedestrians								2				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								0				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	306			181			482	482	174	496	489	306
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	306			181			482	482	174	496	489	306
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			94	100	98	100	100	100
cM capacity (veh/h)	1255			1392			493	483	868	473	478	734

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	179	307	49	0
Volume Left	0	1	32	0
Volume Right	15	0	17	0
cSH	1255	1392	580	1700
Volume to Capacity	0.00	0.00	0.08	0.00
Queue Length 95th (ft)	0	0	7	0
Control Delay (s)	0.0	0.0	11.8	0.0
Lane LOS		A	B	A
Approach Delay (s)	0.0	0.0	11.8	0.0
Approach LOS			B	A

Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	23.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	10	77	26	14	183	56	41	78	10	39	38	4
Future Volume (vph)	10	77	26	14	183	56	41	78	10	39	38	4
Peak Hour Factor	0.64	0.64	0.64	0.80	0.80	0.80	0.77	0.77	0.77	0.81	0.81	0.81
Hourly flow rate (vph)	16	120	41	18	229	70	53	101	13	48	47	5

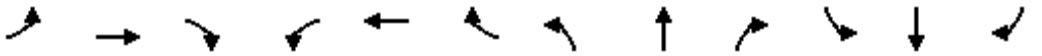
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total (vph)	16	161	18	299	53	101	13	48	52
Volume Left (vph)	16	0	18	0	53	0	0	48	0
Volume Right (vph)	0	41	0	70	0	0	13	0	5
Hadj (s)	0.53	-0.14	0.53	-0.13	0.53	0.03	-0.67	0.53	-0.03
Departure Headway (s)	6.1	5.4	6.0	5.3	6.4	5.9	3.2	6.5	6.0
Degree Utilization, x	0.03	0.24	0.03	0.44	0.09	0.17	0.01	0.09	0.09
Capacity (veh/h)	555	632	576	656	523	565	1121	513	558
Control Delay (s)	8.1	9.0	8.0	11.2	8.9	8.9	5.0	8.9	8.3
Approach Delay (s)	8.9		11.0		8.6			8.6	
Approach LOS	A		B		A			A	

Intersection Summary				
Delay	9.7			
Level of Service	A			
Intersection Capacity Utilization	28.6%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	82	414	418	49	369	634
Future Volume (vph)	82	414	418	49	369	634
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1578	3539	1559	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1578	3539	1559	1770	3539
Peak-hour factor, PHF	0.82	0.82	0.87	0.87	0.90	0.90
Adj. Flow (vph)	100	505	480	56	410	704
RTOR Reduction (vph)	0	104	0	34	0	0
Lane Group Flow (vph)	100	401	480	22	410	704
Confl. Peds. (#/hr)		3		1	1	
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	6	7	8	6	7	4
Permitted Phases		6		8		
Actuated Green, G (s)	8.0	31.9	21.3	29.3	23.9	21.3
Effective Green, g (s)	8.0	31.9	21.3	29.3	23.9	21.3
Actuated g/C Ratio	0.11	0.43	0.29	0.40	0.32	0.29
Clearance Time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	191	829	1018	617	571	1018
v/s Ratio Prot	0.06	c0.16	0.14	0.00	c0.23	c0.20
v/s Ratio Perm		0.10		0.01		
v/c Ratio	0.52	0.48	0.47	0.04	0.72	0.69
Uniform Delay, d1	31.2	15.1	21.7	13.7	22.1	23.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.4	0.3	0.0	4.3	2.0
Delay (s)	33.8	15.6	22.1	13.7	26.4	25.5
Level of Service	C	B	C	B	C	C
Approach Delay (s)	18.6		21.2			25.8
Approach LOS	B		C			C

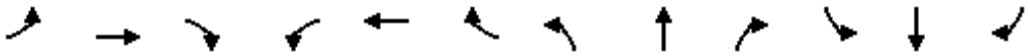
Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	20.8
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	383	58	25	395	21	73	40	35	32	68	25
Future Volume (vph)	7	383	58	25	395	21	73	40	35	32	68	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.5		7.0	6.5	6.5	7.0	7.3	7.3	7.0	7.3	7.3
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1820		1770	1863	1583	1770	1863	1583	1770	1863	1583
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1820		1770	1863	1583	1770	1863	1583	1770	1863	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.69	0.69	0.69	0.63	0.63	0.63
Adj. Flow (vph)	8	421	64	27	434	23	106	58	51	51	108	40
RTOR Reduction (vph)	0	4	0	0	0	10	0	0	38	0	0	30
Lane Group Flow (vph)	8	481	0	27	434	13	106	58	13	51	108	10
Confl. Peds. (#/hr)			3	3					1	1		
Confl. Bikes (#/hr)									1			1
Turn Type	Prot	NA		Prot	NA	pt+ov	Prot	NA	pt+ov	Prot	NA	pt+ov
Protected Phases	5	2		1	6	6 7	3	8	8 1	7	4	4 5
Permitted Phases												
Actuated Green, G (s)	4.6	30.9		4.6	30.9	43.5	6.1	8.4	20.3	6.1	8.4	20.3
Effective Green, g (s)	4.6	30.9		4.6	30.9	43.5	6.1	8.4	20.3	6.1	8.4	20.3
Actuated g/C Ratio	0.06	0.40		0.06	0.40	0.56	0.08	0.11	0.26	0.08	0.11	0.26
Clearance Time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	104	722		104	739	885	138	201	413	138	201	413
v/s Ratio Prot	0.00	c0.26		c0.02	0.23	0.01	c0.06	0.03	0.01	0.03	c0.06	0.01
v/s Ratio Perm												
v/c Ratio	0.08	0.67		0.26	0.59	0.01	0.77	0.29	0.03	0.37	0.54	0.03
Uniform Delay, d1	34.6	19.2		35.0	18.4	7.6	35.2	31.9	21.4	34.0	32.9	21.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	2.3		1.3	1.2	0.0	22.2	0.8	0.0	1.7	2.8	0.0
Delay (s)	34.9	21.5		36.3	19.6	7.6	57.4	32.7	21.5	35.7	35.6	21.4
Level of Service	C	C		D	B	A	E	C	C	D	D	C
Approach Delay (s)		21.8			20.0			42.2			32.8	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	77.8	Sum of lost time (s)	27.8
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		

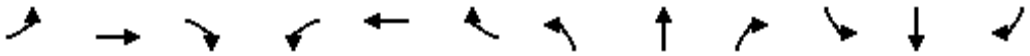
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	3	368	46	12	357	5	44	32	24	19	46	12
Future Volume (vph)	3	368	46	12	357	5	44	32	24	19	46	12
Peak Hour Factor	0.85	0.85	0.85	0.89	0.89	0.89	0.83	0.83	0.83	0.80	0.80	0.80
Hourly flow rate (vph)	4	433	54	13	401	6	53	39	29	24	58	15

Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1
Volume Total (vph)	437	54	420	121	97
Volume Left (vph)	4	0	13	53	24
Volume Right (vph)	0	54	6	29	15
Hadj (s)	0.04	-0.57	0.03	-0.02	-0.01
Departure Headway (s)	5.3	3.2	5.3	6.3	6.4
Degree Utilization, x	0.64	0.05	0.62	0.21	0.17
Capacity (veh/h)	653	1121	648	482	461
Control Delay (s)	17.3	6.4	16.5	11.1	10.8
Approach Delay (s)	16.1		16.5	11.1	10.8
Approach LOS	C		C	B	B

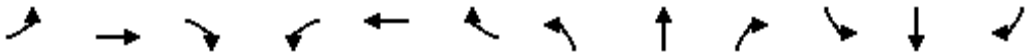
Intersection Summary				
Delay	15.2			
Level of Service	C			
Intersection Capacity Utilization	45.2%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	385	29	20	393	0	30	0	18	0	0	2
Future Volume (Veh/h)	0	385	29	20	393	0	30	0	18	0	0	2
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.88	0.88	0.88	0.86	0.86	0.86	0.25	0.25	0.25
Hourly flow rate (vph)	0	397	30	23	447	0	35	0	21	0	0	8
Pedestrians								1				
Lane Width (ft)								12.0				
Walking Speed (ft/s)								3.5				
Percent Blockage								0				
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	447			428			914	906	413	926	921	447
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	447			428			914	906	413	926	921	447
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			98			86	100	97	100	100	99
cM capacity (veh/h)	1113			1130			246	270	638	237	265	612

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	427	470	56	8
Volume Left	0	23	35	0
Volume Right	30	0	21	8
cSH	1113	1130	320	612
Volume to Capacity	0.00	0.02	0.18	0.01
Queue Length 95th (ft)	0	2	16	1
Control Delay (s)	0.0	0.6	18.6	11.0
Lane LOS		A	C	B
Approach Delay (s)	0.0	0.6	18.6	11.0
Approach LOS			C	B

Intersection Summary				
Average Delay	1.5			
Intersection Capacity Utilization	53.1%	ICU Level of Service	A	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	9	314	77	14	289	38	64	88	25	66	139	14
Future Volume (vph)	9	314	77	14	289	38	64	88	25	66	139	14
Peak Hour Factor	0.80	0.80	0.80	0.91	0.91	0.91	0.79	0.79	0.79	0.91	0.91	0.91
Hourly flow rate (vph)	11	393	96	15	318	42	81	111	32	73	153	15

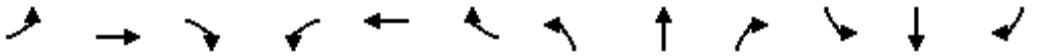
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total (vph)	11	489	15	360	81	111	32	73	168
Volume Left (vph)	11	0	15	0	81	0	0	73	0
Volume Right (vph)	0	96	0	42	0	0	32	0	15
Hadj (s)	0.53	-0.10	0.53	-0.05	0.53	0.03	-0.67	0.53	-0.03
Departure Headway (s)	7.2	6.5	7.4	6.8	8.2	7.7	3.2	8.1	7.5
Degree Utilization, x	0.02	0.89	0.03	0.68	0.18	0.24	0.03	0.16	0.35
Capacity (veh/h)	481	543	466	510	415	440	1121	423	454
Control Delay (s)	9.1	39.9	9.4	21.7	11.8	11.8	5.1	11.4	13.3
Approach Delay (s)	39.2		21.2		10.9			12.7	
Approach LOS	E		C		B			B	

Intersection Summary				
Delay	24.7			
Level of Service	C			
Intersection Capacity Utilization	43.6%	ICU Level of Service		A
Analysis Period (min)	15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	60	310	420	55	135	375
Future Volume (vph)	60	310	420	55	135	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1577	3539	1583	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1577	3539	1583	1770	3539
Peak-hour factor, PHF	0.68	0.68	0.86	0.86	0.86	0.86
Adj. Flow (vph)	88	456	488	64	157	436
RTOR Reduction (vph)	0	52	0	40	0	0
Lane Group Flow (vph)	88	404	488	24	157	436
Confl. Peds. (#/hr)		1				
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	6	7	8	6	7	4
Permitted Phases		6		8		
Actuated Green, G (s)	6.8	20.7	14.3	21.1	13.9	14.3
Effective Green, g (s)	6.8	20.7	14.3	21.1	13.9	14.3
Actuated g/C Ratio	0.12	0.37	0.26	0.38	0.25	0.26
Clearance Time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	215	782	906	598	440	906
v/s Ratio Prot	0.05	c0.13	c0.14	0.00	0.09	0.12
v/s Ratio Perm		0.13		0.01		
v/c Ratio	0.41	0.52	0.54	0.04	0.36	0.48
Uniform Delay, d1	22.6	13.7	17.9	11.0	17.3	17.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.3	0.6	0.6	0.0	0.5	0.4
Delay (s)	23.9	14.2	18.5	11.0	17.8	18.0
Level of Service	C	B	B	B	B	B
Approach Delay (s)	15.8		17.6			17.9
Approach LOS	B		B			B

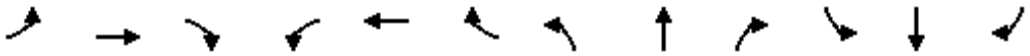
Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	55.8	Sum of lost time (s)	20.8
Intersection Capacity Utilization	42.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	140	30	25	295	65	60	130	45	25	90	15
Future Volume (vph)	20	140	30	25	295	65	60	130	45	25	90	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.97		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3446		1770	3443		1770	1791		1770	1823	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3446		1770	3443		1770	1791		1770	1823	
Peak-hour factor, PHF	0.68	0.68	0.68	0.73	0.73	0.73	0.74	0.74	0.74	0.82	0.82	0.82
Adj. Flow (vph)	29	206	44	34	404	89	81	176	61	30	110	18
RTOR Reduction (vph)	0	16	0	0	17	0	0	15	0	0	7	0
Lane Group Flow (vph)	29	234	0	34	476	0	81	222	0	30	121	0
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	1.9	15.1		1.9	15.1		6.3	14.4		6.3	14.4	
Effective Green, g (s)	1.9	15.1		1.9	15.1		6.3	14.4		6.3	14.4	
Actuated g/C Ratio	0.03	0.23		0.03	0.23		0.10	0.22		0.10	0.22	
Clearance Time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	51	794		51	793		170	393		170	400	
v/s Ratio Prot	0.02	0.07		c0.02	c0.14		c0.05	c0.12		0.02	0.07	
v/s Ratio Perm												
v/c Ratio	0.57	0.29		0.67	0.60		0.48	0.57		0.18	0.30	
Uniform Delay, d1	31.4	20.8		31.5	22.5		28.0	22.8		27.2	21.4	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	13.7	0.2		28.3	1.3		2.1	1.9		0.5	0.4	
Delay (s)	45.1	21.0		59.8	23.8		30.1	24.6		27.7	21.8	
Level of Service	D	C		E	C		C	C		C	C	
Approach Delay (s)		23.5			26.1			26.0			22.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	25.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	65.5	Sum of lost time (s)	27.8
Intersection Capacity Utilization	52.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

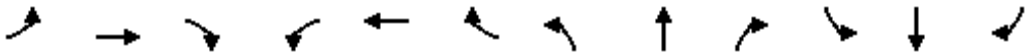


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	160	30	15	315	15	40	30	25	30	30	10
Future Volume (vph)	5	160	30	15	315	15	40	30	25	30	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.93		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1812		1767	1850		1770	1735		1770	1792	
Flt Permitted	0.44	1.00		0.60	1.00		0.72	1.00		0.71	1.00	
Satd. Flow (perm)	818	1812		1109	1850		1348	1735		1328	1792	
Peak-hour factor, PHF	0.72	0.72	0.72	0.68	0.68	0.68	0.81	0.81	0.81	0.79	0.79	0.79
Adj. Flow (vph)	7	222	42	22	463	22	49	37	31	38	38	13
RTOR Reduction (vph)	0	10	0	0	3	0	0	24	0	0	10	0
Lane Group Flow (vph)	7	254	0	22	482	0	49	44	0	38	41	0
Confl. Peds. (#/hr)			3	3								
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.6	13.6		13.6	13.6		6.8	6.8		6.8	6.8	
Effective Green, g (s)	13.6	13.6		13.6	13.6		6.8	6.8		6.8	6.8	
Actuated g/C Ratio	0.46	0.46		0.46	0.46		0.23	0.23		0.23	0.23	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	378	838		513	855		311	401		307	414	
v/s Ratio Prot		0.14			c0.26			0.03			0.02	
v/s Ratio Perm	0.01			0.02			c0.04			0.03		
v/c Ratio	0.02	0.30		0.04	0.56		0.16	0.11		0.12	0.10	
Uniform Delay, d1	4.3	4.9		4.3	5.7		9.0	8.9		8.9	8.9	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.0	0.2		0.0	0.9		0.2	0.1		0.2	0.1	
Delay (s)	4.3	5.1		4.4	6.6		9.3	9.0		9.1	9.0	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		5.1			6.5			9.1			9.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	29.4	Sum of lost time (s)	9.0
Intersection Capacity Utilization	33.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	170	15	10	345	10	25	30	10	15	25	15
Future Volume (vph)	25	170	15	10	345	10	25	30	10	15	25	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.96		1.00	0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1549	1767	1855		1770	1792		1770	1758	
Flt Permitted	0.45	1.00	1.00	0.61	1.00		0.66	1.00		0.71	1.00	
Satd. Flow (perm)	845	1863	1549	1141	1855		1221	1792		1329	1758	
Peak-hour factor, PHF	0.73	0.73	0.73	0.79	0.79	0.79	0.60	0.60	0.60	0.25	0.25	0.25
Adj. Flow (vph)	34	233	21	13	437	13	42	50	17	60	100	60
RTOR Reduction (vph)	0	0	12	0	1	0	0	12	0	0	23	0
Lane Group Flow (vph)	34	233	9	13	449	0	42	55	0	60	137	0
Confl. Peds. (#/hr)			2	2								
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	13.6	13.6	13.6	13.6	13.6		8.5	8.5		8.5	8.5	
Effective Green, g (s)	13.6	13.6	13.6	13.6	13.6		8.5	8.5		8.5	8.5	
Actuated g/C Ratio	0.44	0.44	0.44	0.44	0.44		0.27	0.27		0.27	0.27	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	369	814	677	498	811		333	489		363	480	
v/s Ratio Prot		0.13			c0.24			0.03			c0.08	
v/s Ratio Perm	0.04		0.01	0.01			0.03			0.05		
v/c Ratio	0.09	0.29	0.01	0.03	0.55		0.13	0.11		0.17	0.29	
Uniform Delay, d1	5.1	5.6	5.0	5.0	6.5		8.5	8.5		8.6	8.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.2	0.0	0.0	0.8		0.2	0.1		0.2	0.3	
Delay (s)	5.2	5.8	5.0	5.0	7.3		8.7	8.6		8.8	9.2	
Level of Service	A	A	A	A	A		A	A		A	A	
Approach Delay (s)		5.7			7.3			8.6			9.1	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	31.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	36.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	140	50	20	280	80	50	80	10	40	40	15
Future Volume (vph)	25	140	50	20	280	80	50	80	10	40	40	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.97		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1789		1770	1801		1770	1832		1770	1785	
Flt Permitted	0.46	1.00		0.58	1.00		0.71	1.00		0.68	1.00	
Satd. Flow (perm)	862	1789		1078	1801		1328	1832		1270	1785	
Peak-hour factor, PHF	0.64	0.64	0.64	0.80	0.80	0.80	0.77	0.77	0.77	0.81	0.81	0.81
Adj. Flow (vph)	39	219	78	25	350	100	65	104	13	49	49	19
RTOR Reduction (vph)	0	18	0	0	14	0	0	4	0	0	13	0
Lane Group Flow (vph)	39	279	0	25	436	0	65	113	0	49	55	0
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	13.4	13.4		13.4	13.4		7.7	7.7		7.7	7.7	
Effective Green, g (s)	13.4	13.4		13.4	13.4		7.7	7.7		7.7	7.7	
Actuated g/C Ratio	0.45	0.45		0.45	0.45		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	383	796		479	801		339	468		324	456	
v/s Ratio Prot		0.16			c0.24			c0.06			0.03	
v/s Ratio Perm	0.05			0.02			0.05			0.04		
v/c Ratio	0.10	0.35		0.05	0.54		0.19	0.24		0.15	0.12	
Uniform Delay, d1	4.9	5.5		4.7	6.1		8.8	8.9		8.7	8.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	0.3		0.0	0.8		0.3	0.3		0.2	0.1	
Delay (s)	5.0	5.8		4.8	6.9		9.0	9.1		8.9	8.7	
Level of Service	A	A		A	A		A	A		A	A	
Approach Delay (s)		5.7			6.8			9.1			8.8	
Approach LOS		A			A			A			A	

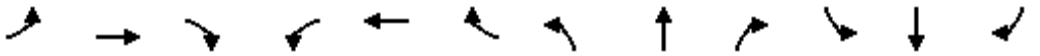
Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	30.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	165	590	600	100	540	905
Future Volume (vph)	165	590	600	100	540	905
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frpb, ped/bikes	1.00	0.99	1.00	0.99	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1575	3539	1570	1770	3539
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1575	3539	1570	1770	3539
Peak-hour factor, PHF	0.82	0.82	0.87	0.87	0.90	0.90
Adj. Flow (vph)	201	720	690	115	600	1006
RTOR Reduction (vph)	0	16	0	50	0	0
Lane Group Flow (vph)	201	704	690	65	600	1006
Confl. Peds. (#/hr)		3		1	1	
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	6	7	8	6	7	4
Permitted Phases		6		8		
Actuated Green, G (s)	16.6	51.3	28.7	45.3	34.7	28.7
Effective Green, g (s)	16.6	51.3	28.7	45.3	34.7	28.7
Actuated g/C Ratio	0.16	0.51	0.28	0.45	0.34	0.28
Clearance Time (s)	7.0	7.0	6.8	7.0	7.0	6.8
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	291	910	1007	705	609	1007
v/s Ratio Prot	0.11	c0.27	0.19	0.02	c0.34	c0.28
v/s Ratio Perm		0.18		0.03		
v/c Ratio	0.69	0.77	0.69	0.09	0.99	1.00
Uniform Delay, d1	39.7	20.1	32.0	15.9	32.8	36.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.9	4.2	1.9	0.1	32.4	27.9
Delay (s)	46.6	24.2	34.0	16.0	65.2	63.9
Level of Service	D	C	C	B	E	E
Approach Delay (s)	29.1		31.4			64.4
Approach LOS	C		C			E

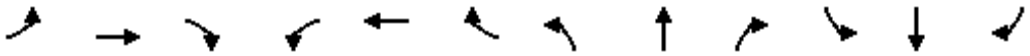
Intersection Summary			
HCM 2000 Control Delay	46.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	100.8	Sum of lost time (s)	20.8
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	545	80	35	560	30	140	80	70	65	145	55
Future Volume (vph)	15	545	80	35	560	30	140	80	70	65	145	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.93		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3460		1770	3512		1770	1722		1770	1780	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3460		1770	3512		1770	1722		1770	1780	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.69	0.69	0.69	0.63	0.63	0.63
Adj. Flow (vph)	16	599	88	38	615	33	203	116	101	103	230	87
RTOR Reduction (vph)	0	10	0	0	4	0	0	32	0	0	14	0
Lane Group Flow (vph)	16	677	0	38	644	0	203	185	0	103	303	0
Confl. Peds. (#/hr)			3	3					1	1		
Confl. Bikes (#/hr)									1			1
Turn Type	Prot	NA		Prot	NA		Prot	NA		Prot	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases												
Actuated Green, G (s)	3.1	22.3		3.1	22.3		13.6	20.0		13.6	20.0	
Effective Green, g (s)	3.1	22.3		3.1	22.3		13.6	20.0		13.6	20.0	
Actuated g/C Ratio	0.04	0.26		0.04	0.26		0.16	0.23		0.16	0.23	
Clearance Time (s)	7.0	6.5		7.0	6.5		7.0	7.3		7.0	7.3	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	63	888		63	902		277	396		277	410	
v/s Ratio Prot	0.01	c0.20		c0.02	0.18		c0.11	0.11		0.06	c0.17	
v/s Ratio Perm												
v/c Ratio	0.25	0.76		0.60	0.71		0.73	0.47		0.37	0.74	
Uniform Delay, d1	40.7	29.8		41.2	29.4		34.9	28.8		32.8	31.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.1	3.9		15.2	2.7		9.6	0.9		0.8	6.8	
Delay (s)	42.9	33.7		56.5	32.1		44.5	29.7		33.6	37.8	
Level of Service	D	C		E	C		D	C		C	D	
Approach Delay (s)		33.9			33.4			36.8			36.8	
Approach LOS		C			C			D			D	

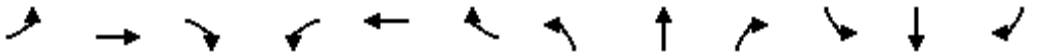
Intersection Summary			
HCM 2000 Control Delay	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	86.8	Sum of lost time (s)	27.8
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	500	85	15	575	10	45	35	35	35	50	15
Future Volume (vph)	15	500	85	15	575	10	45	35	35	35	50	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	1.00		1.00	0.93		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1816		1770	1857		1770	1723		1770	1798	
Flt Permitted	0.31	1.00		0.29	1.00		0.70	1.00		0.70	1.00	
Satd. Flow (perm)	583	1816		540	1857		1311	1723		1308	1798	
Peak-hour factor, PHF	0.85	0.85	0.85	0.89	0.89	0.89	0.83	0.83	0.83	0.80	0.80	0.80
Adj. Flow (vph)	18	588	100	17	646	11	54	42	42	44	62	19
RTOR Reduction (vph)	0	8	0	0	1	0	0	33	0	0	10	0
Lane Group Flow (vph)	18	680	0	17	656	0	54	51	0	44	72	0
Confl. Bikes (#/hr)			3			1						
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	20.5	20.5		20.5	20.5		7.6	7.6		7.6	7.6	
Effective Green, g (s)	20.5	20.5		20.5	20.5		7.6	7.6		7.6	7.6	
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.20	0.20		0.20	0.20	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	322	1003		298	1026		268	352		267	368	
v/s Ratio Prot		c0.37			0.35			0.03			0.04	
v/s Ratio Perm	0.03			0.03			c0.04			0.03		
v/c Ratio	0.06	0.68		0.06	0.64		0.20	0.14		0.16	0.19	
Uniform Delay, d1	3.8	5.9		3.8	5.7		12.2	12.1		12.1	12.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.8		0.1	1.3		0.4	0.2		0.3	0.3	
Delay (s)	3.9	7.8		3.9	7.1		12.6	12.3		12.4	12.5	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		7.7			7.0			12.4			12.5	
Approach LOS		A			A			B			B	

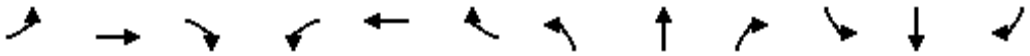
Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	37.1	Sum of lost time (s)	9.0
Intersection Capacity Utilization	48.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	565	60	45	560	30	45	45	20	15	25	20
Future Volume (vph)	55	565	60	45	560	30	45	45	20	15	25	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.95		1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1550	1769	1849		1770	1765		1770	1729	
Flt Permitted	0.29	1.00	1.00	0.36	1.00		0.64	1.00		0.71	1.00	
Satd. Flow (perm)	540	1863	1550	665	1849		1199	1765		1319	1729	
Peak-hour factor, PHF	0.97	0.97	0.97	0.88	0.88	0.88	0.86	0.86	0.86	0.25	0.25	0.25
Adj. Flow (vph)	57	582	62	51	636	34	52	52	23	60	100	80
RTOR Reduction (vph)	0	0	28	0	2	0	0	15	0	0	27	0
Lane Group Flow (vph)	57	582	34	51	668	0	52	60	0	60	153	0
Confl. Peds. (#/hr)			1	1								
Confl. Bikes (#/hr)									1			1
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	22.5	22.5	22.5	22.5	22.5		9.7	9.7		9.7	9.7	
Effective Green, g (s)	22.5	22.5	22.5	22.5	22.5		9.7	9.7		9.7	9.7	
Actuated g/C Ratio	0.55	0.55	0.55	0.55	0.55		0.24	0.24		0.24	0.24	
Clearance Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	294	1017	846	363	1009		282	415		310	407	
v/s Ratio Prot		0.31			c0.36			0.03			c0.09	
v/s Ratio Perm	0.11		0.02	0.08			0.04			0.05		
v/c Ratio	0.19	0.57	0.04	0.14	0.66		0.18	0.15		0.19	0.38	
Uniform Delay, d1	4.7	6.2	4.3	4.6	6.6		12.6	12.5		12.6	13.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.3	0.8	0.0	0.2	1.6		0.3	0.2		0.3	0.6	
Delay (s)	5.1	7.0	4.4	4.8	8.3		12.9	12.6		12.9	13.8	
Level of Service	A	A	A	A	A		B	B		B	B	
Approach Delay (s)		6.6			8.0			12.7			13.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	41.2	Sum of lost time (s)	9.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	445	110	20	475	55	90	90	25	70	140	35
Future Volume (vph)	15	445	110	20	475	55	90	90	25	70	140	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.97		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1807		1770	1830		1763	1802		1770	1798	
Flt Permitted	0.35	1.00		0.26	1.00		0.64	1.00		0.66	1.00	
Satd. Flow (perm)	648	1807		491	1830		1182	1802		1237	1798	
Peak-hour factor, PHF	0.80	0.80	0.80	0.91	0.91	0.91	0.79	0.79	0.79	0.91	0.91	0.91
Adj. Flow (vph)	19	556	138	22	522	60	114	114	32	77	154	38
RTOR Reduction (vph)	0	10	0	0	5	0	0	10	0	0	8	0
Lane Group Flow (vph)	19	684	0	22	577	0	114	136	0	77	184	0
Confl. Peds. (#/hr)							4					4
Confl. Bikes (#/hr)						4						1
Turn Type	Perm	NA		Perm	NA		Perm	NA		Perm	NA	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)	25.5	25.5		25.5	25.5		12.1	12.1		12.1	12.1	
Effective Green, g (s)	25.5	25.5		25.5	25.5		12.1	12.1		12.1	12.1	
Actuated g/C Ratio	0.55	0.55		0.55	0.55		0.26	0.26		0.26	0.26	
Clearance Time (s)	4.5	4.5		4.5	4.5		4.5	4.5		4.5	4.5	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	354	988		268	1001		306	467		321	466	
v/s Ratio Prot		c0.38			0.32			0.08			c0.10	
v/s Ratio Perm	0.03			0.04			0.10			0.06		
v/c Ratio	0.05	0.69		0.08	0.58		0.37	0.29		0.24	0.39	
Uniform Delay, d1	4.9	7.7		5.0	7.0		14.1	13.8		13.6	14.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	2.1		0.1	0.8		0.8	0.3		0.4	0.6	
Delay (s)	5.0	9.8		5.1	7.8		14.9	14.2		14.0	14.8	
Level of Service	A	A		A	A		B	B		B	B	
Approach Delay (s)		9.7			7.7			14.5			14.6	
Approach LOS		A			A			B			B	

Intersection Summary			
HCM 2000 Control Delay	10.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	46.6	Sum of lost time (s)	9.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Concept Design



0 50 100 200

SCALE IN FEET

CONCEPTUAL DESIGN
PRELIMINARY - NOT FOR CONSTRUCTION

THIS IS A PRELIMINARY DOCUMENT. ALL RESULTS, RECOMMENDATIONS, COST ESTIMATES, AND COMMENTARY CONTAINED HEREIN ARE BASED ON LIMITED AVAILABLE DATA AT THE TIME OF PREPARATION. FURTHER STUDY AND INVESTIGATION MAY BE REQUIRED PRIOR TO ADOPTING OR IMPLEMENTING ANY OF THE RECOMMENDATIONS CONTAINED HEREIN. THIS DOCUMENT IS AN INSTRUMENT OF PROFESSIONAL SERVICE. REUSE OR ALTERATION IS AT THE USER'S SOLE RISK.

REUSE OF DOCUMENTS

ALL DRAWINGS ARE INSTRUMENTS OF PROFESSIONAL SERVICE FOR THIS PROJECT. REUSE OR ALTERATION IS AT THE USER'S SOLE RISK.

DSGN						
DR						
CHK						
APVD	NO.	DATE	REVISION		BY	APVD

TOOLE DESIGN

Toole Design Inc. is affiliate of

537 W. 7TH STREET, SUITE 701
LOS ANGELES, CA 90014
PHONE: 213.257.8660
www.tooledesign.com

AVENUE Q
CITY OF PALMDALE

CONCEPTUAL

AVENUE Q
SIERRA HIGHWAY TO 20TH STREET

PROJECT NO.	02041
DATE	2/3/2022
DRAWING NO.	
SHEET NO.	1 OF 1

ACCESSED: P:\Palmdale Blvd (APPROVED)\Palmdale_PLANSHEET_FILL.DWG(APPS Plot)

PALMDALE EAST AVENUE Q COMPLETE STREETS PROJECT

FINAL | April 2022

Economic and Community Development Department
Planning Division

East Avenue Q Complete Streets Study

Palmdale City Council
August 17, 2022

Proposal



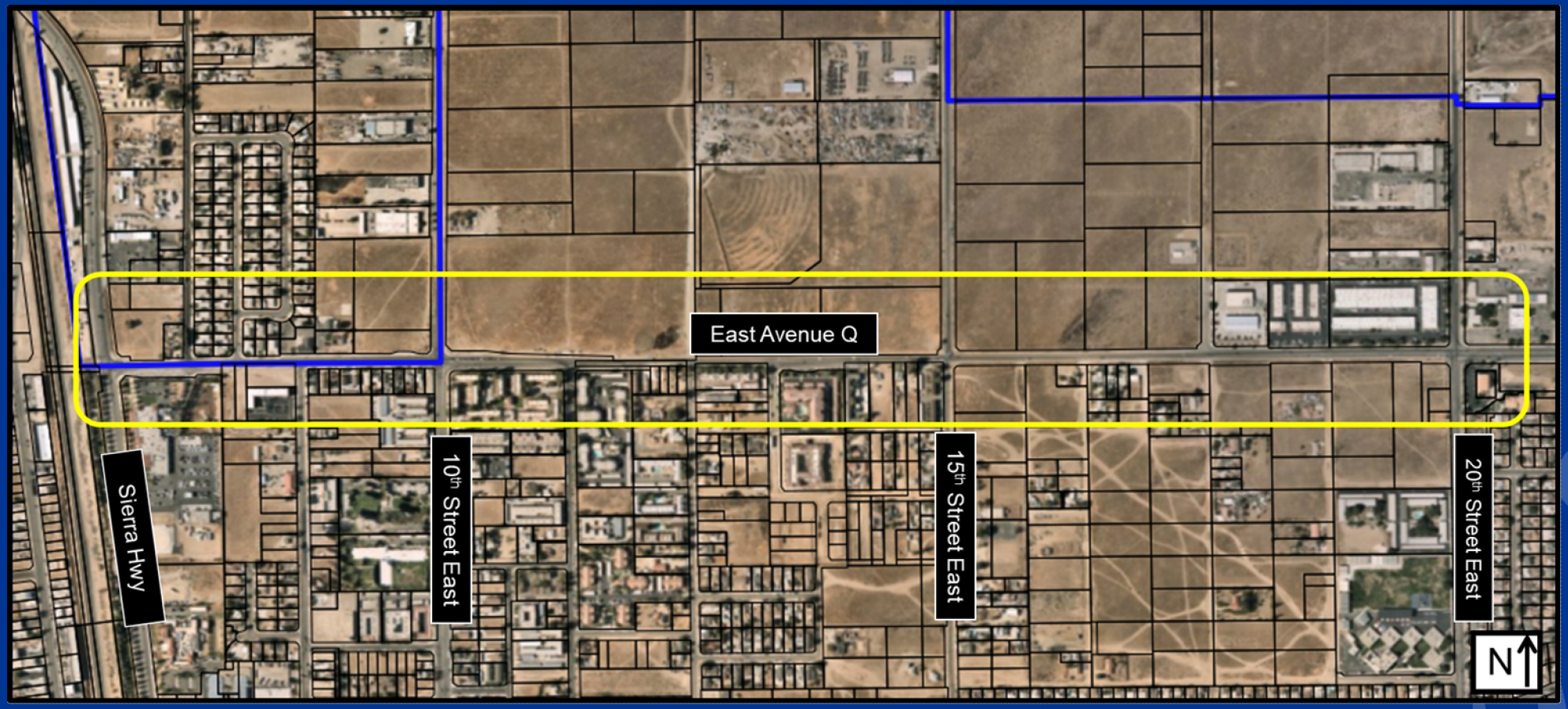
- A multimodal corridor plan for a 1.4-mile segment of East Avenue Q (from Sierra Highway to 20th Street East)
- Aims to aid in the creation of a corridor that enhances
  - Safety and connectivity to future development
  - Provides multimodal access to the future high-speed rail station
- Future development requirements align with the City's General Plan Update (Palmdale 2045)

Goals

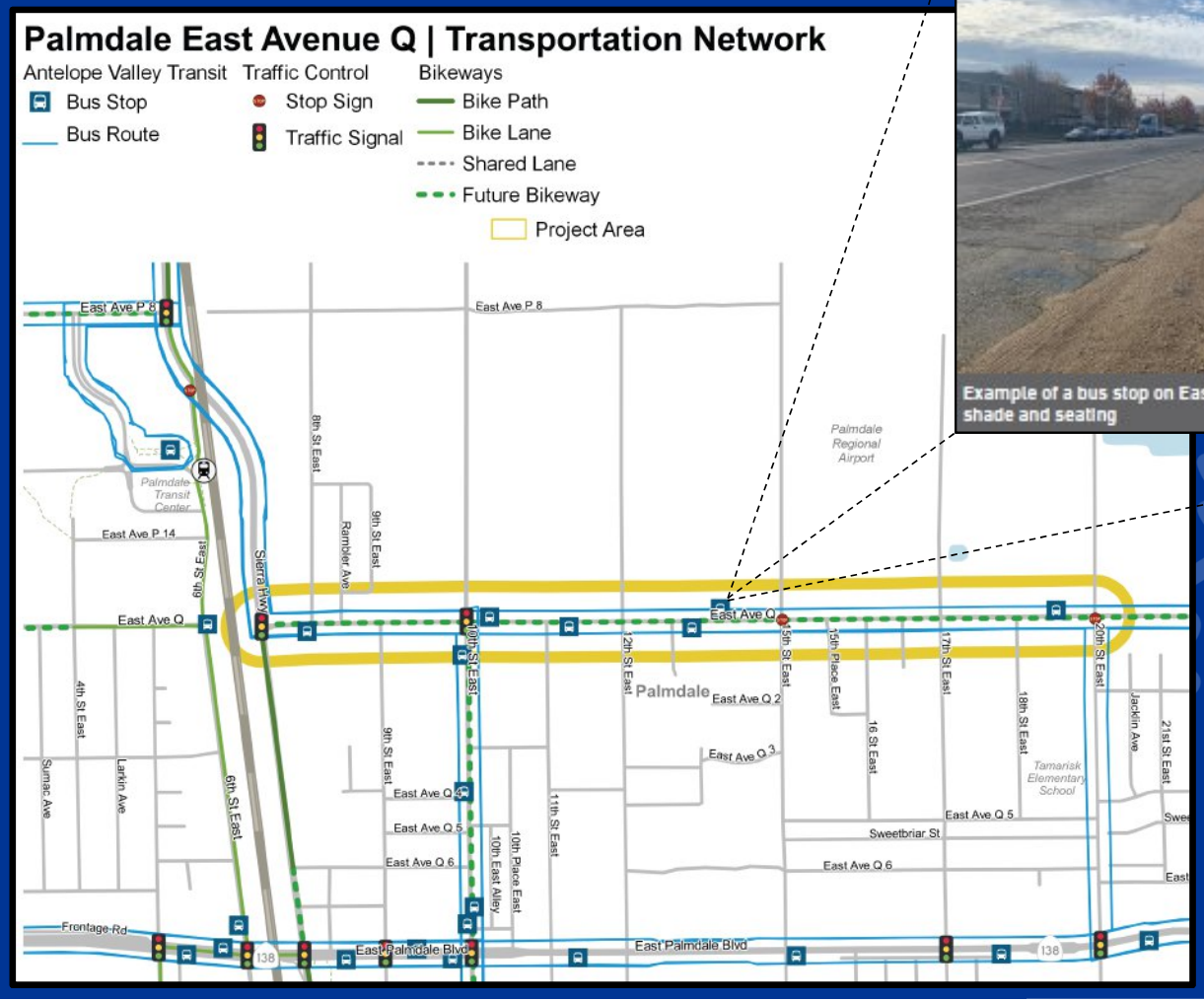
The East Avenue Q Complete Streets Study sets forth the following goals:

- Develop a multimodal corridor plan;
- Enhance pedestrian and bicycle activity and safety;
- Develop planning-level recommendations to address shade and wind;
- Provide a framework for modifying roadway geometry and sidewalk improvements that will promote walking and biking;
- Develop designs for continuous bike facilities and sidewalks; and,
- Ensure consistency with the City's General Plan Update (Palmdale 2045).

Existing Conditions



Existing Transit Facilities





Example of a bus stop on East Avenue Q that lacks amenities like shade and seating

Public Outreach

Outreach activities included:

- A survey (open from March to May 2021)
- Two virtual workshops with Q&A sessions (held in May and August 2021)
- Two in-person pop-up events (held in August of 2021)
- One youth focus group (held in August 2021)

A Technical Working Group consisting of 18 members representing local and regional organizations, LA County staff, and City of Palmdale staff met 3 times in 2021

Community Feedback

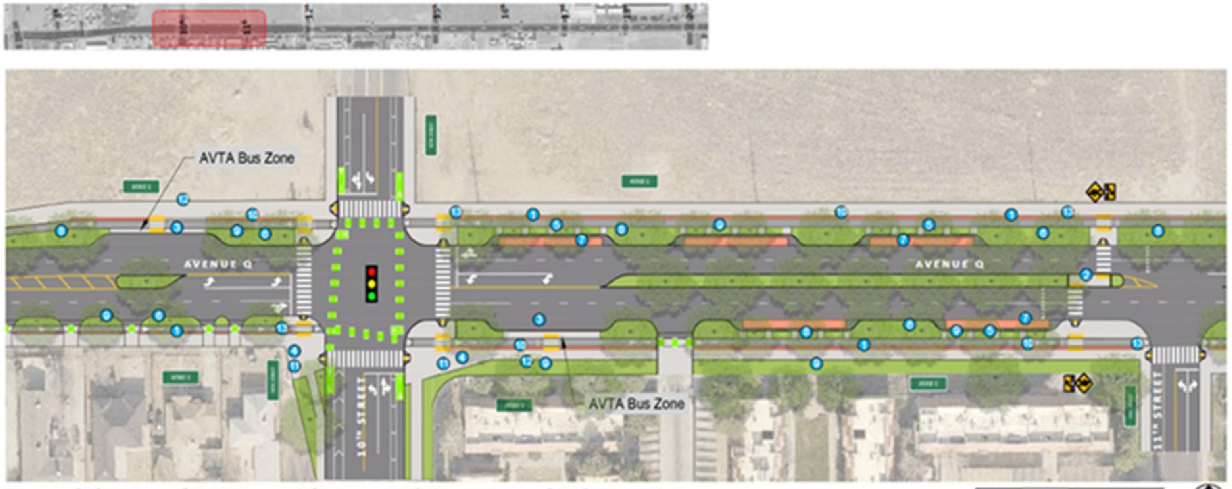
- General feedback received included:
  - Dangerous driver behavior and lack of safe pedestrian and bicycle infrastructure is uncomfortable for pedestrians and cyclists
  - Sidewalk-level bicycle lanes were preferred
  - Support was received for traffic calming designs and a two-lane configuration
- Based on the feedback received, three potential design alternatives were developed

Recommendations for Design

East Avenue Q Recommended Alternative

10th Street East to 11th Street East (four-lane configuration)

Location Key



Proposed Plan View of East Avenue Q between 10th Street East and 11th Street East

0' 35' 70' 140'



Proposed Cross Section of East Avenue Q between 10th Street East and 11th Street East

Mobility + Safety Features

1. Separated bike and pedestrian pathway system
2. Midblock crossing pedestrian refuge island
3. Enhanced transit stop
4. Widened pedestrian space at intersections and accessible ramps
5. Carriage paths lead people from parking zones to the sidewalk

Green Infrastructure Features

6. Stormwater curb extensions capture street runoff
7. Pervious pavement within parking zone
8. Tree planting zone allows for a 40' spacing of trees
9. Low water use planting area along sidewalks and medians

Streetscape Furnishings

10. Pedestrian scale street lighting placed 40-60' throughout the corridor
11. Seating, trash receptacles, bike racks at high-use pedestrian areas
12. Shade structures at key intersections and transit stops (where feasible)
13. Wayfinding signage at intersections

Corridor Features



Stormwater Curb Extensions: *Placed at intersections and midblock locations to shorten capture stormwater and support large trees.*



Pervious Pavement Parking Zones: *Gaps between interlocking concrete pavers allows stormwater to soak into the ground.*

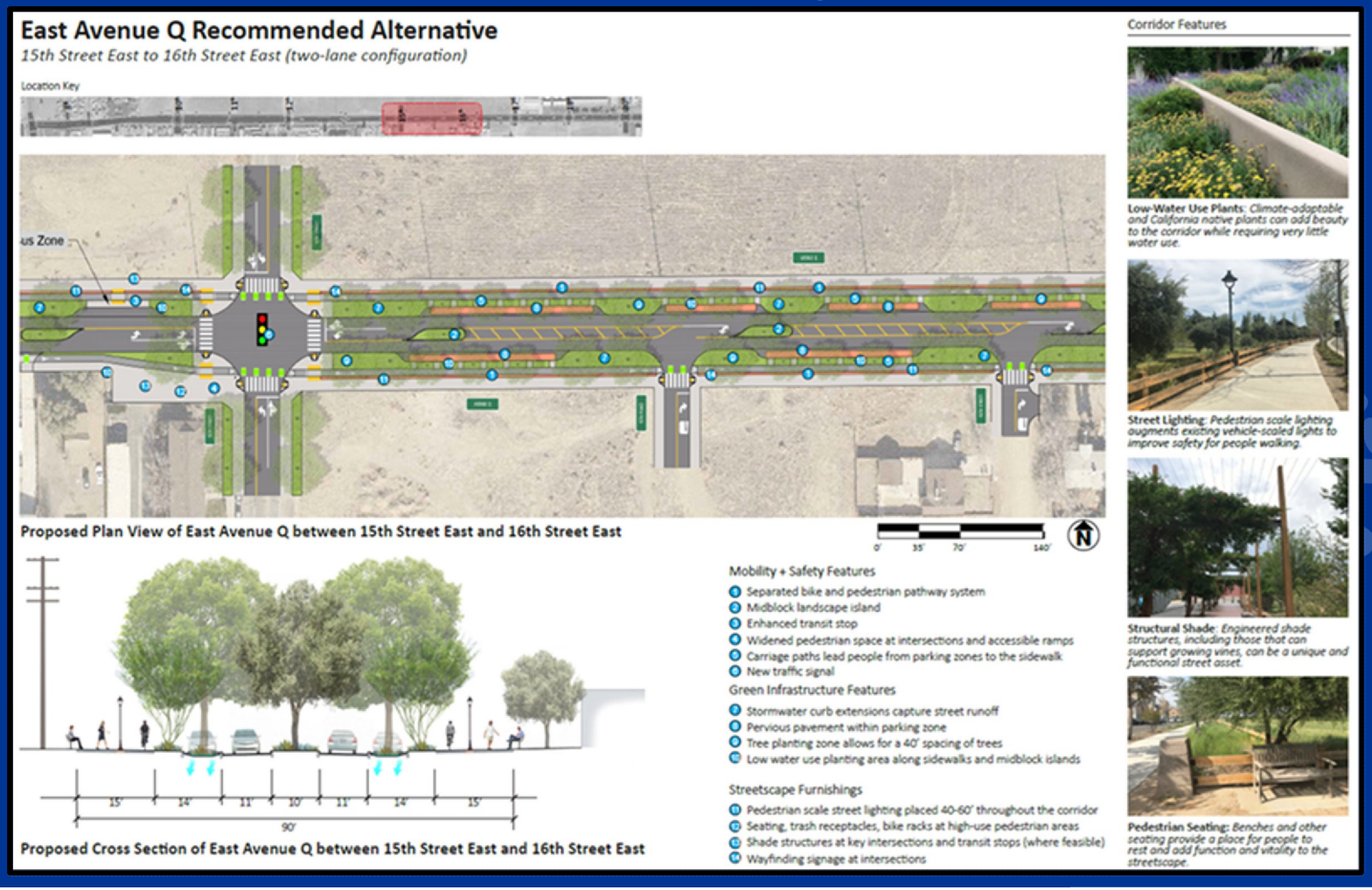


Street Tree Shading: *Large canopy Chinese Elm trees are fast growing and can help shade bicycle and sidewalk zones.*



Multimodal Pathway: *Protected sidewalk-level bike facilities and sidewalks provide a safe and comfortable space for people walking and biking.*

Recommendations for Design Continued



Recommendation

Adopt Resolution No. CC 2022-086 approving the East Avenue Q Complete Streets Study and find that the study is exempt from environmental review

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **PUBLIC WORKS**
ENGINEERING DIVISION

DISTRICT: **1**

SUBJECT: **PUBLIC HEARING TO ADOPT ORDINANCE NO. 1588, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE LEVYING SPECIAL TAXES WITHIN CITY OF PALMDALE COMMUNITY FACILITIES DISTRICT NO. 2022-1 (CITYWIDE MAINTENANCE AND SERVICES)**

ISSUE

Public Hearing to Adopt Ordinance No. 1588, an Ordinance of the City Council of the City of Palmdale levying special taxes within City of Palmdale Community Facilities District No. 2022-1 (Citywide Maintenance and Services).

RECOMMENDATION

Staff recommends that the City Council:

1. Hold a public hearing introducing the proposed Ordinance No. 1588;
2. Receive public testimony regarding the proposed Ordinance No. 1588;
3. Adopt Ordinance No. 1588 levying special taxes within City of Palmdale Community Facilities District No. 2022-1 (Citywide Maintenance and Services).

BACKGROUND

The Mello-Roos Community Facilities Act of 1982 (Government Code Section 53311 and following) contains the statutory framework pursuant to which the City of Palmdale (the "City") or other local agencies may form a community facilities district ("CFD") for the purpose of financing the purchase, construction, expansion, improvement or rehabilitation of public facilities or the provision of certain authorized public services. A CFD may finance such public facilities or services through the levy of special taxes on property within the geographic boundaries of the CFD.

On June 1, 2022, the City Council adopted Resolution No. CC 2022-060 entitled "A Resolution of the City Council of the City of Palmdale Declaring Its Intention to Establish a Community Facilities District and to Authorize the Levy of Special Taxes Therein – stating its intention to establish the City of Palmdale Community Facilities District No.

2022-1 (Citywide Maintenance and Services) (the "District") pursuant to the Mello-Roos Community Facilities Act of 1982, constituting Section 53311 and following of the California Government Code (the "Code"), to provide funds to pay the costs of certain maintenance and services, as described therein.

On July 13, 2022, the City Council held a noticed public hearing as required by Code relative to the determination to proceed with the formation of the District and the rate and method of apportionment of the special tax to be levied within the District to fund costs of the Services.

Following the public hearing, the City Council adopted Resolution No. CC 2022-061 entitled "A Resolution of the City Council of the City of Palmdale of Formation of City of Palmdale Community Facilities District No. 2022-1 (Citywide Maintenance and Services), Authorizing the Levy of a Special Tax Within the District, Preliminarily Establishing an Appropriations Limit for the District and Providing for the Future Annexation of Property to the District" (the "Resolution of Formation"), and Resolution No. CC 2022-062 entitled "A Resolution of the City Council of the City of Palmdale Calling Special Election Within Community Facilities District No. 2022-1 (Citywide Maintenance and Services)". These resolutions established the District, authorized the levy of a special tax in the District, and called an election within the District on the proposition of levying a special tax on property in, and establishing an appropriations limit for the District respectively.

An election was held within the District in which the sole eligible landowner approved the proposed levy of a special tax. Following the election, the City Council adopted Resolution CC 2022-063 entitled "A Resolution of the City Council of the City of Palmdale Declaring the Results of Special Election and Directing the Recording of Notice of Special Tax Lien – Community Facilities District 2022-1 (Citywide Maintenance and Services)".

DISCUSSION

The adoption of this Ordinance authorizes and levies special taxes on properties located within the District pursuant to Code Sections 53328 and 53340 at the rate and in accordance with the method of apportionment set forth in the Resolution of Formation (the "Rate and Method of Apportionment"). The special taxes are to be levied commencing in fiscal year 2022-23 and in each fiscal year thereafter.

The Ordinance authorizes and directs the City's Director of Finance to annually determine the specific special tax rate and amount to be levied for the next ensuing fiscal year for each parcel of real property within the District, in the manner and as provided in the Rate and Method of Apportionment.

All collections of the special tax will be used as provided for in the Code, the Rate and Method of Apportionment, and in the Resolution of Formation including, but not limited to, the payment of the costs of the City in administering the District and the costs of collecting and administering the special tax.

FISCAL IMPACT

The initial Maximum Special Taxes expected to be collected from the property located within the District for Fiscal Year 2022-23 is $19,248.06.

STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

A. Seek innovative, cost effective, customer focused methods of service delivery.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

Prepared by:	Chuck Heffernan P.E., Director of Public Works
Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Ordinance No. 1588

CITY OF PALMDALE
COUNTY OF LOS ANGELES, CALIFORNIA
ORDINANCE NO. 1588

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE LEVYING SPECIAL TAXES WITHIN CITY OF PALMDALE COMMUNITY FACILITIES DISTRICT NO. 2022-1 (CITYWIDE MAINTENANCE AND SERVICES)

WHEREAS, on June 1, 2022, this City Council adopted Resolution No. CC 2022-060 entitled "A Resolution of the City Council of the City of Palmdale Declaring Its Intention to Establish a Community Facilities District and to Authorize the Levy of Special Taxes Therein – Citywide Maintenance and Services" stating its intention to establish the City of Palmdale Community Facilities District No. 2022-1 (Citywide Maintenance and Services) (the "District") pursuant to the Mello-Roos Community Facilities Act of 1982, constituting Section 53311 and following of the California Government Code (the "Code"), to provide funds to pay the costs of certain maintenance and services (the "Services"), as described therein; and

WHEREAS, notice was published as required by the Code relative to the intention of this City Council to form the District and to fund costs of the Services; and

WHEREAS, on July 13, 2022, this City Council has held a noticed public hearing as required by Code relative to the determination to proceed with the formation of the District and the rate and method of apportionment of the special tax to be levied within the District to fund costs of the Services; and

WHEREAS, at said hearing all persons desiring to be heard on all matters pertaining to the formation of the District and the levy of said special taxes were heard, substantial evidence was presented and considered by this City Council and a full and fair hearing was held; and

WHEREAS, subsequent to said hearing, this City Council adopted Resolution No. CC 2022-061 entitled "A Resolution of the City Council of the City of Palmdale of Formation of City of Palmdale Community Facilities District No. 2022-1 (Citywide Maintenance and Services), Authorizing the Levy of a Special Tax Within the District, Preliminarily Establishing an Appropriations Limit for the District and Providing for the Future Annexation of Property to the District" (the "Resolution of Formation"), and Resolution No. CC 2022-062 entitled "A Resolution of the City Council of the City of Palmdale Calling Special Election Within Community Facilities District No. 2022-1 (Citywide Maintenance and Services)", which resolutions established the District, authorized the levy of a special tax with the District, and called an election within the District on the proposition of levying a special tax on property in, and establishing an appropriations limit for, the District, respectively; and

WHEREAS, an election was held within the District in which the sole eligible landowner elector approved said propositions.

THE CITY COUNCIL OF THE CITY OF PALMDALE DOES ORDAIN AS FOLLOWS:

SECTION 1. By the passage of this Ordinance this City Council hereby authorizes and levies special taxes within the District pursuant to Code Sections 53328 and 53340 at the rate and in accordance with the method of apportionment set forth in Exhibit A to the Resolution of Formation (the "Rate and Method of Apportionment"). The special taxes are hereby levied commencing in fiscal year 2022-23 and in each fiscal year thereafter.

SECTION 2. The City's Director Finance is hereby authorized and directed each fiscal year to determine the specific special tax rate and amount to be levied for the next ensuing fiscal year for each parcel of real property within the District, in the manner and as provided in the Rate and Method of Apportionment.

SECTION 3. Properties or entities of the State, federal or local governments shall be exempt from any levy of the special taxes, to the extent set forth in the Rate and Method of Apportionment. In no event shall the special taxes be levied on any parcel within the District in excess of the maximum tax specified in the Rate and Method of Apportionment.

SECTION 4. All of the collections of the special tax shall be used as provided for in the Code, the Rate and Method of Apportionment, and in the Resolution of Formation including, but not limited to, the payment of the costs of the City in administering the District and the costs of collecting and administering the special tax.

SECTION 5. The special taxes shall be collected from time to time as necessary to meet the financial obligations of the District on the secured real property tax roll in the same manner as ordinary *ad valorem* taxes are collected. The special taxes shall have the same lien priority, and be subject to the same penalties and the same procedure and sale in cases of delinquency as provided for ad valorem taxes. In addition, the provisions of Section 53356.1 of the Code shall apply to delinquent special tax payments. The Finance Director is hereby authorized and directed to provide all necessary information to the auditor/tax collector of the County of Los Angeles and to otherwise take all actions necessary in order to effect proper billing and collection of the special tax, so that the special tax shall be levied and collected in sufficient amounts and at the times necessary to satisfy the financial obligations of the District in each fiscal year.

Notwithstanding the foregoing, the City's Director of Finance may collect one or more installments of the special taxes by means of direct billing by the City of the property owners within the District if, in the judgment of the Director of Finance, such means of collection will reduce the administrative burden on the City in administering the District or is otherwise appropriate in the circumstances. In such event, the special taxes shall become delinquent if not paid when due as set forth in any such respective billing to the property owners.

SECTION 6. The Director of Finance is hereby directed to establish an account for the District (which need not be a separate deposit account, but may be a separate general ledger account so long as such proceeds can be separately accounted for) into which proceeds of the special tax levied for the District will be deposited, and the Finance Director is hereby directed to file an annual report with this City Council as required by Section 50075.3 of the Code.

SECTION 7. Severability. If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this Ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof irrespective of the fact that any one (1) or more subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional, or invalid, or ineffective, provided the basic purposes of this Ordinance and the benefits to the City and the public are not substantially impaired.

SECTION 8. The City Clerk shall certify to the adoption of this Ordinance and shall cause this Ordinance to be published or posted as required by law.

PASSED, **APPROVED** and **ADOPTED** this _____ day of August, 2022.

Approved as to form:

Steven D. Hofbauer, Mayor

ATTEST:

Scott E. Porter
Acting City Attorney

Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing Ordinance was duly introduced, passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the _____ day of _____, 20___ effective on the _____ day of _____, 20___ by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ ABSENT: _____

Date: _____ _____
Shanae S. Smith, City Clerk

16007.47:J18295
7/18/22

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT**

PLANNING DIVISION

DISTRICTS: **ALL**

SUBJECT: **ADOPT ORDINANCE NO. 1594, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING ZONING ORDINANCE AMENDMENT 21-006 FOR THE DRAFT MULTI-FAMILY RESIDENTIAL AND MIXED-USE DESIGN STANDARDS**

ISSUE

Adopt Ordinance No. 1594; a Resolution of the City Council of the City of Palmdale approving Zoning Ordinance Amendment (ZOA) 21-006 for the Draft Multi-Family Residential and Mixed-Use Design Standards.

RECOMMENDATION

The Planning Commission recommends that the City Council:

1. Receive public testimony regarding Ordinance No. 1594;
2. Adopt Ordinance No. 1594 approving ZOA 21-006; and,
3. Find that the project is exempt from environmental review.

BACKGROUND

On August 11, 2022, the Planning Commission adopted Resolution No. PC-2022-021 recommending City Council approval of ZOA 21-006.

A guiding theme of the City's updated Draft General Plan, Palmdale 2045, is to increase the supply and diversity of housing types and support different types of households. Palmdale 2045 also seeks to foster a vibrant and active downtown, increase opportunities throughout the City for entertainment and shopping, and realize new spaces for community gathering and events. Among the means to achieve these goals are the introduction and design of high-quality multi-family and mixed-use projects. It is important to note that although the Draft City of Palmdale Multi-Family and Mixed-Use Design Standards (Standards) are being considered ahead of the General Plan update and comprehensive Zoning Ordinance Amendment, the amendments proposed through this

Zoning Ordinance Amendment will remain in effect after adoption of the General Plan update and Comprehensive Zoning Ordinance Amendment.

DISCUSSION

There are good examples of multi-family and mixed-use design in Palmdale, but they are an emergent type of project. To date, well-designed single-family housing projects and single-purpose retail centers predominate. With careful design and sensitivity to existing residential built form patterns, high-quality multi-family and mixed-use projects may successfully fit into Palmdale's predominately suburban low-scale environment. The Standards provide parameters for applicants to achieve this objective while ensuring that new multi-family and mixed-use projects are designed to meet the following goals:

- Enhance connectivity between new multi-family, mixed-use development, and existing Palmdale neighborhoods through project design that supports active transportation, including walking, biking, and use of transit.

- Orient and connect new multi-family and mixed-use developments to existing and new street frontages, public sidewalks, paths, and trails, and utilize active entry elements that connect buildings and the life within buildings to their surrounds through the use of porches, stoops, minor entry masses, ground level storefronts, arcades, plazas, and landscaped open spaces.

- Utilize drought-tolerant and climate appropriate landscape as an integral design component of multi-family and mixed-use projects with each new development incorporating landscaped parkways along public sidewalks, landscaped buffers at adjacent sites, landscaped parking areas, a mix of passive and active recreational open spaces and programs, and use of shade trees to foster outdoor gathering.

- Provide landscape buffers, step-downs in height, and height transitions from higher to lower buildings to relate existing neighborhoods to new multi-family and mixed-use projects.

- Design each new multi-family and mixed-use development with major and minor massing components, breaks in massing and plane, and use of more than one material, texture, color, all with associated details in order to highlight key building components such as entries, windows, transitions from walls to roofs, the base, middle, and tops of buildings, and special outdoor locations where people gather.

- Utilize quantifiable and measurable design standards for new multi-family and mixed-use projects. Use the Standards when designing new multi-family and mixed-use developments to determine factors that connect buildings to the surrounding community, orient structures to streets, link built environments to

> Palmdale's natural surrounds, buffer lower intensity from higher intensity developments, and create buildings with a sense of interest and human scale.

New multi-family and mixed-use projects and alterations to existing multi-family and mixed-use structures that exceed 50 percent of the existing condition, are required to be in compliance with the Standards. Proactive use of the Standards by applicants and their design teams during the design process will help ensure that the approval of projects are consistent with the City's planning and design goals and objectives. Use of the Standards will also promote more timely reviews, and importantly, lead to projects that build upon and contribute to the environmental design qualities sought by the community. City staff and decision makers will use compliance with the Standards to facilitate and expedite the project application approval process.

In compliance with State housing laws such as Senate Bill (SB) 330, the Standards are measurable and quantifiable, and projects are either in conformance or not in conformance. To facilitate the use of the Standards, a summary checklist for both multi-family and mixed-use design standards is provided for applicants, who must use the checklist when designing projects, and for City staff, who will use the same checklist to facilitate consistent application of the City's design principles, determine compliance with the Standards, and with compliance achieved, quickly and efficiently approve or recommend approval of a project.

Public Outreach

The City conducted two virtual workshops to engage with residents and stakeholders and obtain input for housing opportunities in Palmdale during the development of the Standards. The first workshop occurred on June 16, 2021, during which City staff and the consultant team presented the Project objectives and used imagery to describe the existing multi-family housing character in Palmdale. The second workshop was held on April 27, 2022, to provide an overview of the multi-family and mixed-used design standards that had been developed in response to input received during the first workshop. Both community engagement events concluded with informative dialogues between attendees, City staff, and the consultant team, and community considerations were incorporated into the final draft of the Standards.

FISCAL IMPACT

The proposed ZOA amends various sections of the PMC to update the City's multi-family and mixed-use development standards to include conformance with the Standards. The Standards provide flexibility while requiring high-quality development, and also establish minimum design requirements in administering the intent of the PMC as it relates to architecture and site design.

STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work and play.

B. Provide inclusive access to a variety of supportive services that build a resilient and healthy community.

Prepared by:	Brenda Magaña, Senior Planner
Certified as to availability of Funds:	Janelle Sampson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENT

1. Ordinance No. 1594

CITY OF PALMDALE
COUNTY OF LOS ANGELES, CALIFORNIA
ORDINANCE NO. 1594

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING ZONING ORDINANCE AMENDMENT 21-006; THE DRAFT CITY OF PALMDALE MULTI-FAMILY AND MIXED-USE DESIGN STANDARDS

A. RECITALS

WHEREAS, The City of Palmdale has contracted with the architecture and urban design firm of John Kaliski Architects under the direction of the Economic and Community Development Department of the City of Palmdale to prepare Multi-Family and Mixed-Use Design Standards (Standards) outlined within Exhibit III;

WHEREAS, The City of Palmdale has filed an application requesting approval of Zoning Ordinance Amendment (ZOA) 21-006 described herein (herein referred to as "Application");

WHEREAS, The Application applies to new multi-family and mixed-use structures and alterations to existing multi-family and mixed-use structures that exceed 50 percent of the existing condition citywide;

WHEREAS, On August 11, 2022, the Planning Commission of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date; and,

WHEREAS, on August 17, 2022, the City Council of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date. Evidence, both written and oral, was duly presented and considered by the City Council at the aforesaid public hearing, including but not limited to, the staff report dated August 17, 2022.

B. ORDINANCE

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES ORDAIN AS FOLLOWS:

SECTION 1. The City Council hereby specifically finds that all of the facts set forth in the Recitals, Part A of this Ordinance, are true and correct.

SECTION 2. The City Council hereby finds as follows with respect to the environmental documentation:

(a) The proposed ZOA involves modifications to multi-family and mixed-use development standards. Given that the request does not include any development, it does not result in a physical change that could cause an impact to the environment. The project qualifies under the common sense rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Pursuant to CEQA Guidelines Section 15061(B)(3), where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Any future development application will be reviewed for CEQA compliance under a separate entitlement and the appropriate environmental document will be prepared to address project-specific impacts. Therefore, the amendment will not have a significant effect on the environment.

(b) The custodian of records for the environmental document, and all other materials which constitute the record of proceedings upon which the City Council's decision is based, is the Planning Manager of the City of Palmdale. These documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

SECTION 3. Based upon substantial evidence presented to the City Council during August 17, 2022, public hearing, including public testimony and written and oral staff reports, the City Council specifically finds as follows:

(a) The proposed Zoning Ordinance amendment conforms with the goals, objectives and policies of the General Plan.

The Application amends various sections of the PMC to update the City's multi-family residential and mixed-use development standards to require conformance with the Standards. The Standards provide flexibility while requiring high-quality development, and also establish minimum design requirements in administering the intent of the PMC as it relates to architecture and site design. In addition, the Application conforms with the goals, objectives, policies and is consistent with the General Plan as described in Exhibit I. In addition, the PMC currently contains architectural standards in place for single-family residential development but does not address architectural standards for multi-family or mixed-use development.

(b) The proposed Zoning Ordinance amendment is necessary to implement the General Plan and to provide for public safety, convenience and/or general welfare.

The Application is intended to provide flexibility in architecture and site design for new multi-family and mixed-use developments and existing multi-family residential and mixed-use structures modified by more than 50 percent by establishing clear standards for minimum design requirements. Modifying these standards will aide in the development of quality multi-family and mixed-use development and enhance the well-being of life for residents by encouraging architecturally enhanced development.

(c) The proposed Zoning Ordinance amendment conforms with the intent of the Zoning Ordinance and is consistent with all other related provisions thereof.

The proposed modifications to the PMC are minor in nature and are intended to implement the Standards as a requirement to multi-family and mixed-use development in order to provide flexibility in architecture and site design while requiring high quality development. The PMC currently contains architectural standards in place for single-family residential development but does not address architectural standards for multi-family or mixed-use development. Implementation of this ZOA will continue to enhance orderly development, while adhering to the guiding principles within the PMC.

(d) The proposed Zoning Ordinance amendment is reasonable and beneficial at this time.

The PMC has architectural standards in place for single-family residences but does not address architectural standards for multi-family or mixed-use development. ZOA's take place over time in order to improve the quality of life, provide convenience, and to keep-up with local government best practices. The proposed changes to multi-family and mixed-use development standards will improve quality of life of future residents by providing design parameters for high grade multi-family and mixed-use developments that enhance City character. The Standards promote the diversity of housing to support different types of households, including

seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families.

SECTION 4. Based on the findings and conclusions set forth in the above Sections, and based on all other evidence in the record, the City Council hereby approves ZOA 21-006 as shown in Exhibit II and III and finds that the project is exempt from the requirements of the CEQA.

SECTION 5. Severability. If any section, subsection, subdivision, paragraph, sentence, clause or phrase in this Ordinance or any part thereof is for any reason held to be unconstitutional or invalid or ineffective by any court of competent jurisdiction, such decision shall not affect the validity or effectiveness of the remaining portions of this Ordinance or any part thereof. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase thereof irrespective of the fact that any one (1) or more subsections, subdivisions, paragraphs, sentences, clauses or phrases be declared unconstitutional, or invalid, or ineffective, provided the basic purposes of this Ordinance and the benefits to the City and the public are not substantially impaired.

SECTION 6. The City Clerk shall certify to the adoption of this ordinance and shall cause this ordinance to be published or posted as required by law.

PASSED, APPROVED and **ADOPTED** this 17th day of August, 2022.

Approved as to form:

_____
Steven D. Hofbauer, Mayor

ATTEST:

_____
Scott E. Porter
Acting City Attorney

_____
Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 17th day of August, 2022, by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ ABSENT: _____

Date: _____ _____
Shanae S. Smith, City Clerk

EXHIBIT I

GENERAL PLAN CONSISTENCY TABLE

Element	Goal, Objective, or Policy	Standard Met?	Justification*
Land Use	Policy L3.5.1: *Adopt design standards for multi-family development which will create a safe, convenient, attractive environment with public or private open space and recreational on-site amenities.* Objective L3.5: *Ensure that future residential development provides an attractive living environment and creates long-term value for residents as well as the community.*	Yes	The proposed ZOA amends various sections of the PMC to update the City's multi-family and mixed-use development standards to include conformance with the Standards. The Standards provide flexibility while requiring high-quality development, and also establish minimum design requirements in administering the intent of the PMC as it relates to architecture and site design. In addition, the PMC currently contains architectural standards in place for single-family residential development but does not address architectural standards for multi-family or mixed-use development. Therefore, implementation of this ZOA will continue to enhance orderly development, while adhering to the guiding principles within the PMC.

*Justification is based on a review of the Standards dated June 2022

EXHIBIT II

PMC CHAPTER 17.42 MEDIUM RESIDENTIAL (ZONE R-2)

Section 17.42.090 Standards of Development

G. Housing construction standards (Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019.)

2. ~~All m~~Multiple-family housing proposed within Zone R-2 shall comply with the City of Palmdale Multi-Family and Mixed-Use Design Standards and be constructed in the following manner, except as otherwise approved in conjunction with a housing project for low-income households, seniors, or assisted living facilities: (Zoning Ordinance Amendment 98-1, adopted by City Council March 10, 1999. Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019. Zoning Ordinance Amendment 20-003, adopted by City Council July 14, 2020.)

PMC CHAPTER 17.43 MULTIPLE RESIDENTIAL (ZONE R-3)

Section 17.43.090 Standards of Development

G. Multiple-family housing standards (Zoning Ordinance Amendment 98-1, adopted by City Council March 10, 1999. Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019.)

All multiple-family housing proposed within Zone R-3 shall conform to the following standards:

1. ~~All m~~Multiple-family housing proposed within Zone R-3 shall comply with the City of Palmdale Multi-Family and Mixed-Use Design Standards and be constructed in the following manner, except as otherwise approved in conjunction with a housing project for low-income households, seniors, or assisted living facilities: (Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019. Zoning Ordinance Amendment 20-003, adopted by City Council July 14, 2020.)

PMC CHAPTER 17.44 HIGH DENSITY RESIDENTIAL (ZONE R-4)

Section 17.44.090 Standards of Development

G. Multiple-family housing standards (Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019.)

All multiple family housing proposed within Zone R-4 shall conform to the following standards and the Goals, Policies and Objectives of the Community Design Element of the General Plan:

1. ~~All m~~Multiple-family housing proposed within Zone R-4 shall comply with the City of Palmdale Multi-Family and Mixed-Use Design Standards and be constructed in the following manner, except as otherwise approved in conjunction with a housing project for low-income households, seniors, or assisted living facilities: (Zoning Ordinance Amendment 19-003, adopted by City Council June 4, 2019. Zoning Ordinance Amendment 20-003, adopted by City Council July 14, 2020.)

PMC CHAPTER 17.73 MIXED USE OVERLAY (MX)

Section 17.73.090 Standards of Development

D. ~~The following standards shall apply to construction of any new~~ Multiple-family residential structures within the MX Overlay Zone shall comply with the City of Palmdale Multi-Family and Mixed-Use Design Standards and shall be constructed in the following manner: ~~within the MX Overlay Zone or to alterations of existing units as deemed applicable by the reviewing authority.~~

City Council Staff Report

DATE: **August 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **CITY MANAGER'S OFFICE**

DISTRICT: **ALL**

SUBJECT: **INTRODUCTION OF ORDINANCE NO. 1593, AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE ADDING CHAPTER 9 (UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER PROHIBITED) TO TITLE 10 (VEHICLES AND TRAFFIC) OF THE PALMDALE MUNICIPAL CODE ESTABLISHING REGULATIONS PROHIBITING THE UNLAWFUL POSSESSION OF CATALYTIC CONVERTERS IN THE CITY**

ISSUE

Hold a Public Hearing and adopt Ordinance No. 1593, an Ordinance of the City Council of the City of Palmdale adding Chapter 9 (Unlawful Possession of a Catalytic Converter Prohibited) to Title 10 (Vehicles and Traffic) of the Palmdale Municipal Code establishing regulations prohibiting the unlawful possession of catalytic converters in the City.

RECOMMENDATION

Staff recommends that the City Council:

1. Hold a public hearing to accept public testimony; and
2. Introduce and adopt Ordinance No. 1593.

BACKGROUND

Catalytic converters, an external component of vehicles are accessible from the underside of a parked car. They convert most of a vehicle's emissions into less harmful forms, improving air quality and vehicle performance. Catalytic converters contain valuable materials such as platinum, palladium, and rhodium, rare metals that command ever-increasing prices on the recyclables market.

Theft of these parts are on the rise. Individuals steal catalytic converters for multiple reasons including the ease and undetectable nature of such thefts, potentially in a matter of seconds and using common tools such as a reciprocating saw; the ability to recycle them at scrap mental yards for $200 to $1,200 in cash per catalytic converter; and loopholes in legislation protecting criminals from prosecution unless a victim can be identified.

A report by the National Insurance Crime Bureau details that that catalytic converter crimes increased 325% from 2019 to 2020.

DISCUSSION

The City of Palmdale is no exception to this national trend with residents and the City being victimized by this practice. To date, the Los Angeles County Sheriff Department Palmdale Station reported 184 catalytic converter related crimes. There is currently no City, State, or Federal legislation applicable within the City of Palmdale to define and punish catalytic converter thefts absent an identifiable victim. Additionally, there is currently no City, State, or Federal legislation applicable within the City of Palmdale requiring individuals to provide proof to law enforcement as to how they obtained catalytic converters. This limits law enforcement's ability to protect the public by preventing these thefts and seizing suspected stolen catalytic converters when there is no identifiable victim present. Preventing and punishing these crimes at present is nearly impossible due to the ease and speed with which they are committed and the difficulty of tracing a particular catalytic converter back to its prior owner (the victim); they typically have no identifying markers.

Individuals in possession of stolen catalytic converters can recycle them for a substantial profit at a relatively low risk, while victims are forced to pay for costly repairs. By criminalizing the mere possession of an unattached catalytic converter absent proof of ownership or lawful possession, the attached ordinance would combat this criminal activity by (1) achieving deterrence by establishing zero-tolerance for catalytic converter thefts; (2) establishing sanctions for possessing stolen catalytic converters; (3) preventing criminals from profiting from the sale and recycling of stolen catalytic converters; (4) providing indirect justice to the victims of catalytic converter theft cases that have gone or will go unsolved for the reasons discussed above; and (5) minimizing the fiscal and personnel impact on the City of Palmdale and the Los Angeles County Sheriff's Department by reducing time invested in deterring and investigating catalytic converter thefts.

FISCAL IMPACT

There is no fiscal impact associated with introducing Ordinance No. 1593.

STRATEGIC PLAN

Goal I: Maintain effective public safety and protection for life, property, and the environment.

Objective A: Provide comprehensive and innovative safety services to prevent crime and promote a safe community.

Prepared by: Terrie Zayas, City Council Chief of Staff

Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Ordinance No. 1593

CITY OF PALMDALE
COUNTY OF LOS ANGELES, CALIFORNIA
ORDINANCE NO. 1593

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF PALMDALE ADDING CHAPTER 9 (UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER PROHIBITED) OF TITLE 10 (VEHICLES AND TRAFFIC) OF THE PALMDALE MUNICIPAL CODE ESTABLISHING REGULATIONS PROHIBITING THE UNLAWFUL POSSESSION OF CATALYTIC CONVERTERS IN THE CITY

WHEREAS the citizens of Palmdale have experienced catalytic converter thefts from automobiles over the past several years; and

WHEREAS*,* there is currently no City, State, or Federal legislation applicable within the City of Palmdale to define and punish catalytic converter thefts absent an identifiable victim; and

WHEREAS*,* there is currently no City, State, or Federal legislation applicable within the City of Palmdale requiring individuals to provide proof to law enforcement as to how they obtained catalytic converters, thus limiting law enforcement's ability to: (1) protect the public by preventing catalytic converter thefts and (2) seize suspected stolen catalytic converters when no victim is present; and

WHEREAS, catalytic converter thefts are on the rise because individuals are incentivized to commit catalytic converter thefts for multiple reasons including, but not limited to: (1) the ease and undetectable nature of committing such thefts, potentially in a matter of seconds and through the use of common tools such as a reciprocating saw; (2) the ability to recycle catalytic converters at scrap metal yards for high dollar returns ranging from $200 to $1,200 per catalytic converter; and (3) loopholes in legislation protecting criminals from prosecution unless a victim can be identified; and

WHEREAS, the citizens of Palmdale and the Los Angeles County Sheriff's Department are in need of legislation criminalizing mere possession of catalytic converters absent proof of ownership or lawful possession, for multiple reasons including, but not limited to: (1) achieving deterrence by establishing zero-balance for catalytic converter thefts; (2) establishing sanctions for possessing stolen catalytic converters; (3) preventing criminals from profiting from the sale and recycling of stolen catalytic converters; (4) providing indirect justice to the victims of catalytic converter theft cases that have gone or will go unsolved for the reasons discussed above; and (5) minimizing the fiscal and personnel impact on the City of Palmdale and the Los

Angeles County Sheriff's Department by reducing the time invested in deterring and investigating catalytic converter thefts; and

WHEREAS, individuals who are in possession of stolen catalytic converters recycle them for substantial profit while victims of these thefts suffer tremendous consequences in the form of costly repairs, inconvenience, and feelings of a lack of safety in the community; and

WHEREAS, this Ordinance is necessary to provide the City of Palmdale and the Los Angeles County Sheriff's Department clear legal authority and option to issue a misdemeanor or administrative citation.

THE CITY COUNCIL OF THE CITY OF PALMDALE DOES ORDAIN AS FOLLOWS:

SECTION 1. The above recitals are true and correct and incorporated herein.

SECTION 2. Chapter 9 (Unlawful Possession of a Catalytic Converter Prohibited) of Title 10 (Vehicles and Traffic) of the City of Palmdale Municipal Code is hereby added to read in its entirety as follows:

10.09.01 – Unlawful Possession of a Catalytic Converter Prohibited.

(a) It shall be unlawful for any person, other than a Core Recycler as defined in California Business and Professions Code Section 21610, to possess any catalytic converter that is not attached to a vehicle, unless the possessor has valid documentation or other proof to verify that they are in lawful possession of the catalytic converter.

(b) This section does not apply to a detached catalytic converter that has been tested, certified, and labeled or otherwise approved for reuse, and being bought or sold for purposes of reuse in accordance with the federal Clean Air Act (42 U.S.C. §7401 *et seq.*) and regulations under the Clean Air Act, as they may, from time to time, be amended.

10.09.02 – Definitions

a. For purposes of this section, "lawful possession" includes (1) being the lawful owner of the catalytic converter or (2) in possession of the catalytic converter with the lawful owner's written consent. It is not required to prove the catalytic converter was stolen to establish the possession is not a "lawful possession."

b. For purposes of this section, “documentation or other proof” means written document(s) that clearly identify the vehicle from which the catalytic converter

originated based on the totality of the circumstances, and includes, but is not limited to, the following types of documents:

1. Bill of Sale from the original owner with photographs

2. Documentation from the auto body shop providing that the owner relinquished the catalytic converter to the auto body shop.

3. Verifiable electronic communications from the previous owner to the possessor relinquishing ownership of the catalytic converter.

4. Photographs of the vehicle from which the catalytic converter originated.

10.09.03 – Violations

a. Each and every violation of this section shall constitute a separate violation and shall be subject to all remedies and enforcement measures authorized by the Palmdale Municipal Code. Each and every catalytic converter unlawfully possessed is a separate violation of this section.

b. It is unlawful and a misdemeanor subject to punishment in accordance with Chapter 12 of Title 1 of this Code, for any person to violate any provision of this section.

c. The remedies provided herein are not to be construed as exclusive remedies. The City is authorized to pursue any proceedings or remedies provided by law.

SECTION 3. This Ordinance is exempt from the requirements of the California Environmental Quality Act (“CEQA”) pursuant to State CEQA Guidelines because there is no possibility that this Ordinance or its implementation would have a significant negative effect on the environment. (14 Cal. Code Regs. § 15061(b)(3).) City staff shall cause a Notice of Exemption to be filed as authorized by CEQA and the State CEQA Guidelines.

SECTION 4. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Ordinance. The City Council hereby declares that it would have adopted this Ordinance and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared invalid or unconstitutional.

SECTION 5. The City Clerk shall certify to the adoption of this ordinance and shall cause this ordinance to be published or posted as required by law.

PASSED, APPROVED and **ADOPTED** this _____ day of _____, _____.

_____
Steven D. Hofbauer, Mayor

Approved as to form:

ATTEST:

_____
Scott Porter
Acting City Attorney

_____
Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing Ordinance was duly introduced, passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the _____ day of _____, 20___ effective on the ____ day of _____, 20___ by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT: _____

Date: _____ _____
Shanae S. Smith, City Clerk

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **CITY MANAGER'S OFFICE**

DISTRICT: **ALL**

SUBJECT: **ADOPT RESOLUTION NO. CC 2022-091 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE ADOPTING ADMINISTRATIVE CITATIONS: UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER**

ISSUE

Adopt Resolution No. CC 2022-091 a Resolution of the City Council of the City of Palmdale adopting Administrative Citations: Unlawful Possession of a Catalytic Converter.

RECOMMENDATION

Staff recommends that the City Council:

1. Conduct a public hearing and then adopt Resolution 2022-09.

BACKGROUND

Staff has recommended that the Council introduce and adopt an ordinance to prohibit unauthorized possession of catalytic converters. Violation of that ordinance, if adopted, would constitute a misdemeanor. A violation may also be enforced through as an administrative citation. The proposed resolution would establish the amount of the amount of the administrative citations.

A public hearing notice regarding the adoption of Resolution No. 2022-091 was published in the local newspaper of general circulation on August 8, 2022, and on August 17, 2022.

On August 3, 2022, the City Council adopted Resolution, No. CC 2022-065 adopting a citywide fee schedule. The Administrative Citation related to the Catalytic Converter fine amount was not included in Resolution 2022-065 as the fine had not been established prior to Resolution's adoption. The Catalytic Converter administrative citation would be listed in the fee schedule.

DISCUSSION

The City Council has adopted Ordinance No. 1593 adding Chapter 9 (Unlawful Possession of a Catalytic Converter Prohibited of Title 10 (Vehicles and Traffic) of the Palmdale Municipal Code establishing regulations prohibiting the unlawful possession of catalytic converters in the City.

Adoption of Resolution No. 2022-091 establishes the amount of the administrative citation for the unlawful possession of a catalytic converter as follows:

NEIGHBORHOOD SERVICES		
Description	FY 2023 Fee	Comments
Administrative Citations: Unlawful Possession of a Catalytic Converter		
For Violations of the following codes:		
a. 10.9 Vehicles and Traffic		
First	$500.00	Plus $125 late fee if applicable
Second	$1,000.00	Plus $250 late fee if applicable
Third	$2,500.00	Plus $625 late fee if applicable
Repeat Violations:		
The administrative citations fine amount of a second and third violation of the same Code provision by the same responsible party within one (1) year or three (3) years, as it applies to the violation, from the date of administrative citation shall equal a higher fine amount that is listed in this Resolution for a first violation of that Municipal Code section at the time of the second or third violation.		
Late Payment Charges:		
Payment of the administrative citation fine amount after twenty (20) days from the date of the administrative citation shall be subject to an additional late payment charge. The late payment charge shall equal twenty-five percent (25%) of the administrative citation fine amount due to the City. Late payment charges shall be in addition to the amount of the administrative citation amount.		
Collections Charge:		
In the event they city incurs costs to collect unpaid monies due to, inclusive of late payment charges, the collections charge shall equal thirty-five percent (35%) of the total amount due. The collections charge shall be in addition to the amount of administrative citations fine amount and the late payment charges.		

Adopting this fee will provide law enforcement flexibility by providing the option to issue a misdemeanor or administrative citation.

FISCAL IMPACT

Resolution No. CC 2022-091, would establish the amount of the administrative fines for violations to Palmdale Municipal Code 10.9, to allow the City to recoup some costs and to continue providing safety services to the community.

STRATEGIC PLAN

Goal I: Maintain effective public safety and protection for life, property, and the environment.

Objective A: Provide comprehensive and innovative safety services to prevent crime and promote a safe community.

Prepared by:	Terrie Zayas, City Council Chief of Staff
Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott E. Porter, Acting City Attorney

ATTACHMENTS

1. Resolution No. CC 2022-091

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2022-091

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING ADOPTION OF ADMINISTRATIVE CITATIONS: UNLAWFUL POSSESSION OF A CATALYTIC CONVERTER

WHEREAS, the City Council has adopted Ordinance No. 1593 adding Chapter 9 (Unlawful Possession of a Catalytic Converter Prohibited of Title 10 (Vehicles and Traffic) to the Palmdale Municipal Code; and

WHEREAS, the ordinance allows enforcement as a misdemeanor and pursuant to the administrative citation process;

WHEREAS, the City Council conducted a duly noticed public hearing on August 17. 2022 at which time the council considered all evidence presented; and

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

SECTION 1. Administrative Citations. Administrative citations for violations of Palmdale Municipal Code Chapter 10.9 shall be issued consistent with the following, and shall be listed in the City's fee schedule:

NEIGHBORHOOD SERVICES		
Description	FY 2023 Fee	Comments
Administrative Citations: Unlawful Possession of a Catalytic Converter		
For Violations of the following codes:		
A. 10.9 Vehicles and Traffic		
First	$500.00	Plus $125 late fee if applicable
Second	$1,000.00	Plus $250 late fee if applicable
Third	$2,500.00	Plus $625 late fee if applicable
Repeat Violations:		
The administrative citations fine amount of a second and third violation of the same Code provision by the same responsible party within one (1) year or three (3) years, as it applies		

to the violation, from the date of administrative citation shall equal a higher fine amount that is listed in this Resolution for a first violation of that Municipal Code section at the time of the second or third violation.
Late Payment Charges:
Payment of the administrative citation fine amount after twenty (20) days from the date of the administrative citation shall be subject to an additional late payment charge. The late payment charge shall equal twenty-five percent (25%) of the administrative citation fine amount due to the City. Late payment charges shall be in addition to the amount of the administrative citation amount.
Collections Charge:
In the event they city incurs costs to collect unpaid monies due to, inclusive of late payment charges, the collections charge shall equal thirty-five percent (35%) of the total amount due. The collections charge shall be in addition to the amount of administrative citations fine amount and the late payment charges.

SECTION 2. Waiver. Unless Federal or State regulations, or an ordinance of the City prohibits such or prescribes alternate procedures, any person subject to payment of the fines established hereunder may apply to the City Manager for a waiver or reduction of such fine. The application shall be made in writing and shall state in detail the factual basis for the request, including a description of the proposed activity, or other undertaking involved and the extraordinary benefits to the City resulting therefrom which justify the requested waiver or reduction of fines. The City Manager may consider the application and upon a finding of extraordinary benefit to the City, waive or reduce such fine. The determination of the City Manager shall be final and conclusive.

SECTION 3. The fine amounts set forth in this Resolution shall become effective on the first date that they can legally be enforced.

SECTION 4. The City Clerk shall certify to the adoption of this resolution.

PASSED, APPROVED and **ADOPTED** this 17th day of August, 2022.

Approved as to form:

_____
Steven D. Hofbauer, Mayor

ATTEST:

_____
Scott E. Porter, Acting City Attorney

_____
Shanae S. Smith, City Clerk

I, Shanae S. Smith, City Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the _____ day of _____, 20___ by the following roll call vote:

AYES: _____

NOES:_____

ABSTAIN:_____ABSENT:_____

Date: _____ _____

Shanae S. Smith, City Clerk

City Council Staff Report

DATE: **AUGUST 17, 2022**

TO: **HONORABLE MAYOR AND CITY COUNCIL**

FROM: **OFFICE OF THE CITY MANAGER**

DISTRICT: **ALL**

SUBJECT: **AWARD MEASURE AV GRANT PROGRAM FUNDING, TOTALING $1,306,810, TO GRANTEES IN EXHIBIT A AND AUTHORIZE INTERIM CITY MANAGER TO ENTER INTO AGREEMENTS RANGING FROM $2,000 TO $250,000.**

ISSUE

Award Measure AV Grant Program funding, totaling $1,306,810, to grantees in Exhibit A and authorize the Interim City Manager to enter into agreements ranging from $2,000 to $250,000.

RECOMMENDATION

Staff recommends that the City Council:

1. Award Measure AV Grant Program funding, totaling $1,306,810, to grantees in Exhibit A and authorize the Interim City Manager to enter into agreements ranging from $2,000 to $250,000.

BACKGROUND

In November 2020, voters in the City of Palmdale passed a local ¾ cent sales tax generating revenue to:

- Maintain 911 emergency response times;
- Keep public parks open, safe and clean;
- Repair streets and potholes;
- Retain and recruit local businesses through economic development initiatives to ensure the City's long-term financial stability;
- Support community policing, activities for at-risk youth and mental health efforts to help keep our community safe for everyone;
- Address homelessness;
- Support services for local military veterans and seniors;
- Upgrade emergency communications and improve emergency preparedness;
- Partner with faith communities, non-profits, and local youth sports programs; and,
- Protect water resources.

On December 15th, 2021, the City Council adopted adjustments to the Measure AV Fiscal Year 2022 budget to include revised revenue projections and approving a new appropriation for the Measure AV Grant Program, totaling $1,500,000. The remaining Measure AV funds

are appropriated for budgeted projects, programs, and/or services. The Measure AV Committee also received and filed a recommendation on new grant program funding on January 26, 2022.

The City of Palmdale launched the first Measure AV Grant Program in January 2022 after approving funds, totaling $1,500,000. The funding opportunities are intended for small business, nonprofits, and other eligible agencies, that help address critical issues and meet Measure AV funding criteria set by voters. Eligible programs and services for this round include local military veterans, at-risk youth, mental health, food and shelter services, community-based policing, and crime prevention.

DISCUSSION

On January 10, 2022, online applications were made available to community organizations for the Measure AV Grant Program. A virtual workshop was held on January 13, to inform potential applicants on the submission process and to participate in a Q&A session; 80 organizations were in attendance. Eighty-four (84) applications were received, totaling $5,560,000.

All applications were assessed by an initial eligibility review committee that determined if all program and documentation requirements were met. Applicants who met program and documentation requirements continued to the second review committee. Each committee member evaluated applications individually and then met to determine a group consensus score, based on of the following criteria:

EVALUATION CRITERIA	POINTS
Organization Location	5
Services & Recipients	20
Organizational Accomplishments	10
Community Partnerships	10
Palmdale Community Benefit	30
Measurements & Outcomes	25
Total Possible Points	**100**

Upon final review of all eligible applications, twenty-nine (29) projects are recommended for funding, totaling $1,306,810 (see Exhibit A - Recommended Awardee List). The remaining funds will be available for either successful appeals or will be used towards future grant programs.

The applications recommended for funding in Exhibit A were presented to the Measure AV Oversight Committee on April 27. Staff reviewed the recommended awardee list and the Committee received and filed this item.

FISCAL IMPACT

$1,500,000; grant program funds are budgeted as part of the overall fiscal year 21/22 Measure AV budget in account 15711001-737325.

STRATEGIC PLAN

Goal II: Ensure long-term fiscal health of the City and maintain funding for services.

A. Manage resources, costs, and liability to ensure the City's long-term fiscal health.

Goal IV: Maintain a desirable community where everyone wants to live, work and play.

A. Support opportunities to celebrate rich traditions and diverse cultures in the community.
D. Develop and maintain diverse programs and events that inspire growth, pride, and lifelong learning.

Prepared by:	Eric Dombrowski, Deputy Director of Parks & Recreation
Presented by:	Jordyn Kelley, Management Analyst
Certified as to availability of Funds:	Janelle Samson, Director of Finance
Approved by:	Ronda Perez, Interim City Manager
Approved as to form:	Scott Porter, Interim City Attorney

ATTACHMENTS

Exhibit A – Recommended Awardee List

EXHIBIT A - RECOMMENDED AWARDEE LIST

Legal Organization Name	Entity Type	Project Name	Category	Total Project Amount	Requested Grant Fund Amount	Recommended Award
American Youth Soccer Organization	Non-Profit Organization	2022 Spring Season Soccer Programs	At-Risk Youth	$ 32,000	$ 20,000	**$ 20,000**
Antelope Valley Blue Star Mothers (AVBSM)	Non-Profit Organization	AVBSM Desert Lawn Beautification	Local Military/Veteran	$ 2,000	$ 2,000	**$ 2,000**
Antelope Valley CERT	Non-Profit Organization	Palmdale Resiliency, Education and Preparedness (PREP)	Food & Shelter	$ 21,000	$ 21,000	**$ 21,000**
Antelope Valley Partners for Health	Non-Profit Organization	Regional Violence Prevention Coalition, Community Action Plan Expansion (RVPC-CAPE)	Community-Based Policing	$ 136,950	$ 14,950	**$ 14,950**
Coalition for Humane Immigrant Rights (CHIRLA)	Non-Profit Organization	CHIRLA's Palmdale Community Service Project	Community-Based Policing	$ 273,143	$ 180,000	**$ 90,000**
Dynamic Therapy Solutions & Dyslexia Center LLC	Business Organization	The COVID Regression Solution to At Risk Youth	At-Risk Youth	$ 67,300	$ 49,300	**$ 49,300**
Friends of the Children (FOTC) - Los Angeles	Non-Profit Organization	Youth Well-Being through a 2Gen Professional Mentoring	At-Risk Youth	$ 123,467	$ 25,000	**$ 25,000**
Homes for Families	Non-Profit Organization	Palmdale Veteran Enriched Neighborhood	Local Military/Veteran	$ 2,406,700	$ 100,000	**$ 100,000**
Jewish Vocational Services (JVS) SoCal	Non-Profit Organization	JVS Veterans First Skills Training	Local Military/Veteran	$ 931,887	$ 20,700	**$ 20,700**
Little LeagueInc. dba American Indian Little League	Non-Profit Organization	Baseball Field Improvements & Scholarship	At-Risk Youth	$ 10,000	$ 10,000	**$ 10,000**
Marzette's House	Non-Profit Organization	Healthy Heart and Minds - Healthy Snack Program	Food & Shelter	$ 2,000	$ 2,000	**$ 2,000**
Mental Health America of Los Angeles	Non-Profit Organization	TAY Academy - Mental Health Program	At-Risk Youth/ Mental Health	$ 482,600	$ 25,000	**$ 25,000**
Mental Health America of Los Angeles	Non-Profit Organization	Military Resource Center	Local Military/Veteran	$ 1,133,209	$ 25,000	**$ 25,000**
Mighty Little Giants, Inc.	Non-Profit Organization	NICU Essential Self Care Kits	Mental Health	$ 10,000	$ 10,000	**$ 10,000**
Saint Mary Elementary School	Education Organization	High-Dosage Tutoring Program	At-Risk Youth	$ 20,000	$ 20,000	**$ 20,000**
SALVA	Non-Profit Organization	SALVA building healthy communities and reducing disparities with the City Of Palmdale	Mental Health/Food & Shelter	$ 355,000	$ 355,000	**$ 177,500**
South Bay Center for Counseling	Non-Profit Organization	Child Abuse Prevention	Community-Based Policing	$ 25,000	$ 24,758	**$ 24,758**
Spring of Evolution dba Wolf Connection	Non-Profit Organization	Youth Empowerment Mentoring Component	At-Risk Youth	$ 2,336,899	$ 248,803	**$ 124,402**
STARBASE Edwards, Inc.	Non-Profit Organization	STARBASE Edwards 2.0 - After School Program	At-Risk Youth	$ 414,500	$ 40,000	**$ 40,000**
The Community Action League	Non-Profit Organization	Rent Relief Education & Outreach	Food & Shelter	$ 15,000	$ 15,000	**$ 15,000**
The Community Action League	Non-Profit Organization	Jumpstart to Success - Employment, Training and Mentorship Program	At-Risk Youth	$ 25,000	$ 25,000	**$ 25,000**
The Way Center of Truth, Inc.	Faith-Based Organization	Youth Empowerment 2022 - Suicide Prevention: From Depression to Inspiration	Mental Health	$ 19,800	$ 19,800	**$ 19,800**
U S Marine Corp Toys for Tots	Non-Profit Organization	Antelope Valley Toys for Tots	At-Risk Youth	$ 47,000	$ 26,000	**$ 26,000**
United American Indian Involvement, Inc.	Non-Profit Organization	UAII City of Palmdale Native American Youth Outreach Expansion	Mental Health	$ 50,000	$ 50,000	**$ 50,000**
Ventura Foundation	Non-Profit Organization	Developing our next generation of leaders - Leadership Training	At-Risk Youth	$ 50,000	$ 50,000	**$ 50,000**
Vets 4 Veterans, Inc	Non-Profit Organization	Operation Restart Immediate Need	Local Military/Veteran	$ 61,000	$ 35,000	**$ 35,000**
Vets 4 Veterans, Inc	Non-Profit Organization	Vets 4 Veterans Transition House	Local Military/Veteran	$ 508,000	$ 250,000	**$ 250,000**
Victory Outreach Palmdale	Non-Profit Organization	Basketball Tournament	At-Risk Youth	$ 9,400	$ 9,400	**$ 9,400**
West Antelope Valley Education, Inc.	Education Organization	Activities for All - Science, Arts and Athletics	At-Risk Youth	$ 44,000	$ 25,000	**$ 25,000**
				$ 9,612,855	**$ 1,698,711**	**$ 1,306,810**