SPECIAL JOINT CITY COUNCIL / OPEN SPACE, ACTIVE TRANSPORTATION, AND SUSTAINABILITY COMMISSION AGENDA

City Hall - Council Chambers
4381 Broadway St., Suite 201, American Canyon
June 16, 2026
7:30 PM

Mayor: Pierre Washington
Vice Mayor: Mark Joseph
Councilmembers: Brando Cruz, Melissa Lamattina, David Oro

Chair: Nance Matson
Vice Chair: Tara McClinton Horner
Commissioners: Debbie Chavarria, Barry Christian, Sean Hughes

7:30 P.M. OPEN SESSION - SPECIAL JOINT MEETING

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

PUBLIC COMMENT - ITEMS NOT ON THE AGENDA

This time is reserved for members of the public to address the City Council on items not appearing on the agenda that are within the Council's jurisdiction. Comments are limited to three (3) minutes per speaker. Pursuant to the Brown Act, the City Council is generally prohibited from discussing or taking action on items not listed on the agenda.

PUBLIC HEARING

1. **Active Transportation (AT) Plan General Plan Amendment**
Recommendation: Adopt a Resolution approving a General Plan Amendment to incorporate the American Canyon Active Transportation Plan as an appendix into the General Plan Mobility Element

BUSINESS

2. **Work Plan Fiscal Year 2026/27**
Recommendation: Adopt a Minute Order approving the Open Space, Active Transportation, and Sustainability Commission Work Plan for Fiscal Year 2026/27.

ADJOURNMENT

CERTIFICATION

I, Taresa Geilfuss, City Clerk for American Canyon, do hereby declare that the foregoing agenda was posted in compliance with the Brown Act prior to the meeting date.

_____

Taresa Geilfuss, City Clerk

PUBLIC PARTICIPATION

This meeting is a limited public forum. The City expects respectful conduct from all participants. Offensive language or discriminatory remarks based on any protected classification under federal, state, or local law will not be tolerated, and the speaker may be immediately disconnected.

Meetings are conducted in person and are also available via Zoom. Meetings are broadcast live on Napa Valley TV, the City's website, and YouTube.

Zoom Link: Click here. **Webinar ID:** 847 1017 1711. **Passcode:** 123456. **Phone-in:** (408) 638-0968

Oral Comments: In person during Open/Closed Session, or via Zoom during Open Session only. Use "Raise Your Hand" during public comment periods only.

Written Comments: Submit via eComments on the City's Meetings & Agendas webpage. eComments close at 3:00 p.m. on the day of the meeting.

Agenda Materials: Posted 72 hours in advance at www.americancanyon.gov.

ADA: Requests for accommodations or alternative formats must be submitted at least three calendar days in advance to the City Clerk at 4381 Broadway, Suite 201, American Canyon, CA 94503 or cityclerk@americancanyon.gov.

Need Additional Assistance? Contact the City Clerk by phone at (707) 647-4369 or by email at cityclerk@americancanyon.gov.

TITLE

Active Transportation (AT) Plan General Plan Amendment

RECOMMENDATION

Adopt a Resolution approving a General Plan Amendment to incorporate the American Canyon Active Transportation Plan as an appendix into the General Plan Mobility Element

CONTACT

Brent Cooper, AICP, Community Development Director

BACKGROUND & ANALYSIS

Imagine a community where residents and visitors can easily complete daily trips—to work, the market, or home—without relying on cars or other motorized vehicles. Shifting more trips to active transportation will lower household transportation costs, reduce greenhouse gas emissions, improve public health, and ease traffic congestion.

To expand opportunities for non-automobile travel, the Napa Valley Transportation Authority (NVTA) has prepared a Countywide Active Transportation Plan (Plan). The Plan aims to enhance walking, biking, and other non-motorized travel options throughout Napa County. The new plan replaces the Bicycle and Pedestrian Master Plans that were included as appendices to the General Plan.

The NVTA Board approved the Countywide Active Transportation Plan on April 15, 2026. This new Plan establishes countywide standards and policies, along with dedicated chapters for each jurisdiction: American Canyon, the City of Napa, Yountville, St. Helena, Calistoga, and unincorporated Napa County.

The American Canyon Plan under consideration includes countywide standards and specific goals for American Canyon. The other Napa County jurisdiction policy components were excluded from our plan. A copy of the proposed American Canyon Active Transportation Plan is included as Exhibit A to Attachment 1.

Key Project Goals

Create a Connected Network
Develop a countywide system of bicycle and pedestrian facilities that link communities and key destinations.

Improve Safety and Accessibility
Enhance safety and accessibility for users of all ages and abilities, with a focus on vulnerable road users.

Encourage Active Transportation
Promote walking and biking—especially for short trips—to support public health, reduce congestion, and improve air quality.

Engage the Community
Incorporate community input through surveys, interactive mapping tools, and outreach events to ensure the Plan reflects local needs and priorities.

Grant Benefits for American Canyon
Once adopted, the Plan will help jurisdictions like American Canyon qualify for active transportation grants by aligning local policies with State and Regional funding programs, including:

- California Active Transportation Program (ATP)
- SB1 (Road Repair and Accountability Act)
- AHSC (Affordable Housing and Sustainable Communities)
- SCCP (Solutions for Congested Corridors Program)

Local Adoption Is Critical:
Jurisdictions must formally adopt the Plan to qualify for certain funding programs. Adoption demonstrates a commitment to implementation and helps ensure projects are "shovel-ready" when funding opportunities arise.

Napa Airport Land Use Compatibility Plan:
Outdoor, non-group recreational facilities—such as sidewalks and trails identified in the Active Transportation Plan—constitute linear, low-occupancy infrastructure. Under Exhibit 5-2 of the Napa Airport Land Use Compatibility Plan (NACUCP), these improvements are considered "normally compatible" within Zones D1, D2, and E.

This designation is appropriate because implementation of the Active Transportation Plan would not alter land use designations or densities, nor would it introduce facilities into safety-critical areas (e.g., Runway Protection Zones or inner approach zones). Accordingly, the Plan would not affect

Napa County airport operations and is therefore exempt from referral to the Napa County Airport Land Use Commission.

On May 28, 2026, the Planning Commission conducted a public hearing on the Plan and recommended City Council approval.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Outdoors and Recreation: "Expand opportunities for use of outdoor recreation and an active and healthy lifestyle."

FISCAL IMPACT

There is no immediate fiscal impact associated with this report. However, adoption of the AT Plan may improve the City's eligibility for future grant funding opportunities through programs such as ATP, SB1, AHSC, and SCCP.

ENVIRONMENTAL REVIEW

The proposed action is statutorily exempt from the CEQA pursuant to PRC §21080.20, as it is an active transportation plan “that promotes and encourages people to choose walking, bicycling, or rolling through the creation of safe, comfortable, connected, and accessible walking, bicycling, or rolling networks, and encourages alternatives to single-occupancy vehicle trips.”

COMMUNICATION

Level 0: No Further Public Communication Needed

ATTACHMENTS:

1. Reso Active Transportation Plan
1. Exhibit A American Canyon-AT-Plan

RESOLUTION NO. 2026-XX

A RESOLUTION APPROVING A GENERAL PLAN AMENDMENT TO INCORPORATE THE AMERICAN CANYON ACTIVE TRANSPORTATION PLAN AS AN APPENDIX INTO THE GENERAL PLAN MOBILITY ELEMENT

WHEREAS, pursuant to Section 65300 of the California State Planning and Zoning Law, the City of American Canyon has adopted a General Plan to guide long-term growth and development, including land use and circulation policies; and

WHEREAS, the General Plan currently includes separate Bicycle and Pedestrian Plans as appendices to the Mobility (formerly Circulation) Element; and

WHEREAS, the Napa Valley Transportation Authority (NVTA) has prepared the Napa Countywide Active Transportation Plan ("Plan") to update and consolidate existing plans and to integrate bicycle and pedestrian travel into a coordinated, countywide program; and

WHEREAS, development of the Plan included extensive public outreach, engaging nearly 2,000 community members through more than 30 in-person and virtual events, and generating over 700 comments via meetings, surveys, and interactive mapping tools; and

WHEREAS, the Plan is intended to be adopted by each Napa County jurisdiction to guide local planning efforts and investment in active transportation infrastructure and programs; and

WHEREAS, Section 65358 of the State Planning and Zoning Law authorizes the City Council to amend the General Plan when such amendments are in the public interest; and

WHEREAS, incorporating the Plan into the Mobility Element will strengthen policy direction and improve the City's competitiveness for grant funding related to bicycle, pedestrian, and active transportation projects identified in the Plan; and

WHEREAS, outdoor, non-group recreation such as trails are limited to Zones D1, D2, and E of the Napa Airport Land Use Compatibility Plan (Exhibit 5-2) and trails in these zones are deemed "normally compatible"; and

WHEREAS, the proposed action is statutorily exempt from the California Environmental Quality Act (CEQA) pursuant to Public Resources Code Section 21080.20, as it promotes walking, bicycling, and other non-motorized travel through the development of safe, connected, and accessible transportation networks; and

WHEREAS, on May 28, 2026, the Planning Commission conducted a duly-noticed public hearing to evaluate the Active Transportation Plan and determined that based on all the evidence presented, including, but not limited to, written and oral testimony given at meetings, it is appropriate to recommend that the City Council adopt the Active Transportation Plan; and

WHEREAS, on June 16, 2026, the City Council reviewed the Active Transportation Plan during a joint meeting with the Open Space, Active Transportation, and Sustainability Commission; and

WHEREAS, on June 16, 2026, the City Council conducted a duly-noticed public hearing to evaluate the Active Transportation Plan and determined that based on all the evidence presented, including, but not limited to, written and oral testimony given at meetings, it is appropriate to approve the General Plan Amendment; and

WHEREAS, the City Council has considered all written and oral testimony presented at the public hearing in making its recommendation.

NOW THEREFORE BE IT RESOLVED that the City Council of the City of American Canyon **HEREBY** repeals the Bicycle Master Plan (Appendix 4-1) and Pedestrian Master Plan (Appendix 4-2) and approves a General Plan Amendment to incorporate the American Canyon Active Transportation Plan as Appendix 4-1 to the Mobility Element as attached hereto as Exhibit A and incorporated by reference.

SECTION 1. CEQA FINDINGS

The Planning Commission finds that the proposed General Plan Amendment is statutorily exempt from CEQA pursuant to Public Resources Code Section 21080.20, as it supports active transportation by encouraging walking, bicycling, and rolling through the development of safe, accessible, and connected networks

SECTION 2. NAPA AIRPORT LAND USE COMPATIBILITY PLAN.

Outdoor, non-group recreational facilities—such as sidewalks and trails identified in the Active Transportation Plan—constitute linear, low-occupancy infrastructure. Under Exhibit 5-2 of the Napa Airport Land Use Compatibility Plan (NACUCP), these improvements are considered "normally compatible" within Zones D1, D2, and E.

This designation is appropriate because implementation of the Active Transportation Plan would not alter land use designations or densities, nor would it introduce facilities into safety-critical areas (e.g., Runway Protection Zones or inner approach zones). Accordingly, the Plan would not affect Napa County airport operations and is therefore exempt from referral to the Napa County Airport Land Use Commission.

PASSED, APPROVED and **ADOPTED** at a special joint meeting of the City Council/Open Space Active Transportation Sustainability Commission of the City of American Canyon held on the 16th day of June 2026, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Pierre Washington, Mayor

ATTEST:

_____
Taresa Geilfuss, CMC, City Clerk

APPROVED AS TO FORM:

_____
Matthew Summers, City Attorney

Exhibit A: American Canyon Active Transportation Plan

Exhibit A

American Canyon
ACTIVE TRANSPORTATION PLAN

Final Plan | April 2026

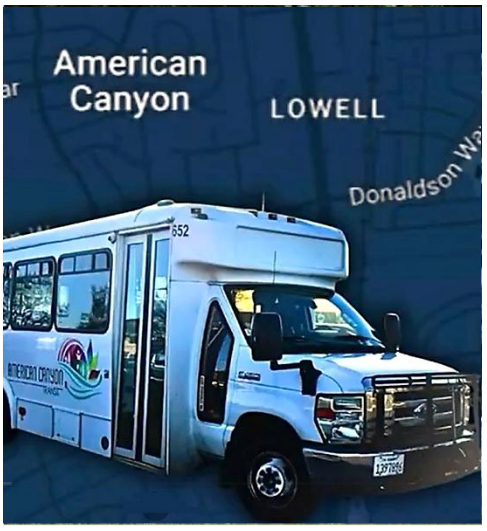
CITY OF AMERICAN CANYON

NVTA
NAPA VALLEY TRANSPORTATION AUTHORITY

GHD TOOLE DESIGN circlepoint













Acknowledgments

Jurisdiction Partners

City of Calistoga

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Greg Desmond

David Fradelizio

City of St. Helena

Joe Leach

Maya DeRosa

Eric Janzen

Jackie O'Neal

Town of Yountville

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Please Note: To keep the document shorter, Chapters about plans for Calistoga, St. Helena, Yountville, and the City and County of Napa have been removed.

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Chapter 1 Introduction

Located in the northern San Francisco Bay region, Napa County is renowned worldwide as a premier winemaking region and cherished locally as a vibrant place to live, work, and visit. In addition to the many wineries and restaurants, the county offers a wide variety of outdoor recreation opportunities including mountain biking, hiking, swimming, and more. The region's mild climate makes it a year-round destination for outdoor activities and makes active transportation an attractive option for most of the year.

With input from the community and guidance from stakeholder agencies, this Napa Countywide Active Transportation Plan (AT Plan) captures a vision for walking, bicycling and other non-automotive transportation options such as e-bikes and e-scooters throughout the county over the next 25 years. The AT Plan documents the existing environment and presents a thoughtful set of recommended projects and other strategies to make active transportation safer, more accessible, and more convenient for residents and visitors to the region. The AT Plan provides an achievable implementation framework to complete the proposed strategies by 2050.

Napa Countywide

Napa County has a total population of 136,070 residents. There are five incorporated jurisdictions within Napa County, all located along the north/south spine formed by State Route (SR) 128 / SR 29 in the western portion of the county. From north to south, they are the City of Calistoga, the City of St. Helena, the Town of Yountville, the City of Napa, and the City of American Canyon.

Unincorporated areas outside these jurisdictions are dominated by vineyards along the valley floor and a mix of forests, grazing land, and open spaces in the mountains to the east and west. Several small residential communities are located throughout the unincorporated County of Napa, including Deer Park, Angwin, Pope Valley, Carneros, and Circle Oaks, among others.

The eastern portion of the county is dominated by foothills and the Vaca Range mountains, which include Lake Berryessa, a popular recreational destination and major reservoir for Solano County. The Mayacamas Range runs along the western edge of the County, separating the Napa and Sonoma valleys.

City of Calistoga

The City of Calistoga covers approximately 2.5 square miles and has a population of 5,159 residents. Calistoga is located in the northern part of the Napa Valley at the junction of SR 29 and SR 128. Calistoga is a walkable small town, made up of a vibrant main street set within pedestrian-oriented neighborhoods and surrounded by wineries, vineyards, and other agricultural lands.

City of St. Helena

St. Helena is a town of 5,378 residents and covers 5.6 square miles. The city is centrally located in the heart of the upper Napa Valley. St. Helena is bisected by SR 29 (also known as Main Street) and surrounded agricultural uses. The community stands out in the Valley for its unique historic character. Major economic drivers in St. Helena include agriculture, winemaking, tourism, and education.

Town of Yountville

The Town of Yountville is approximately 1.5 square miles and has a population of 3,396 residents. The town is located halfway between Napa and St. Helena along SR 29. The Yountville Veterans Home is a focal point in the town and accounts for between one-quarter and one-third of the Town's population. Yountville began as an agricultural settlement surrounded by fields and vineyards, and it remains small and compact to this day.

City of Napa

The City of Napa is the county seat and the largest city in the county, with a population of 78,816 residents and an area of 18.4 square miles. Highway 29 runs north/south through the City with other major highways (SR 12, 121, 221) crossing the City and providing access to nearby communities and the greater region. The community offers a multitude of options for entertainment, dining, cultural and recreational experiences; quaint and historic neighborhoods; an active and historic Downtown; and access to recreation, nature, and the Napa River.

City of American Canyon

The City of American Canyon is approximately 6.5 square miles and has a population of 21,698 residents. The city is located in southern Napa County along SR 29, in the world-famous Napa Valley wine growing region and in close proximity to the San Francisco Bay.

American Canyon serves as a wine processing hub; and is a vibrant and diverse community. Because of its strategic location at the southern end of Napa County and with easy access to state and interstate highways, American Canyon's industrial district is home to millions of square feet of wine processing, bottling storage, and shipping space.

County of Napa

The unincorporated areas of the county are predominantly rural, characterized by wineries, vineyards, open space, and hills. Small communities and neighborhoods in the county including Angwin, Lake Berryessa, Rutherford, Oakville, and Silverado are linked primarily by two-lane rural roadways and state routes. There are approximately 21,623 residents in the unincorporated areas.

Purpose of this Plan

The Napa Valley Transportation Authority (NVTA) is the county transportation agency (CTA) and oversees both short- and long-range transportation planning in Napa County. NVTA works closely with the County, Town, and Cities to improve streets, highways, transit, bikeways, and pedestrian facilities.

Since the development of the 2016 Countywide Pedestrian Plan and the 2019 Countywide Bicycle Plan, Napa Countywide's population has grown, transportation demand has changed, and active transportation best practices have been updated. NVTA has developed this Countywide AT Plan to address these changes and reflect the current regional transportation priorities. This AT Plan is the culmination of more than a year of community engagement, technical analysis, and stakeholder input to update and consolidate prior countywide pedestrian and bicycle planning efforts into one document.

By developing this countywide AT Plan, NVTA provides a framework for consistency in bicycle and pedestrian facilities, policies, and programs across all jurisdictions, supporting both formula and discretionary funding of infrastructure and programs.

Planning Context

This Countywide AT Plan helps NVTA do its part to implement and achieve the goals, guiding principles, and targets set forth by local, regional, and statewide planning documents. The planning process began with a thorough screen of all planning efforts relevant to active transportation in Napa County, which ultimately informed the development of countywide infrastructure recommendations, programs, and policies. The goal of the screen was to develop a framework of policies that provide consistency throughout the region, while also responding to the unique needs of local jurisdictions.

Below is a list of the programs and policies reviewed for the AT Plan. See Appendix A for the complete project, policy, and program consistency screen.

Statewide Plan

- Toward an Active California (2017)

Regional Plans

- Metropolitan Transportation Commission (MTC) Plan Bay Area 2050 (2024)
- NVTA Vision Zero Plan (2023)
- Advancing Mobility 2045 (2021; update underway)
- Caltrans District 4 Bicycle Plan (2025) and Pedestrian Plan (2021)
- SR 29 Comprehensive Multimodal Corridor Plan (CMCP, 2020)
- NVTA Napa Countywide Bicycle Plan (2019)
- Napa County Bicycle Coalition: Napa County Safe Routes to School Program Published Reports (2018-2022)
- NVTA Napa Countywide Pedestrian Master Plan (2016)

Local Plans and Reports

Local plans and reports that inform this plan include General Plans, Local Road Safety Plans, and Active Transportation Plans.

- City of Calistoga
  - Calistoga General Plan (2014)
  - Calistoga Active Transportation Plan (2014)
- City of St. Helena
  - St. Helena 2040 General Plan (2019)
- Town of Yountville
  - Envision Yountville General Plan (2019)
- City of Napa
  - City of Napa Local Road Safety Plan (LRSP, 2022)
  - Napa 2040 General Plan (2022)
- City of American Canyon
  - City of American Canyon Local Road Safety Plan (LRSP, 2022)
  - Broadway District Specific Plan (2019)
- County of Napa
  - Napa County Local Road Safety Plan (LRSP, 2022)
  - Napa County General Plan (2008)

In addition, this plan is coordinated with several concurrent, ongoing projects and planning efforts to align recommendations:

- NVTA Accessible Transportation Needs Assessment (2025)
- NVTA Travel Behavior Study (2025)
- NVTA Community Based Transportation Plan (2025)
- City of St. Helena Streets Master Plan (anticipated 2026)
- City of American Canyon General Plan 2040 (2025)

Organization of this Plan

Chapters 1-6 present countywide analysis, findings, and recommendations for active transportation. Chapters 7-12 present individual Active Transportation Plans intended to be adopted by each of the five Cities/Town and the County. These individual chapters focus on the existing conditions, analysis, and recommendations for each jurisdiction. After the chapters, six appendices are provided, expanding on and addressing topics discussed throughout the AT Plan.

Vision Statement

A countywide vision statement and subsequent goals and objectives were developed to guide the planning process and the recommendations made by this plan. The vision statement was developed by NVTA and was informed by current and past planning efforts, existing transportation needs, and input from the community and local jurisdictions.

The vision is the basis for the goals and objective outlined below, which ultimately guided the analysis conducted and development of recommendations. These goals prioritize safety and connectivity, while also addressing equity, accessibility, sustainability, and infrastructure maintenance and project accountability.

"Napa County will be an active transportation-friendly community with a connected and comfortable network designed for all ages and abilities.

This comprehensive active transportation network will provide residents and visitors with safe, convenient, and enjoyable access to destinations throughout Napa County and beyond, supporting everyday commuting, non-work trips, and recreation, and promoting a high quality of life."

Vision Zero

In 2023, NVTA adopted a Vision Zero Plan, which aims to eliminate traffic related deaths and serious injuries by 2030. The AT Plan is one tool NVTA can use to achieve this goal. As compared to the Vision Zerio Plan, The AT Plan provides a wider range recommendations specific to pedestrians, bicyclists, and other non-motorized users. The analysis conducted to develop this plan, and the subsequent infrastructure and policy recommendations, are all guided by the vision of a safe active transportation network that supports the region's most vulnerable road users.

Vehicle Miles Traveled Reduction

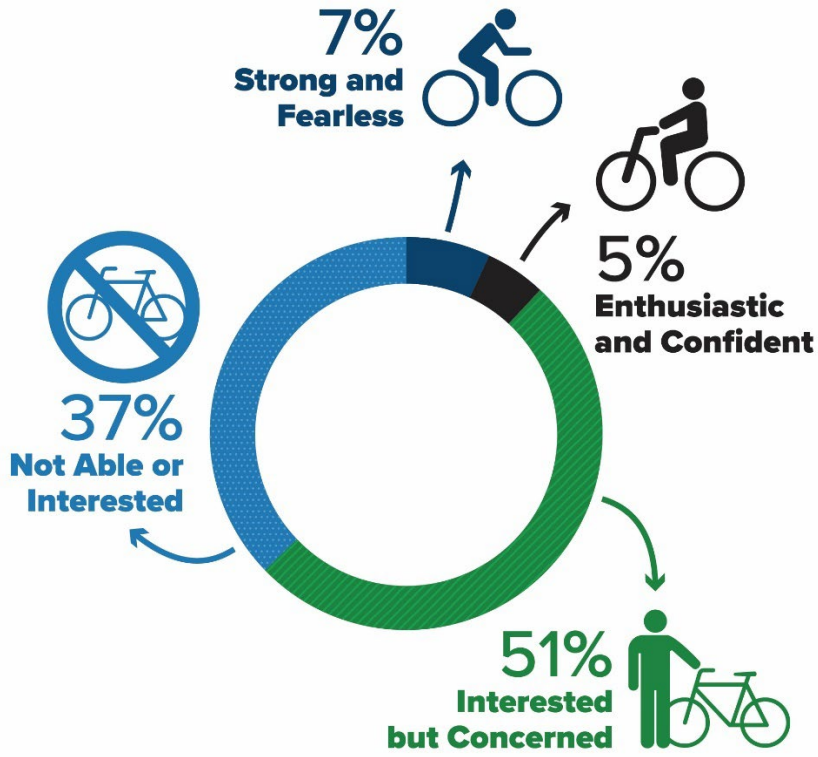
Encouraging active travel and reducing vehicle miles traveled (VMT) is key to achieving regional climate and sustainability goals. Advancing Mobility 2045 sets four goals related to sustainability:

- Reduce greenhouse gas emissions by 19 percent per capita
- Reduce vehicle miles traveled by 15 percent per capita
- Increase work trips made by bicycling or walking to 10 percent mode share
- Maintain or increase transit ridership

People are typically willing to walk up to one half-mile, and willing to bike up to two miles. The AT Plan explores opportunities for mode shift for these "short trips" by recommending active transportation near key destinations where it is feasible to walk or bike.

All Ages and Abilities

Providing comfortable active transportation facilities for all users, regardless of age and ability, is key for reducing reliance on driving and increasing active travel. While a portion of the population are uninterested in riding a bicycle under any condition, a majority of people are "interested but concerned", meaning they may want to ride a bicycle, but feel uncomfortable riding with or adjacent to high-speed, high-volume traffic.[1] These riders, which comprise between 50 and 60 percent of the population, typically prefer riding in off-street pathways, on lower volume streets, or in conditions where their interactions with motor vehicles are limited. The vision statement guides the AT Plan to support these riders in an effort to encourage bicycling in Napa County. Perceived safety or comfort riders experience on a given road can be measured by Level of Traffic Stress (LTS). LTS considers a variety of factors that may impact a bicyclist's experience, including whether a bicycle facility is present, how wide it is, the speed and volume of adjacent vehicle traffic, and more. A complete LTS analysis can be found in Chapter 4 Needs Assessment.



[1] Jennifer Dill and Nathan McNeil, "Revisiting the Four Types of Cyclists: Findings from a National Survey," Transportation Research Record: Journal of the Transportation Research Board, 2587: 90-99, 2016.

Goals and Objectives

The following goals and objectives outlined in Table 1.1 were developed to advance the vision statement and aim to achieve vision zero, reduce vehicle miles traveled, and provide an active transportation network for all ages and abilities.

Table 1.1: Napa AT Plan Goals and Objectives

Goal	Objective
Goal 1: Safety Improve safety for all users of the transportation system, especially vulnerable road users (those who use active transportation).	**Objective 1.1** Reduce level of traffic stress (LTS) on the bicycle network by using LTS as a tool for facility design. For example, if a facility scores LTS 3 or 4 (high stress), use design to reduce to a low stress score of LTS 1 or 2.
	Objective 1.2 Improve safety for vulnerable users by enhancing roadway crossings, particularly intersections on the High Injury Network.
	Objective 1.3 Achieve the Vision Zero goal of zero severe injuries and fatalities by 2035.
Goal 2: Equity & Accessibility Develop an active transportation network that supports all ages and abilities and prioritize access for underserved communities.	**Objective 2.1** Strive for a bicycle network that is comfortable for the "interested but concerned" bicyclist by implementing new and enhanced low-stress facilities on the primary network.
	Objective 2.2 Prioritize funding for new and enhanced bicycle and pedestrian infrastructure for underserved communities, including communities where people rely on active and public transportation as their primary modes.
	Objective 2.3 Upgrade all pedestrian facilities to be ADA- and PROWAG-compliant so that users with disabilities can comfortably use the network.
Goal 3: Connectivity Efficiently implement a connected network that allows active transportation users to directly access key destinations without interruption.	**Objective 3.1** Prioritize gap closures in the active transportation network over new infrastructure that does not connect to the existing network.
	Objective 3.2 Identify opportunities to use quick-build techniques to get projects on the ground in shorter timelines, and to test treatments before installing fixed infrastructure.

Goal	Objective
Goal 4: Sustainability & Mode Shift Invest in complementary programs to reduce greenhouse gas emissions and increase active transportation mode share.	**Objective 4.1** Partner with local businesses to create robust Transportation Demand Management programs that support the local economy while reducing VMT and greenhouse gas emissions.
	Objective 4.2 Achieve a countywide active transportation mode share[2] of 10% by 2050
Goal 5: Maintenance Evaluation & Data Collection Support the longevity of the active transportation network through maintenance and evaluation.	**Objective 5.1** Develop and implement a maintenance program that includes all facilities within the public right-of-way, including shared facilities, dedicated active transportation facilities, and amenities.
	Objective 5.2 Utilize pre/post data collection to evaluate project success, including metrics such as volume, speed, mode, as well as qualitative community feedback.
	Objective 5.3 Maintain a publicly accessible record of past and planned active transportation projects and priorities.

[2] Mode share is defined as the percentage of total trips taken using a given type of transportation (e.g. transit, single occupancy vehicle) for any purpose (work, shopping, recreation, etc.) that begin and/or end in Napa County. Active transportation includes but is not limited to those trips that occur by walking, bicycling, e-bike, scooter, or other human-powered and battery-electric assisted mobility devices.

Chapter 2
Existing Active Transportation Environment

This chapter presents a review of existing conditions for active transportation throughout Napa County. Understanding the current environment establishes a foundation for recommended facilities, policies, and programs, and documents a baseline against which future progress can be measured. Existing facilities are also important for understanding ongoing maintenance obligations to ensure a safe and accessible network.

Demographics

The following demographic information is based on American Community Survey (ACS) 2023 five-year estimates.

Age

Communities of all ages benefit from a connected and accessible active transportation network. People who are introduced to walking, bicycling and transit at a younger age are more likely to use active modes of travel in adulthood, contributing to active lifestyles. Active lifestyles are linked to many physical and mental benefits such as cardiovascular health, improved mental health, and for areas, can form a large sense of community. Figure 2.1 shows the age distribution of Napa County residents. The median age is 42.8 years old, though 28% of the population are under 25.

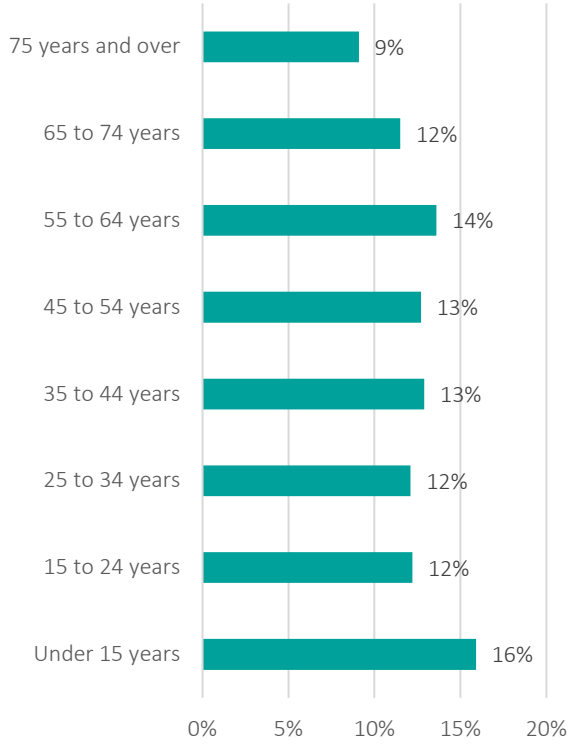


Figure 2.1: Napa Countywide Age

Income

Figure 2.2 shows household income for Napa County. Napa County has a median household income (MHI) of $108,970, slightly higher than the state of California's MHI of $96,334. The California low-income level for a family of 3 (average household size in Napa County is approximately 2.66 people) is $29,657 annually. Around 12 percent of Napa County households fall below the federal poverty level. Lower-income community members are more likely to rely on active transportation and transit as opposed to car travel. Providing adequate active transportation will support connectivity for these residents.

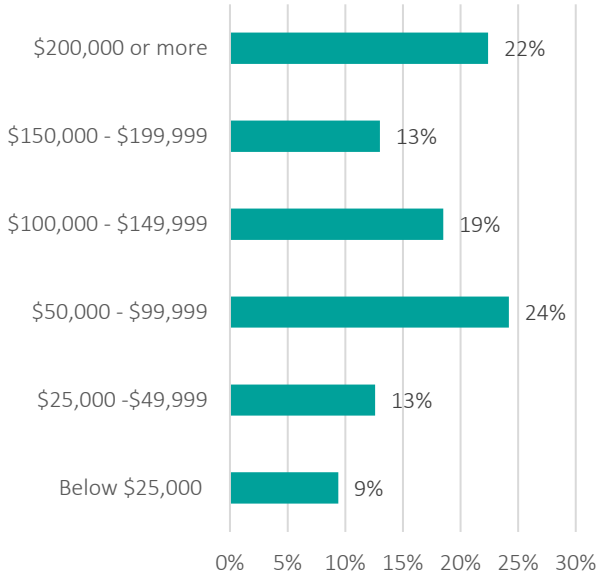


Figure 2.2: Napa Countywide Household Income

Travel Behavior

Travel behavior data is based on American Community Survey (ACS) 2023 five-year estimates, as well as excerpted from the 2025 NVTA Travel Behavior Study (TBS).

According to the TBS, there are fewer Napa County residents and fewer Napa County based employees in 2025 than there were in 2018. Napa County is exporting fewer and importing more workers, and more residents are working from home. The TBS reports that traffic passing through Napa County has increased, while trips that enter and leave Napa County from nearby regional (inter-county trips) have decreased. Internal Napa County trips have increased by 5%.

Typically, people are willing to walk up to one half-mile or bicycle up to two miles to their destinations. Short driving trips under two miles present the potential for mode shift, or the opportunity to encourage active travel instead of driving. There may be potential for mode shift among shorter trips within jurisdictions, or between cities along regional routes like the Vine Trail.

Mode Share

Figure 2.3 provides an overview of commute mode share in Napa County for workers 16 years and older. Mode share data was sourced from the American Community Survey (ACS) five-year estimates for 2016 and 2023. The data does not include non-work trips.

Most Napa County residents drive to work, either alone or by carpooling. Since 2016, more residents are working from home, likely due to the Covid-19 pandemic, and fewer residents are driving alone or carpooling to work.

Though 13 percent of all workers who live in Napa County work from home and do not have a commute, there may be opportunities to increase active travel for non-work and recreational trips.

Trip Length

Figure 2.4 shows average trip length for weekday and weekend trips from the 2025 Travel Behavior Study. About a quarter of trips in Napa County are under 2 miles—focusing on improving active transportation infrastructure for these trips could increase rates of walking and bicycling.

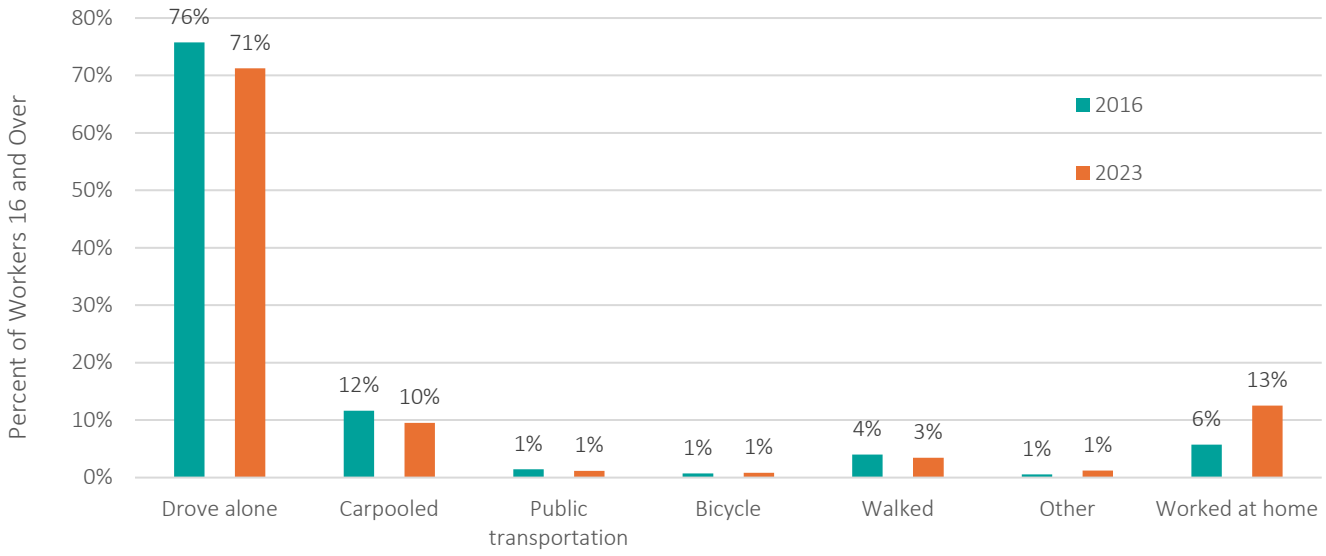


Figure 2.3: Napa Countywide Means of Transportation to Work

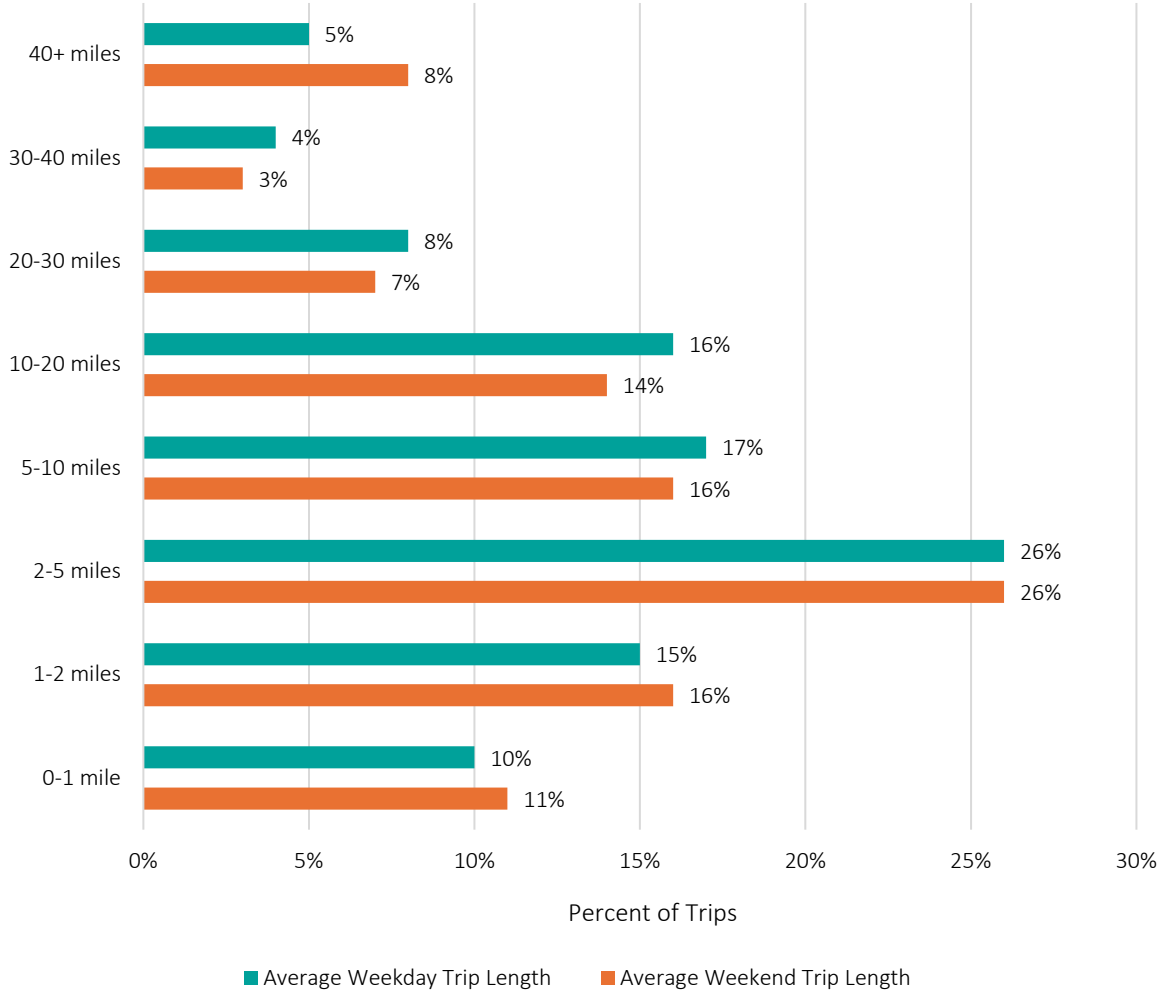


Figure 2.4: Napa Countywide Trip Length

Travel Between Jurisdictions

The TBS also provides information about travel between jurisdictions. Table 2.1 shows where trips begin and end for each jurisdiction. In American Canyon, Calistoga, and the City of Napa, most trips end in the same jurisdiction where they started. Trips that begin in St. Helena, Yountville, or the unincorporated County of Napa are more likely to end in a different jurisdiction.

Transit

While this chapter details the existing pedestrian and bicycle facilities, NVTA recognizes that transit is a key component to the active transportation network. Transit riders rely on the active transportation network to travel to and from their transit stop, often referred to as "first- and last-mile connectivity."

The Vine is the county's bus system and is operated by NVTA. The Vine is comprised of local routes serving the City of Napa and adjacent areas, and regional routes that connect residents and visitors to the Up Valley Communities (Calistoga, St. Helena, and Yountville) as well as the Bay Area. Local jurisdictions also feature their own fixed and on-demand transit services. The transit network expands how far pedestrians, bicyclists, and other non-motorized users can travel, connecting them to regional destinations.

Transit mode share for commuters comprises 1% of all trips, through NVTA recognizes transit is also used for non-work trips. Bolstering the active transportation network near transit stops and along key routes would improve first- and last-mile connectivity and encourage transit mode shared for commuting, non-work trips, and recreation.

Table 2.1: Travel Between Jurisdictions (2025 Travel Behavior Study)

Destination					
American Canyon	**Calistoga**	**City of Napa**	**County of Napa**	**St. Helena**	**Yountville**
Trips originating in American Canyon					
76%	<1%	17%	6%	<1%	1%
Trips originating in Calistoga					
1%	60%	5%	23%	10%	<1%
Trips originating in the City of Napa					
2%	<1%	87%	9%	1%	1%
Trips originating in the County of Napa					
5%	4%	39%	39%	10%	3%
Trips originating in St. Helena					
1%	6%	16%	28%	46%	2%
Trips originating in Yountville					
3%	1%	39%	20%	5%	31%

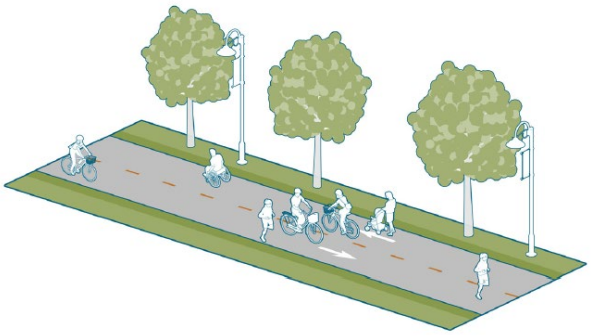
Bicycle and Pedestrian Facilities

Bikeways

In California, dedicated bicycle facilities are categorized into one of four "classes" based on the amount of separation they offer from traffic. Some classes have variations within them that can improve bicyclist comfort or respond to different roadway contexts. For more information on bicycle and pedestrian facilities, see Appendix D: Treatment Toolkit.

Shared-Use Paths (Class I)

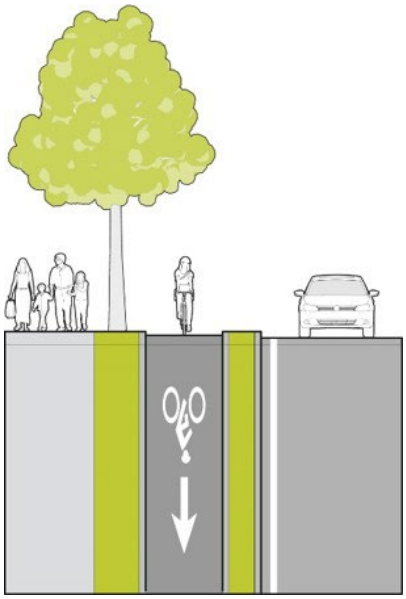
A shared-use path is a two-way facility physically separated from motor vehicle traffic and used by bicyclists, pedestrians, and other non-motorized users. Shared-use paths can be located in an independent alignment, such as a greenbelt or abandoned railroad, or constructed adjacent to a roadway.



Shared-use Path (Class I)

Separated Bikeways (Class IV)

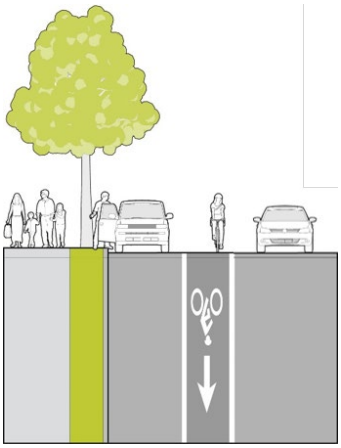
Separated bikeways or bike lanes are a dedicated bikeway facility type that combines the user experience of a shared-use path with the on-street infrastructure of a conventional bike lane. They are physically separated from motor vehicle traffic by curbs, bollards, parked cars, or other vertical elements, and are distinct from the sidewalk. Separated bike lanes can be constructed at sidewalk grade, roadway grade, or an intermediate grade between the sidewalk and street. Separated bike lanes can be designed to serve one-way bicyclist traffic or two-way bicyclist traffic.



Separated Bikeway (Class IV)

Bicycle Lanes (Class II)

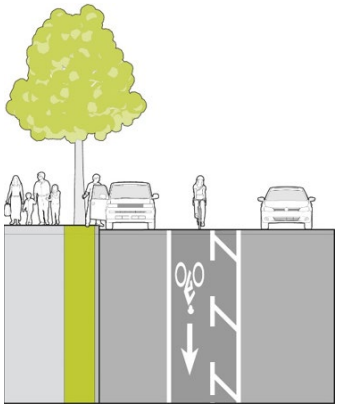
Bike lanes provide an exclusive space for bicyclists in the roadway. Bike lanes are delineated with lines and symbols on the roadway surface. Bike lanes are for one-way travel and are normally provided in both directions on two-way streets or on one side of a one-way street. Bicyclists may leave the bike lane as necessary to make turns, pass other bicyclists, avoid debris, or other potential conflicts or hazards, or to properly position themselves for other necessary movements.



Bicycle Lane (Class II)

Buffered Bicycle Lanes (Class II)

Buffered bike lanes are created by painting a buffer zone between the bike lane and the adjacent travel lane. Buffers are typically used between bike lanes and motor vehicle travel lanes to increase bicyclists' comfort. However, buffers can also be painted in the "door zone" between the right edge of the bike lane and the parking lane in locations with high parking turnover to discourage bicyclists from riding too close to parked vehicles.



Buffered Bicycle Lane (Class II)

Urban Bicycle Routes (Class III)

Urban bike routes are neighborhood streets where the travel lane is shared between bicyclists and motorists. Urban bicycle routes are designed for lower speeds and average daily traffic below 3,000 vehicles. These facilities may be marked with sharrow pavement markings and bicycle signage to alert drivers that they are sharing the road with non-motorized users.

Bicycle Boulevards (Class III)

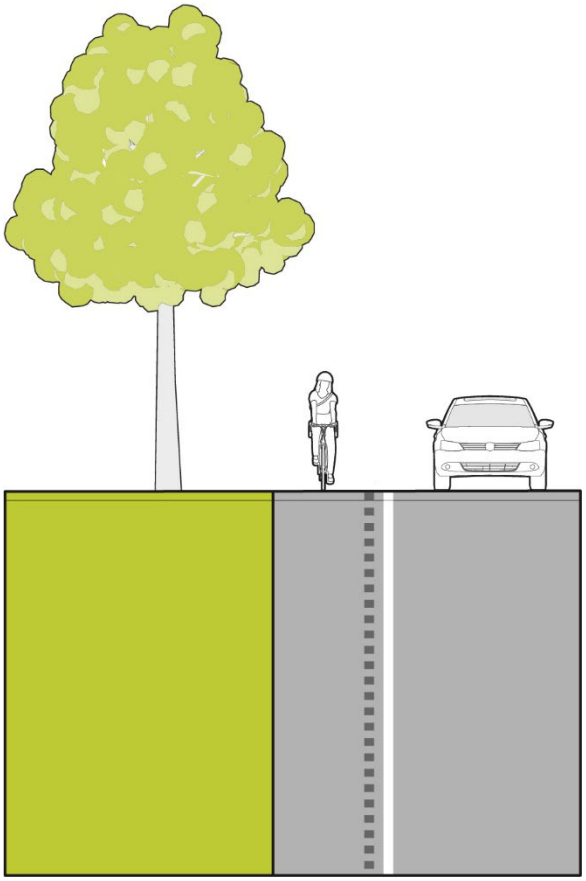
Like bicycle routes, bicycle boulevards are designed for bicyclists to ride with vehicle traffic. However, they emphasize slow vehicle speeds and are often located on quitter, residential streets. Traffic calming treatments are often employed on bicycle boulevards to slow traffic, including speed humps, traffic diverters, pavement markings, and more.



Bicycle Boulevard (Class III)

Rural Bicycle Routes (Class III)

In rural areas, rural bicycle routes are applicable on roadways with posted speed limits of less than 35 mph.[3] Bicyclists are instructed to share the lane with vehicle traffic or ride in the shoulder. This type of facility is typical where dedicated bikeways either will not fit on the street or would not be appropriate given the surrounding context.



Rural Bicycle Route (Class III)

Unclassified Bicycle Routes

Unclassified bike routes are rural roadways popular with recreational bicyclists that have no dedicated bike facilities and posted speed limits of 35 mph or greater. The high posted speed limits preclude these roads from being Bicycle Routes, but a designation acknowledges that bicyclists use these roads.

Bicycle Parking

Bicycle parking enhances the effectiveness of bicycle networks by providing locations for the secure storage of bicycles at the end of a trip. Sometimes called visitor parking, short-term parking is intended for shorter stays at locations such as shops, recreational facilities, businesses, and other institutions. Bicycle parking requires far less space than automobile parking; in fact, ten bicycles can typically park in the area needed for a single car.

Long-term bike parking is intended for residents in multi-unit buildings, workers, transit users, and others not attending to their bicycle for longer periods of time (generally two hours or longer). Typically used for long-term bicycle parking, bicycle lockers are secure, locked boxes that store a single bicycle. Bicycle lockers are concentrated in the City of Napa, but they are also available in Calistoga, Yountville, and American Canyon.

BikeLink cards grant users access to long-term bicycle parking lockers. In some cases, larger housing or commercial sites may have dedicated indoor bike rooms or other long-term bicycle storage options.

Bicycle parking locations shown in maps throughout this plan were mapped utilizing Survey 123, an online GIS-based data collection platform. Volunteer data collectors were recruited by the Napa County Bicycle Coalition and trained on data collection by NVTA staff. Volunteers contributed many dozens of hours identifying existing bike parking locations throughout Napa County and collecting information about the type of parking and compliance with bike parking best practices.

Pedestrian Facilities

Sidewalks

Sidewalks play a critical role in the character, function, enjoyment, and accessibility of neighborhoods, main streets, and other community destinations. In addition to providing space for

[3] SB 1216: https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB1216

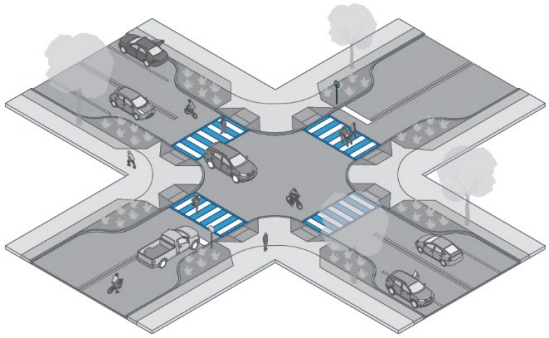
pedestrians separated from motor vehicles, sidewalks also accommodate street trees and other plantings, stormwater infrastructure, streetlights, and bicycle parking.

Sidewalks vary by street type and expected pedestrian activity. Sidewalks along downtown corridors may be wider to accommodate window shopping, higher pedestrian volumes, and street amenities like benches and trash receptacles, while neighborhood sidewalks are often narrower. Other characteristics that may impact sidewalk width include building scale, character of the surrounding environment, or available right-of-way.

Marked Crosswalks

Legal crosswalks exist at all locations where sidewalks meet the roadway, regardless of whether pavement markings are present. Drivers are legally required to yield to pedestrians at intersections, even when there are no pavement markings for crosswalks.

Providing marked crosswalks communicates to drivers that pedestrians may be present and helps guide pedestrians to locations where they should cross the street. In addition to pavement markings, crosswalks may include signals/beacons, warning signs, and raised platforms.



Marked Crosswalks

Unmarked Crosswalks

Even when no marked crosswalk is present, pedestrians have the right-of-way to cross at most intersections. This is known as an unmarked crosswalk. Unmarked crosswalks are part of the pedestrian network and are frequently used by pedestrians when no other crossing infrastructure is present.

Unmarked crosswalks are appropriate along streets with minimal levels of traffic. However, marked crosswalks and crossing enhancements should be considered where at key crossing locations on streets with more than minimal levels of traffic.

Curb Ramps

Curb ramps transition pedestrian from the sidewalk to the street. Curb ramps improve accessibility specifically for people with disabilities, but benefit all pedestrians, including those pushing strollers, grocery carts, suitcases, or bicycles. Curb ramps should meet requirements defined by Right-of-Way Accessibility Guidelines (PROWAG), including proper slopes, grade breaks, side treatments, and detectable warning surfaces. In reality, many curb ramps throughout Napa County may not meet all PROWAG requirements.

Crossing Enhancements

Safety at crossing locations may be enhanced through a variety of physical infrastructure measures, lighting, signage, and policy. Many of these crossing enhancements already exist in parts of the county or are being considered for implementation. For more information, see Appendix D: Treatment Toolkit.

- Rectangular rapid flashing beacons (RRFB) and pedestrian hybrid beacons (PHB): alert drivers to pedestrian activity at midblock crossings, or at intersections where traffic signals or stop signs are not present
- Pedestrian scale lighting: typically, shorter than roadway-scale light fixtures, lamps are installed along corridors to illuminate walkways or at intersections to enhance crossing safety at night or in low-light conditions
- Daylighting: restricts parking within 20-feet of a crossing location to improve sightlines (required in California under AB 1330).

- Curb extensions: extension of the sidewalk at a crossing location meant to shorten crossing distances and reduce driver speeds.
- Raised crosswalks: slow traffic and improve motorists yielding to pedestrians.
- Crossing islands: raised island located in the middle of a crossing to allow pedestrians to cross one lane of traffic at a time.

Existing Active Transportation Network

The active transportation network detailed in this section identifies dedicated pedestrian and bicycle facilities in Napa County. It is important to note that many residents who rely on active modes of transportation travel along the road network regardless of the presence of active transportation facilities.

Existing Bicycle Network

Napa County's existing bicycle facilities include denser networks of bicycle lanes, routes, and paths in more heavily populated areas with more limited connections through rural areas. Table 2.2 below lists the total mileage of each bicycle facility type by jurisdiction within Napa County. The countywide bicycle network is mapped in Figure 2.5 through Figure 2.21. Data collection for existing facilities occurred in 2024; more recently completed facilities may not appear on maps or in mileage counts.

The on-street bikeway network provides both intra-city and regional bicycle connections. Many of the County's bike lanes are in the City of Napa. These bike lanes are typically located on primary arterials and collectors with higher vehicle capacity and speeds. Bike lanes (Class II) are also present on some rural roadways, such as SR 29 and Silverado Trail, where the road shoulder is designated as the bike lane.

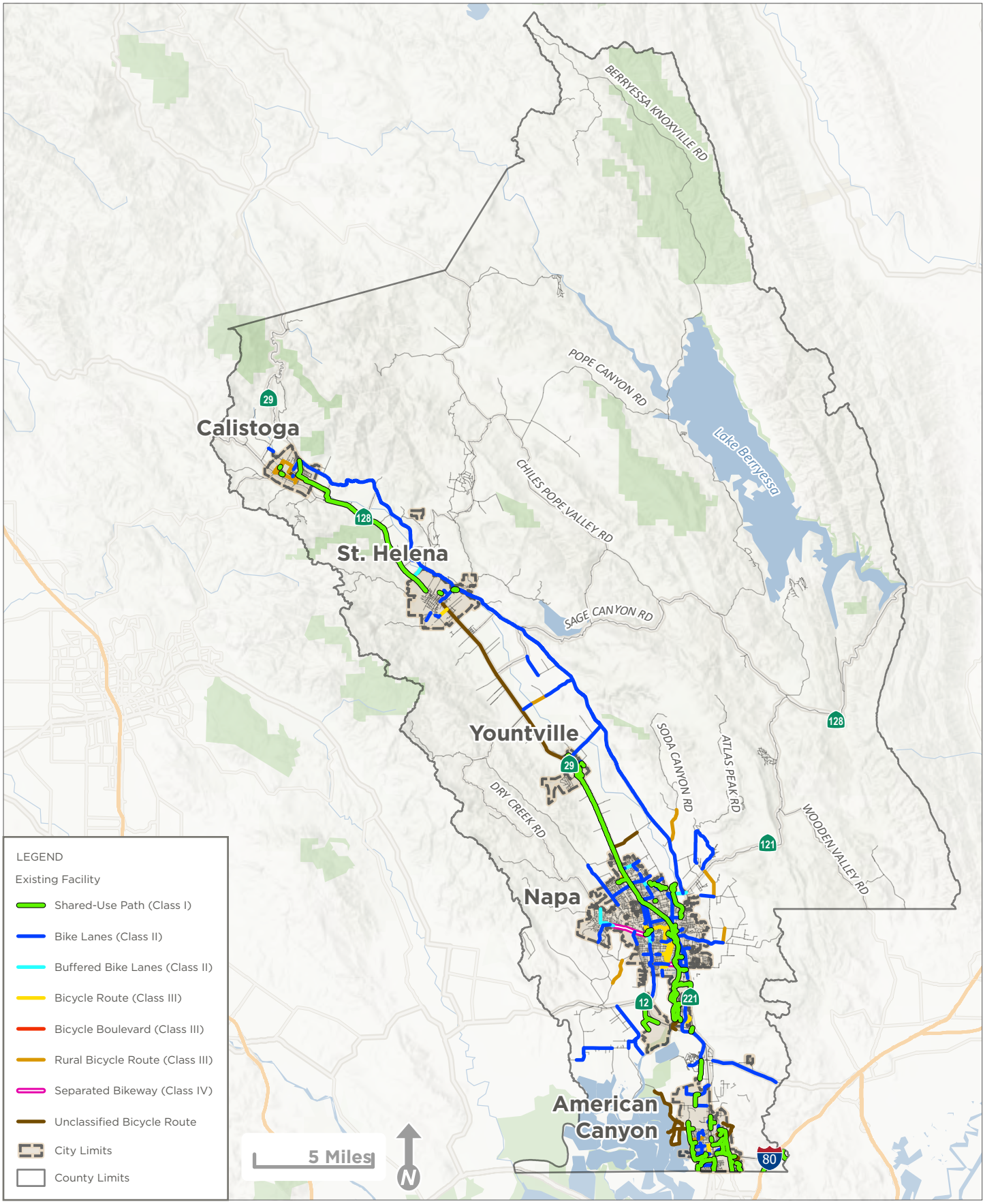
Bicycle Routes (Class III) and unclassified bicycle routes are present throughout incorporated and unincorporated parts of the County. The City of Napa has the most bicycle routes of all incorporated jurisdictions. Unclassified bicycle routes are common throughout the unincorporated County. Bicycle routes in the unincorporated County are primarily located west of American Canyon and east of the City of Napa.

The off-street shared-use path network centers around the Vine Trail, which currently has segments between Calistoga and St. Helena, and through the Town of Yountville and the City of Napa and includes other recreational facilities. Other off-street path networks provide regional bicycle connections between communities, as well as within some jurisdictions such as the City of Napa, American Canyon, and the Town of Yountville.

Table 2.2: Napa Countywide Existing Bicycle Facility Mileage

Jurisdiction	Shared Use Paths (Class I)	Separated Bikeways (Class IV)	Bicycle Lanes (Class II) *	Bicycle Routes (Class III) *	Unclassified Bicycle Routes	Total
City of Calistoga	2.3		1.6	3.5	0.4	7.8
City of St Helena	1.3		1.8	0.6	0.9	4.6
Town of Yountville	2.4		0.7	0.4		3.5
City of Napa	18.6	1.9	28.4	5.3		54.2
City of American Canyon	11.0		6.0	1.1	1.9	20.0
County of Napa	11.5		52.2	5.1	14.7	83.5
Total	**47.0**	**1.9**	**90.7**	**16.0**	**17.9**	**173.6**

**In this table, buffered bicycle lanes are included under Bicycle Lanes (Class II) and rural bicycle routes, and bicycle boulevard are included under Bicycle Routes (Class III).*

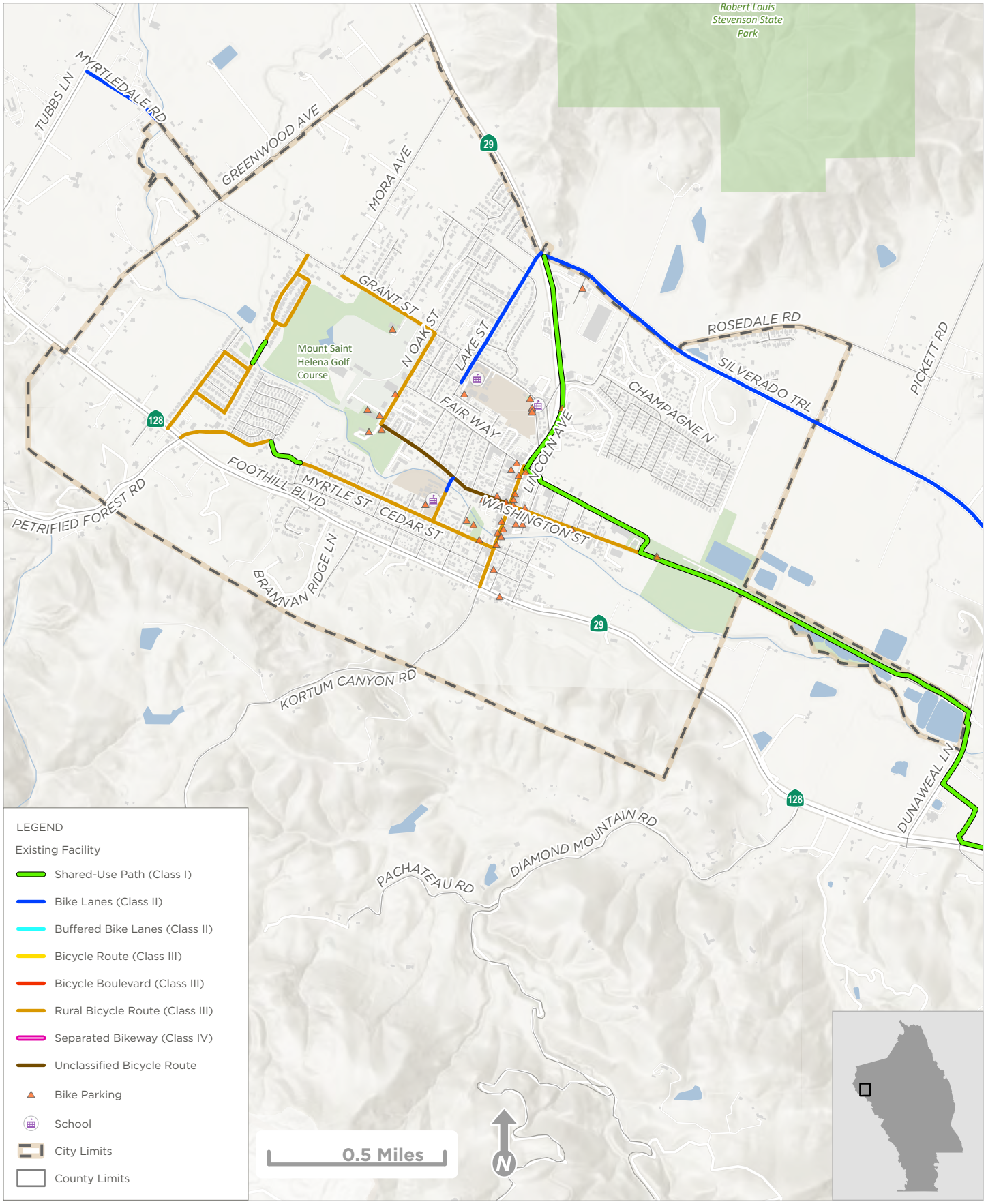


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Napa Countywide
Existing Bicycle Facilities

FIGURE 2.5

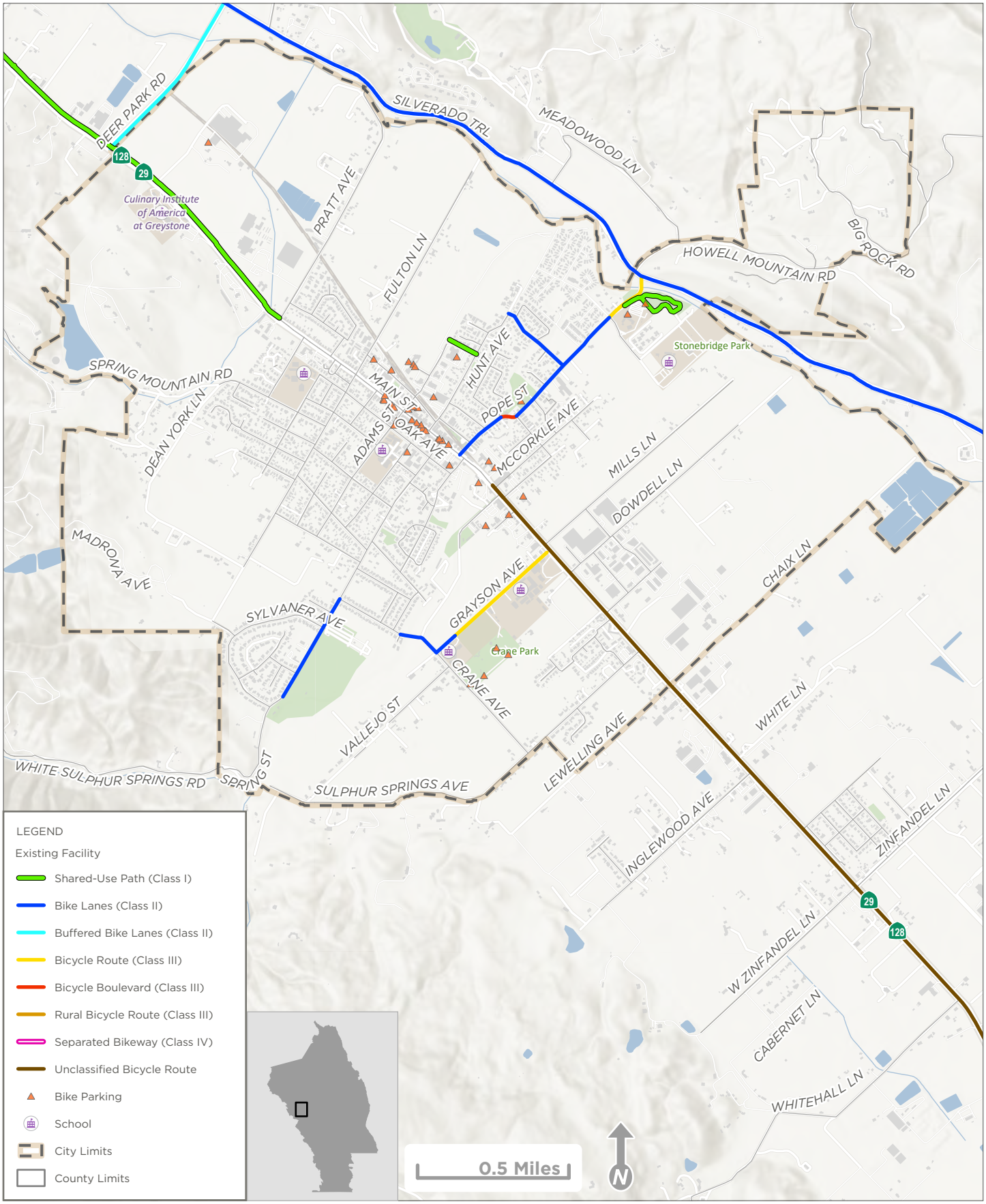


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga
Existing Bicycle Facilities

FIGURE 2.6

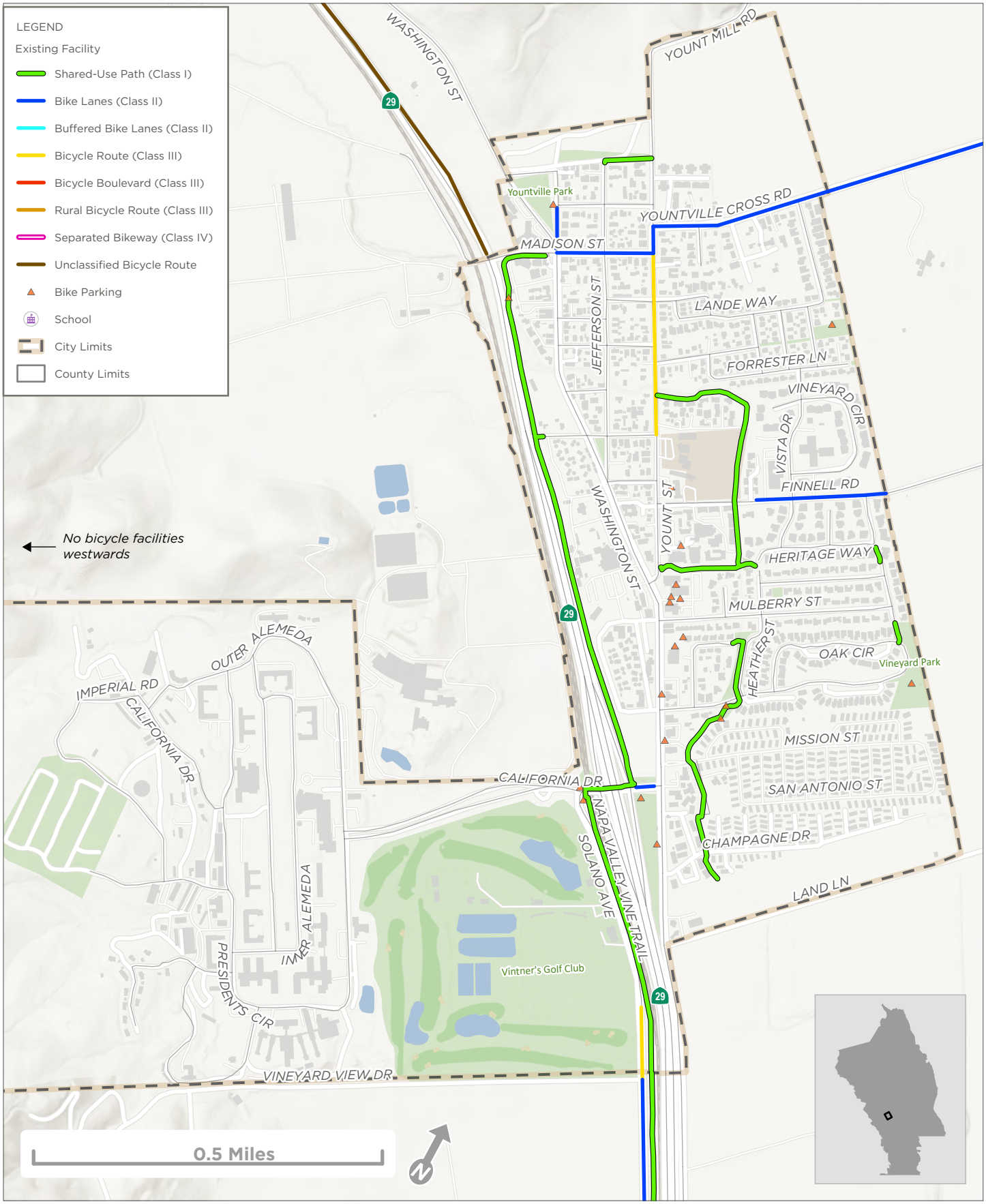


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena
Existing Bicycle Facilities

FIGURE 2.7

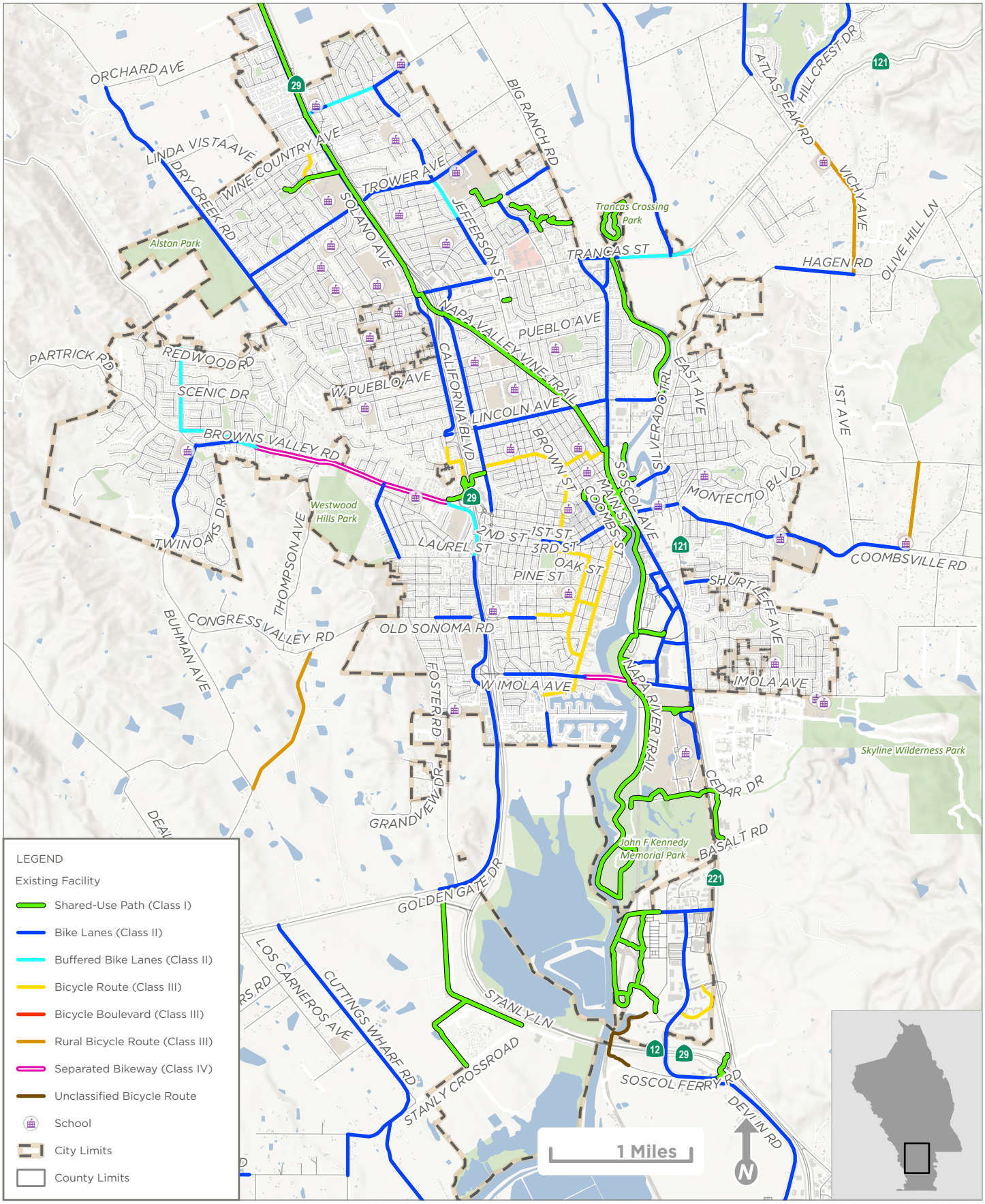


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville
Existing Bicycle Facilities

FIGURE 2.8

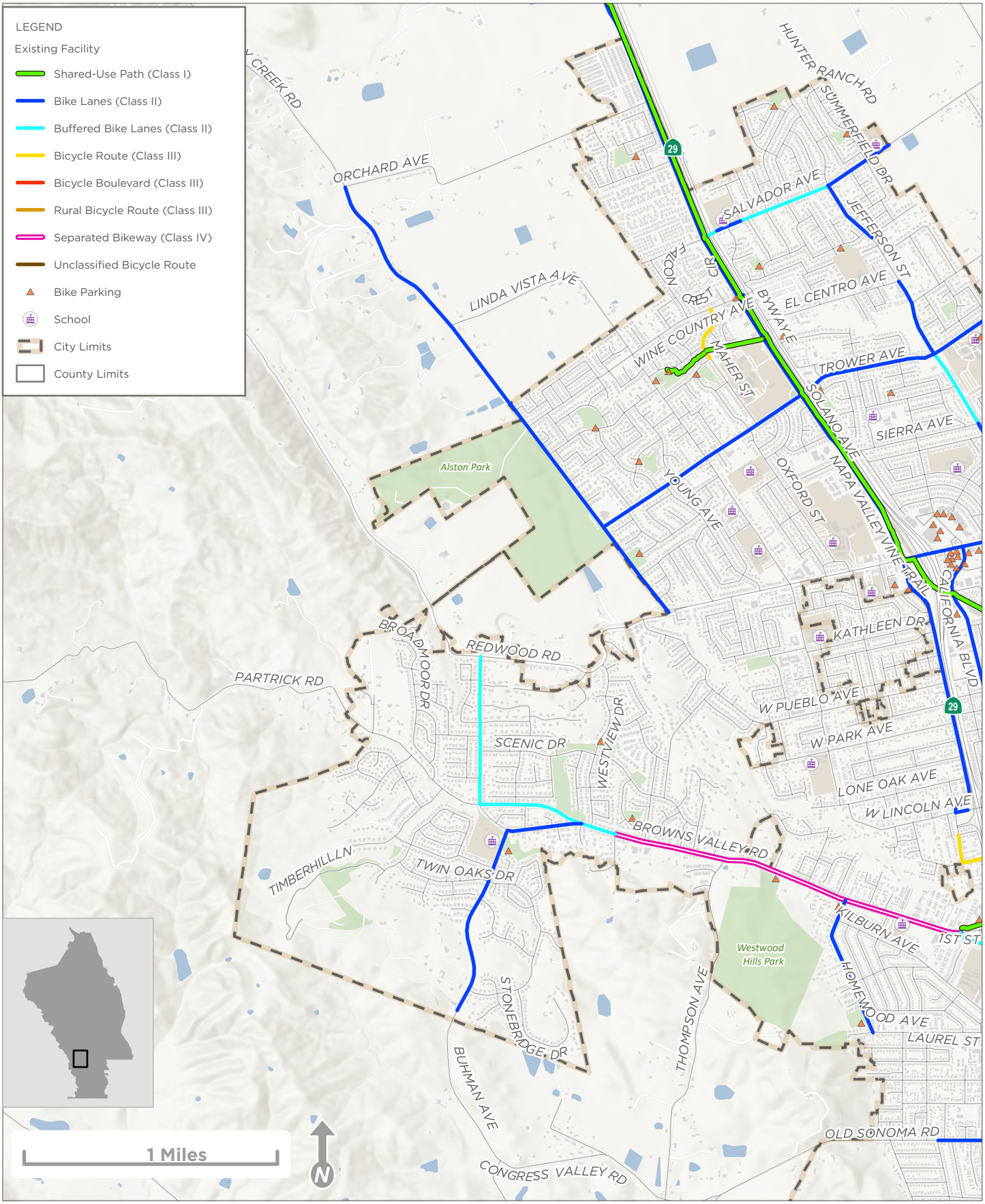


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa
Existing Bicycle Facilities

FIGURE 2.9

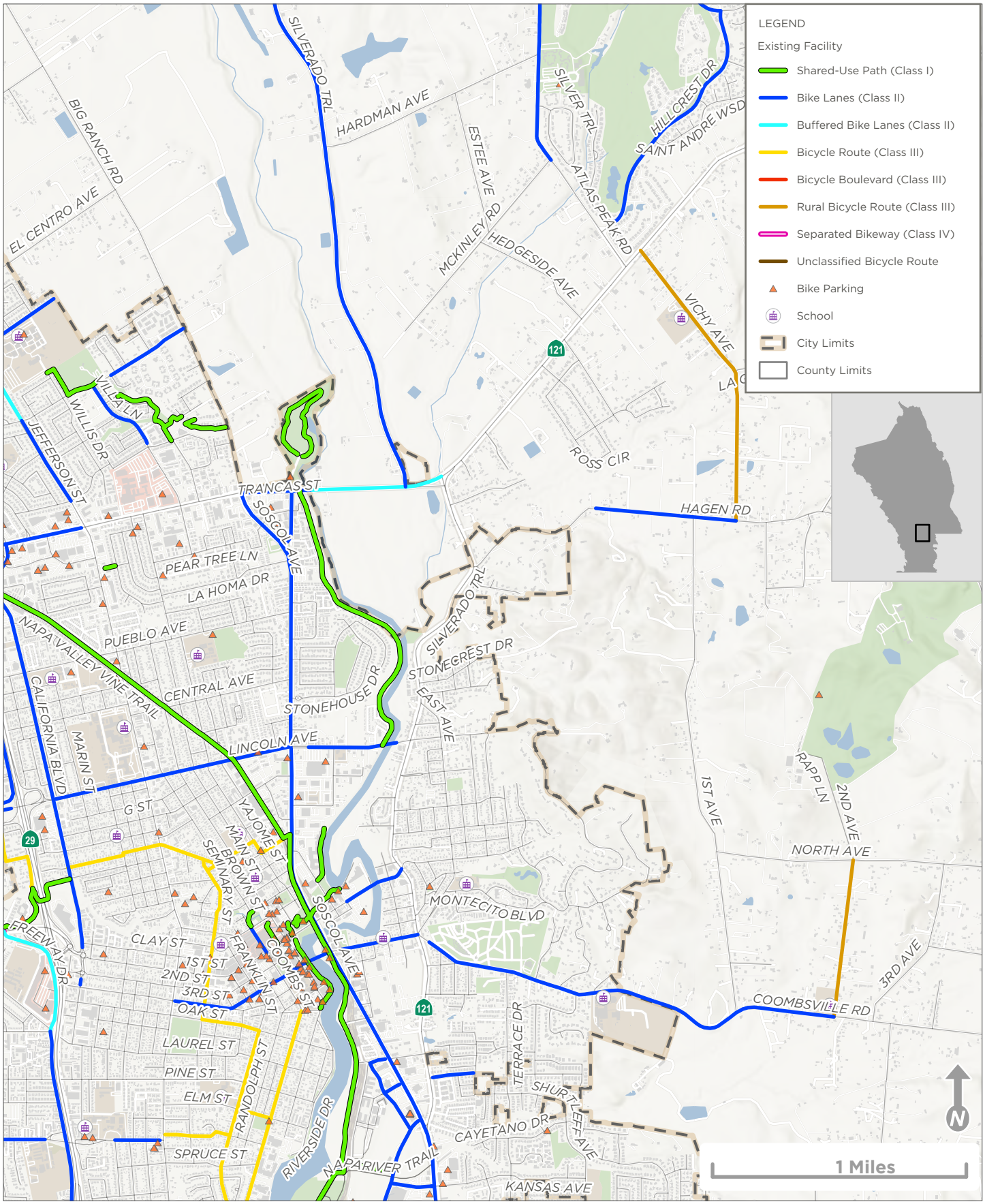


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest
Existing Bicycle Facilities

FIGURE 2.10

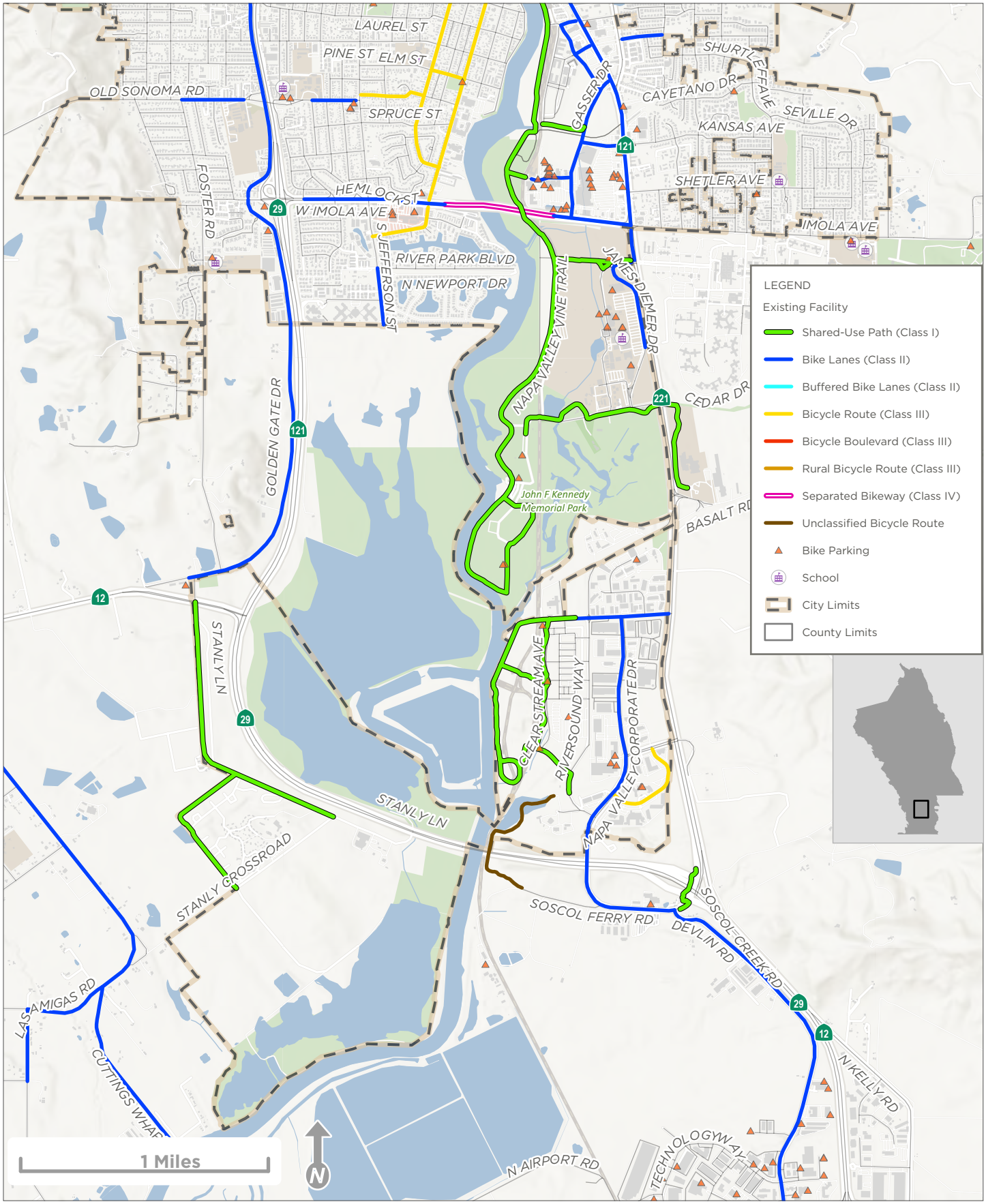


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast
Existing Bicycle Facilities

FIGURE 2.11

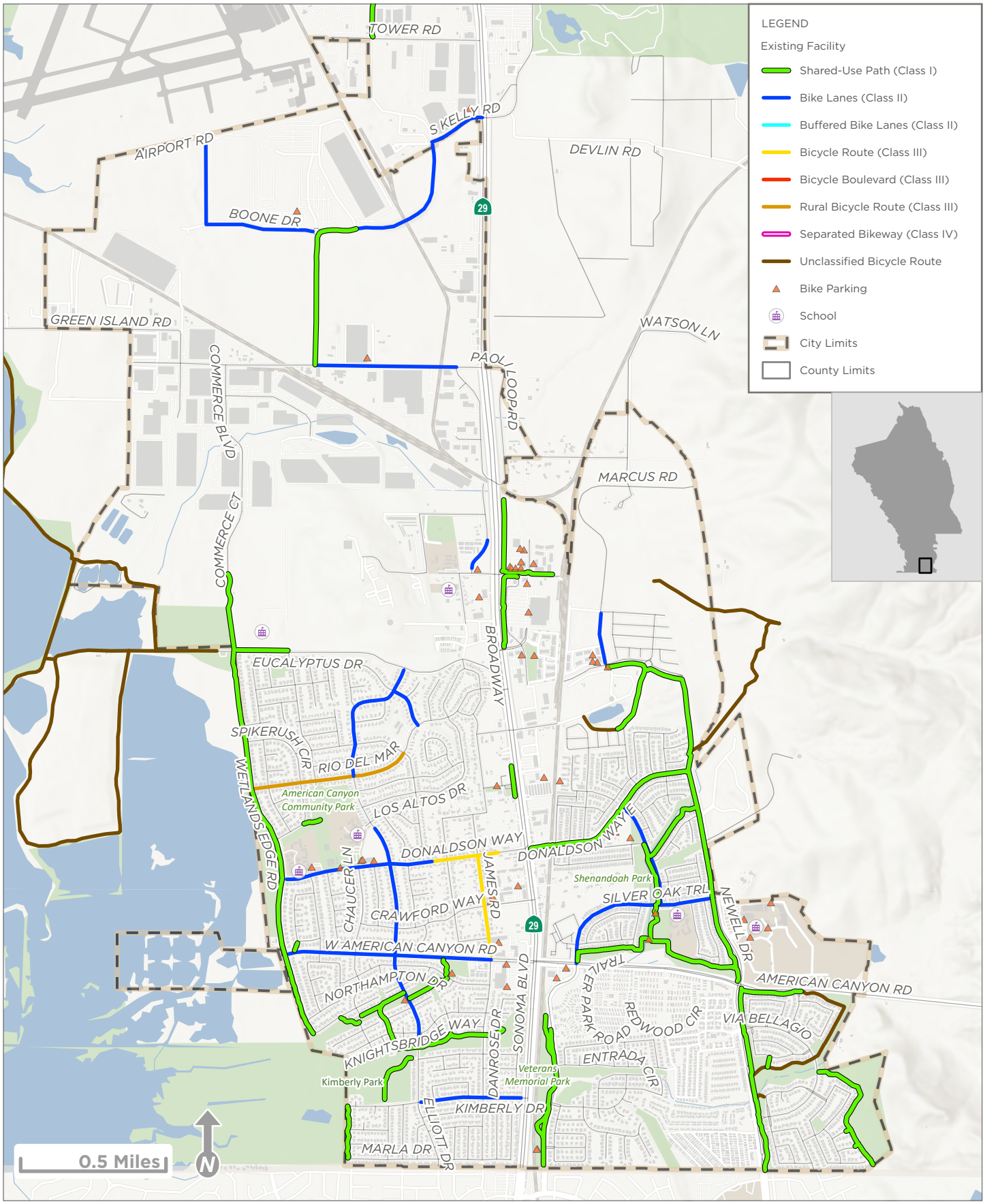


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South
Existing Bicycle Facilities

FIGURE 2.12

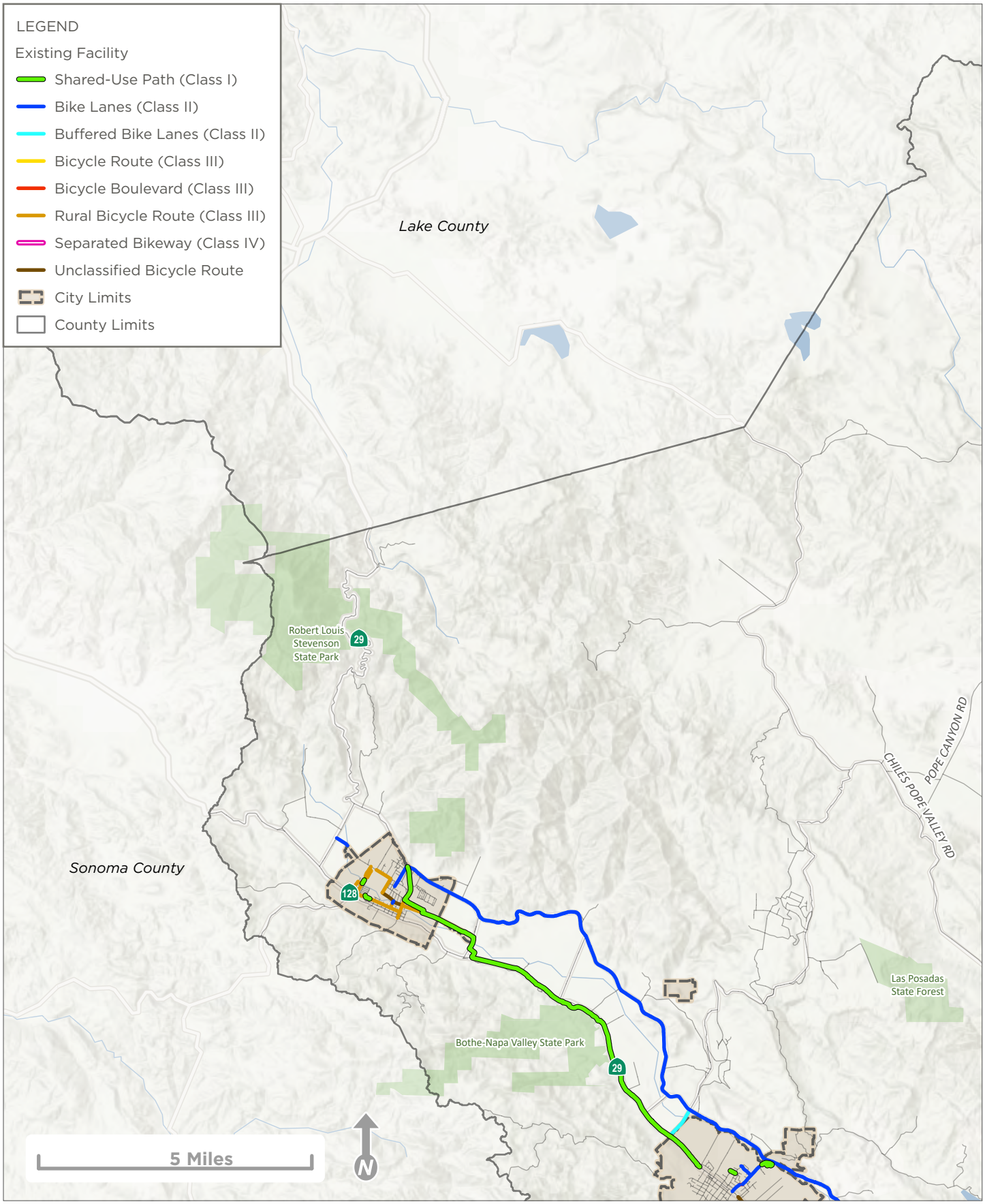


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing Bicycle Facilities

FIGURE 2.13

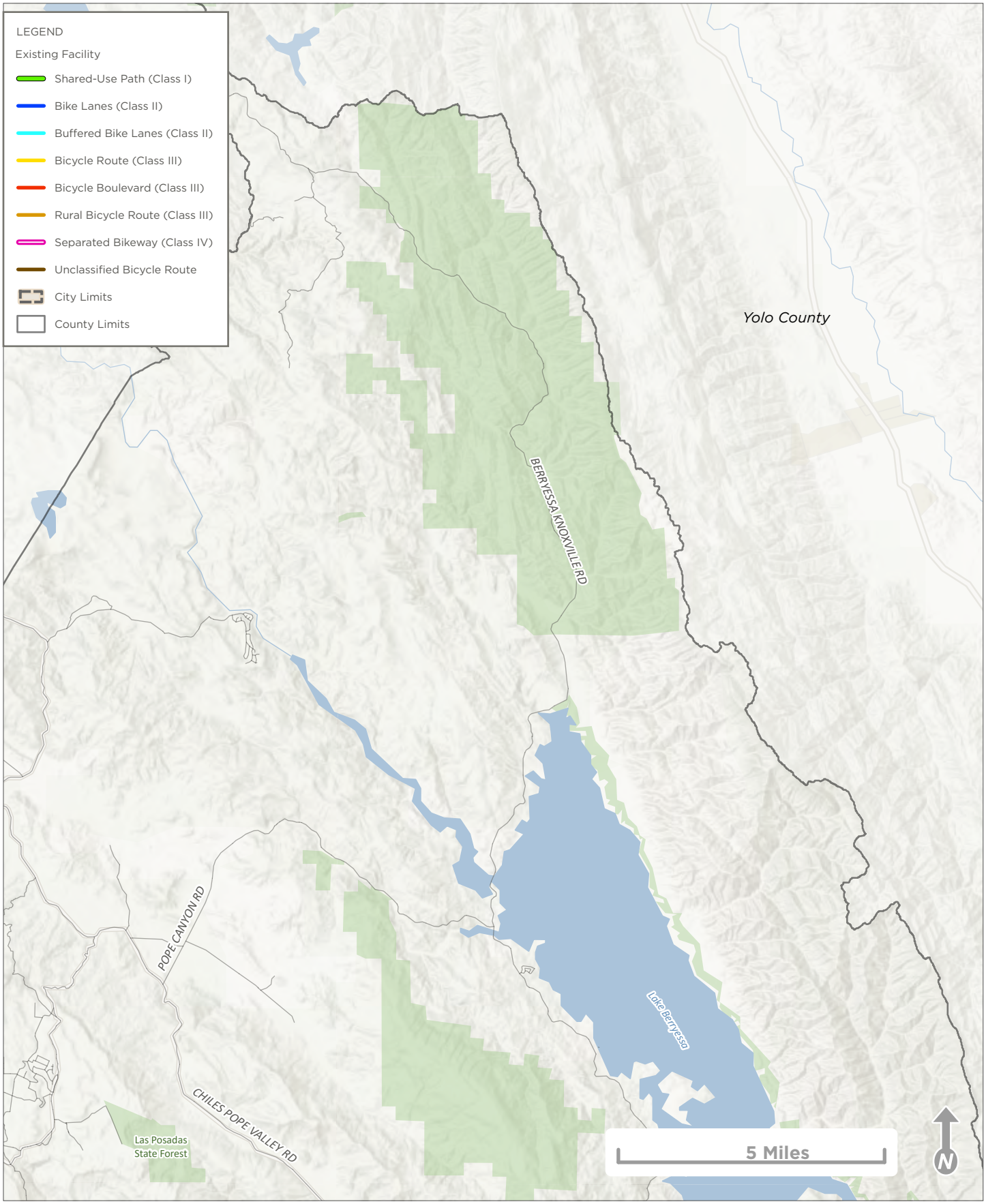


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northwest
Existing Bicycle Facilities

FIGURE 2.14

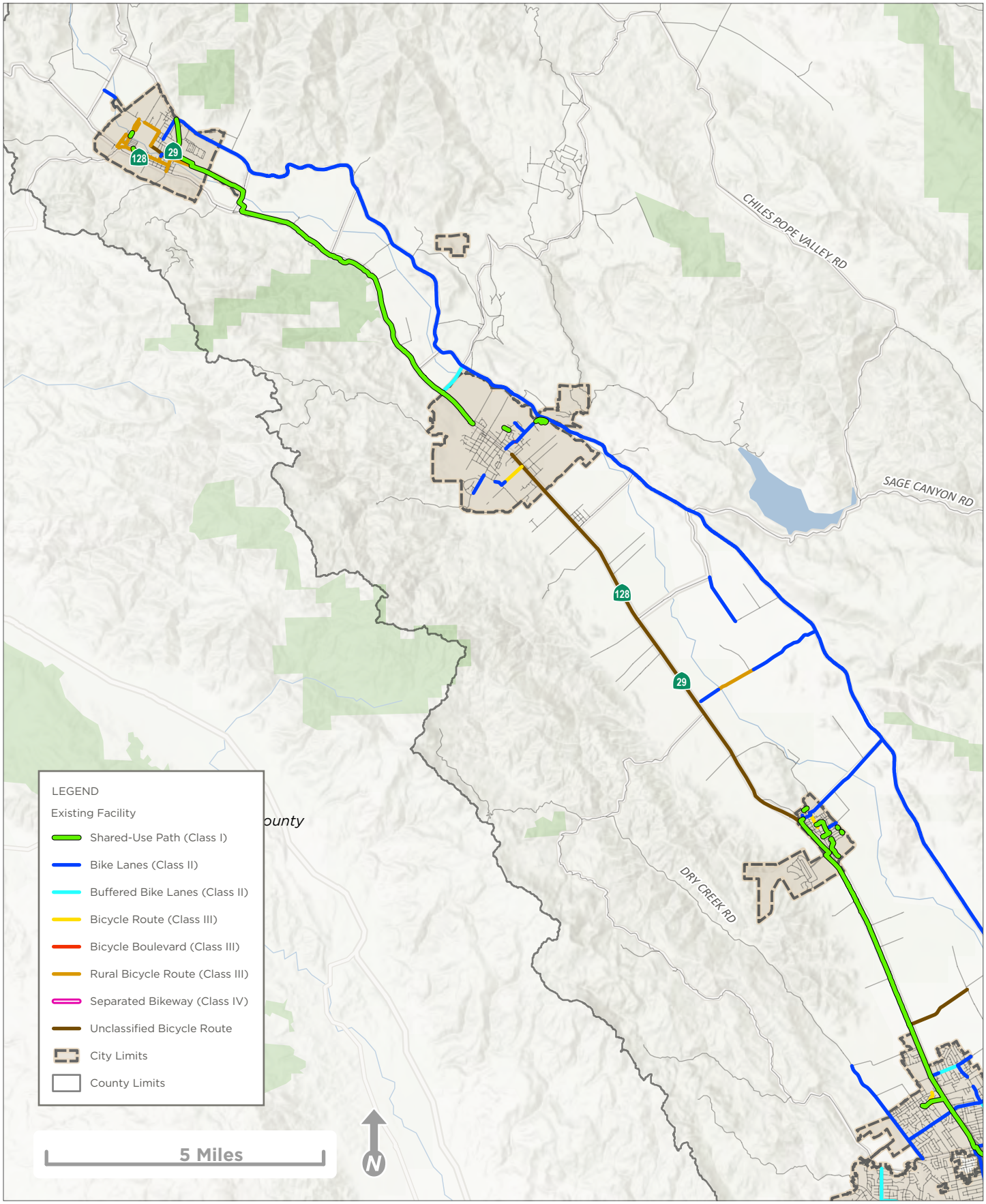


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northeast
Existing Bicycle Facilities

FIGURE 2.15



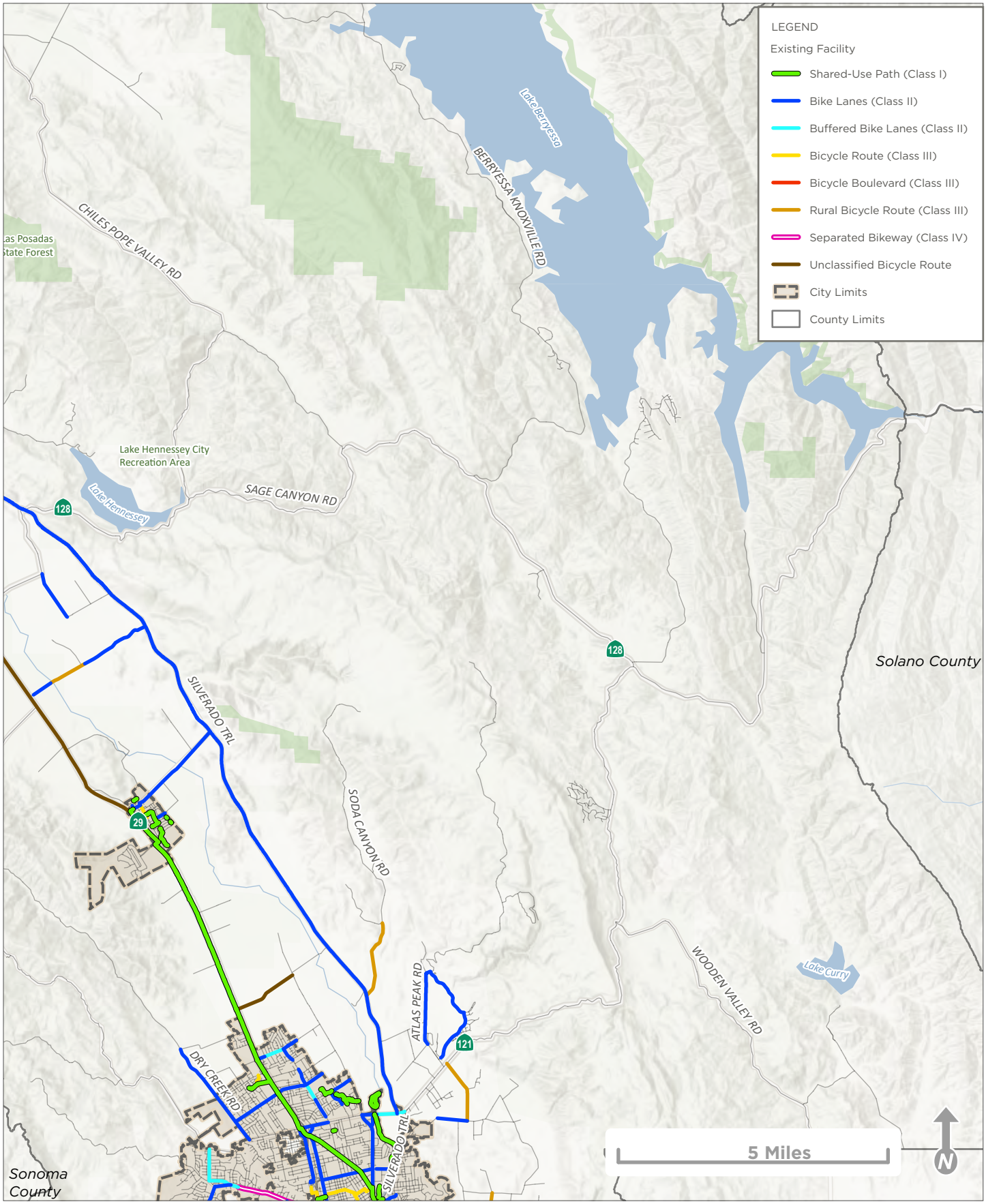
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central West

Existing Bicycle Facilities

FIGURE 2.16



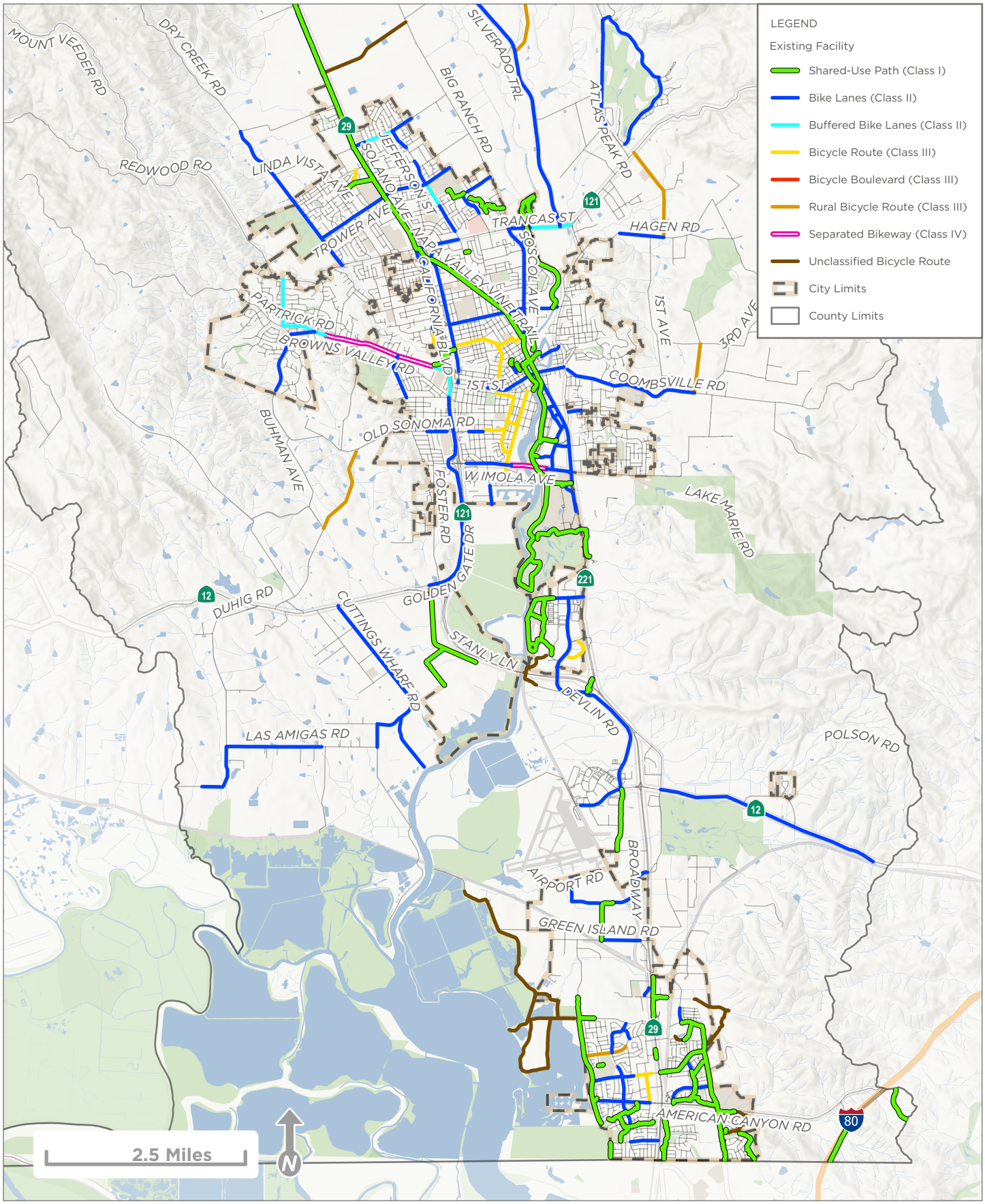
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central East

Existing Bicycle Facilities

FIGURE 2.17

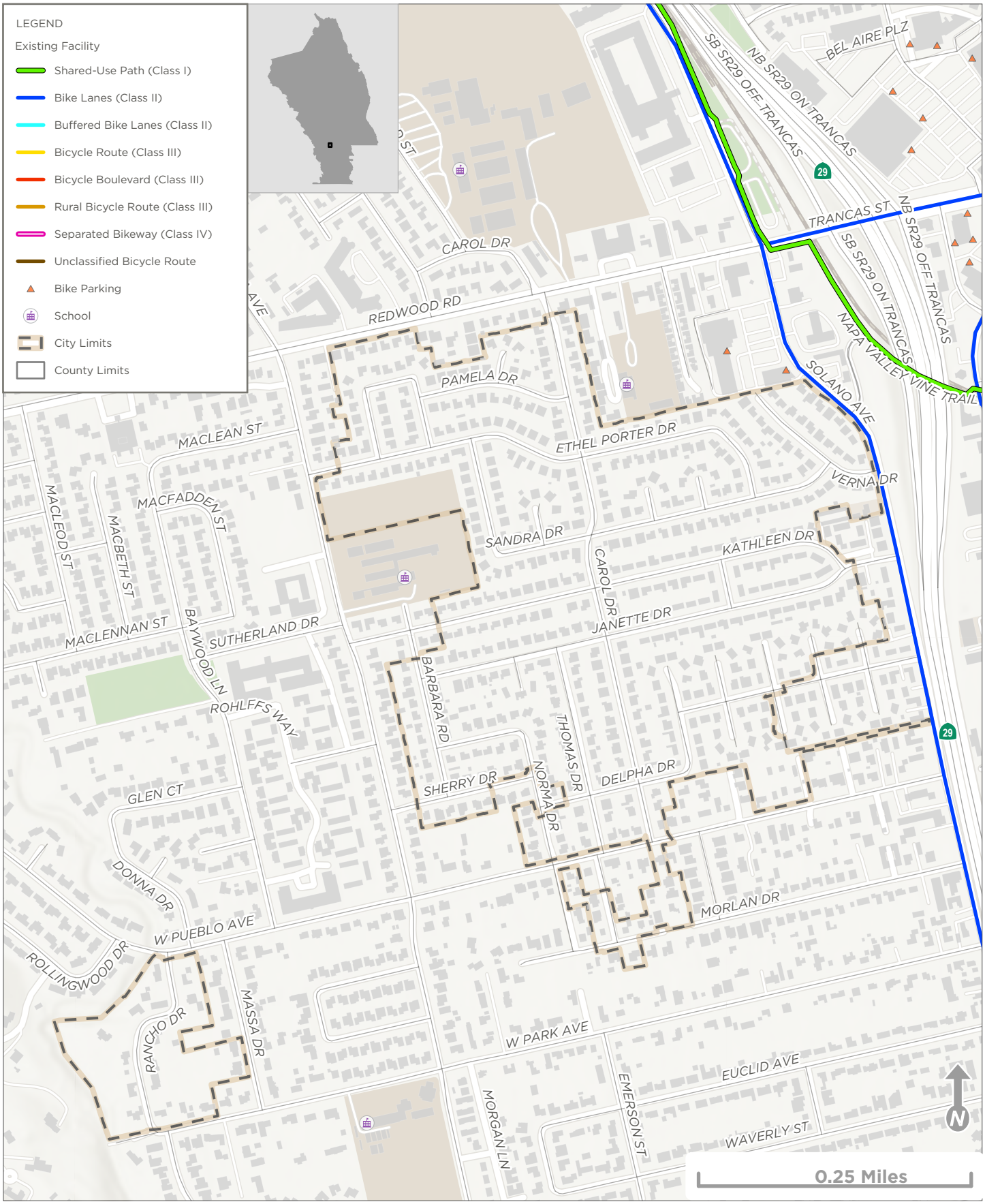


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - South
Existing Bicycle Facilities

FIGURE 2.18



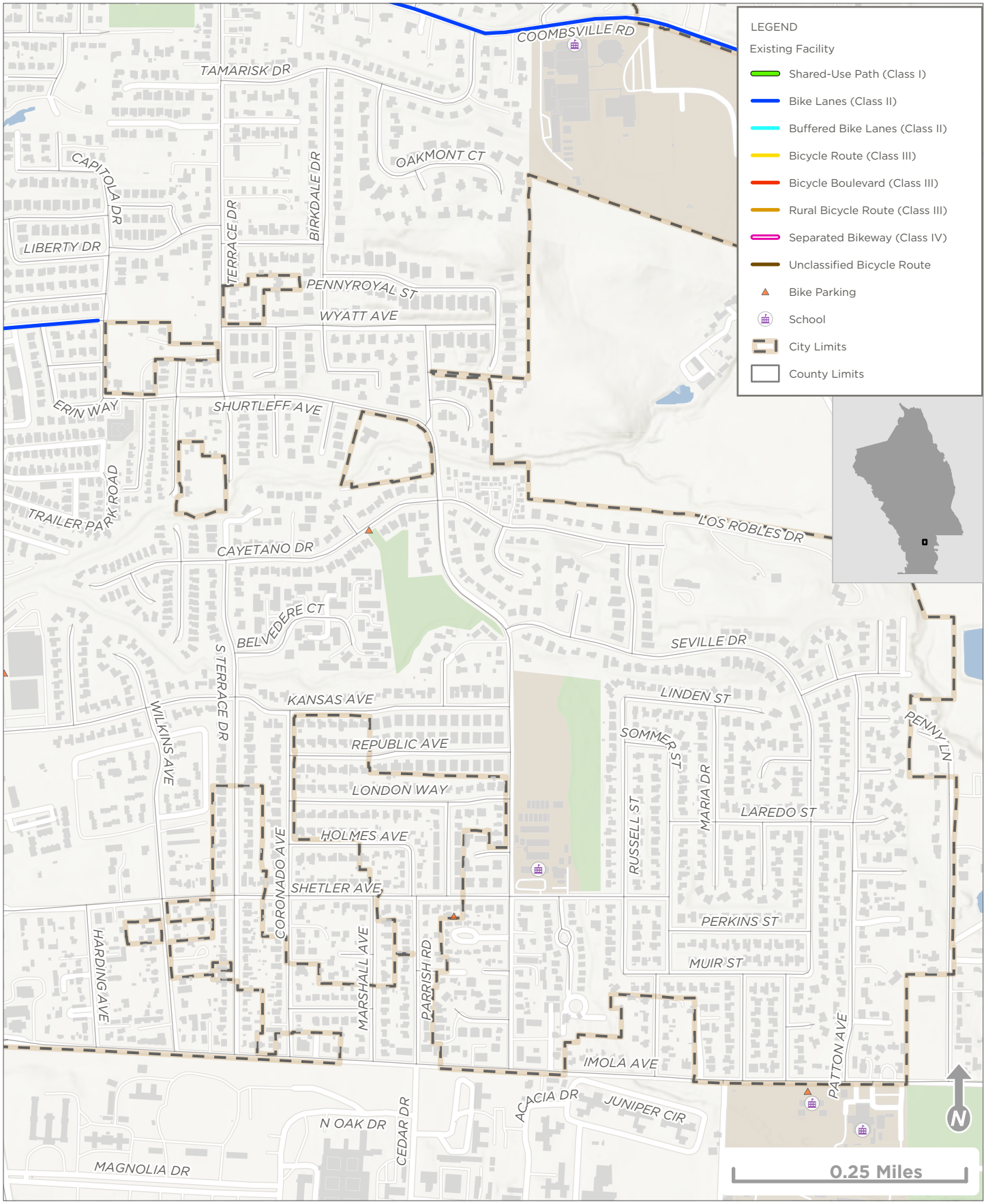
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - West Pueblo

Existing Bicycle Facilities

FIGURE 2.19



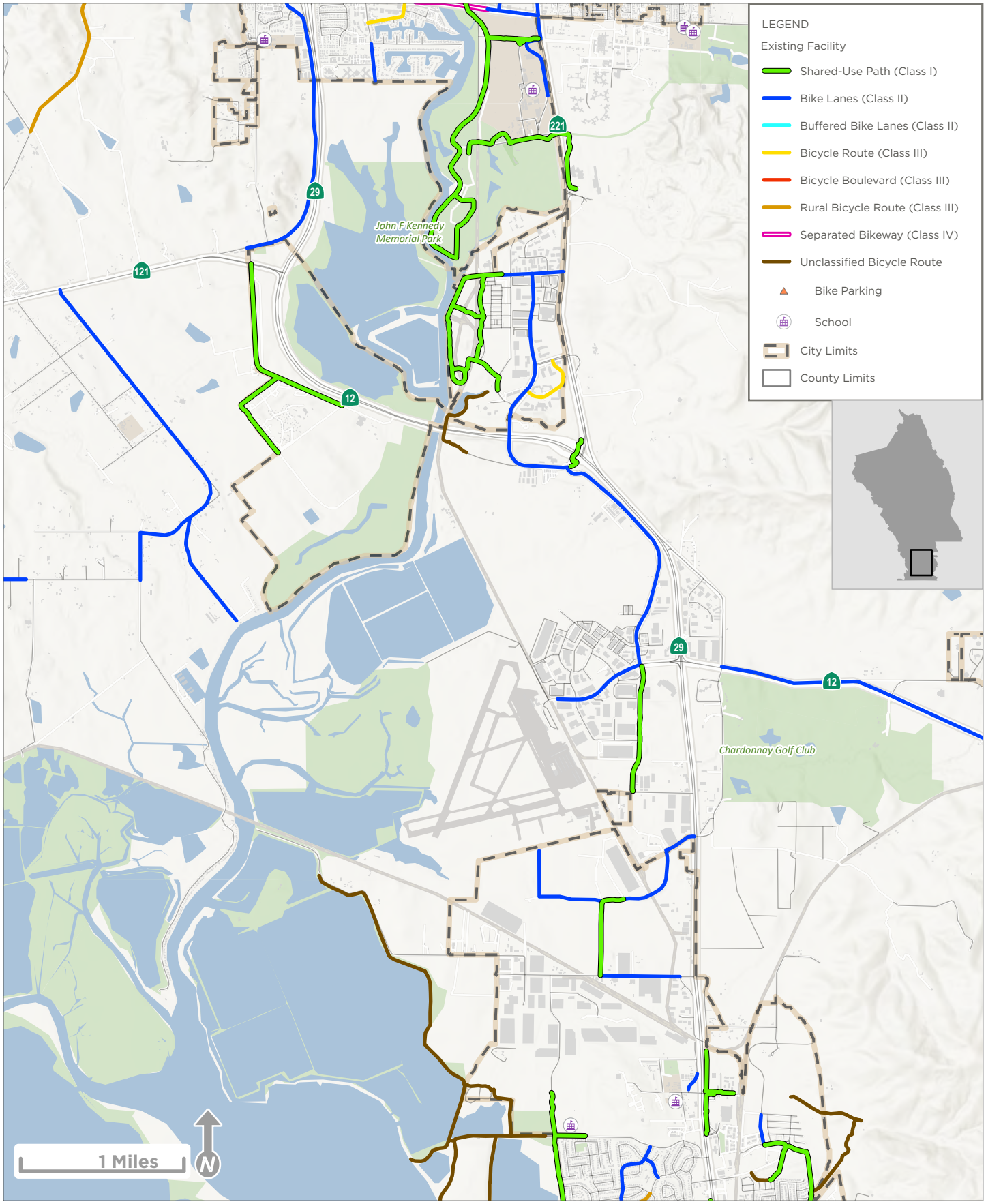
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Southeast Napa Islands

Existing Bicycle Facilities

FIGURE 2.20



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Napa / American Canyon
Existing Bicycle Facilities

FIGURE 2.21

Existing Pedestrian Network

The pedestrian network was mapped for all five incorporated jurisdictions and the four unincorporated communities of Deer Park, Angwin, Rutherford, and Oakville. Other rural communities of Pope Valley, Berryessa Highlands, and Circle Oaks were not analyzed given their removed location and limited opportunities for pedestrian facility enhancements. Existing sidewalks and shared-use paths are mapped in Figure 2.22 through Figure 2.35. Total existing facility mileage is listed by jurisdiction in Table 2.3.

The pedestrian network inventory provides information about streets with existing or missing sidewalks or paths, which will be used to develop near-term sidewalk gap closure recommendations. However, not all locations without sidewalks will be considered gaps in the network. Some rural or residential neighborhoods may not require sidewalk implementation per local guidelines, and jurisdictions may apply their own discretion where sidewalk gap projects are or are not appropriate.

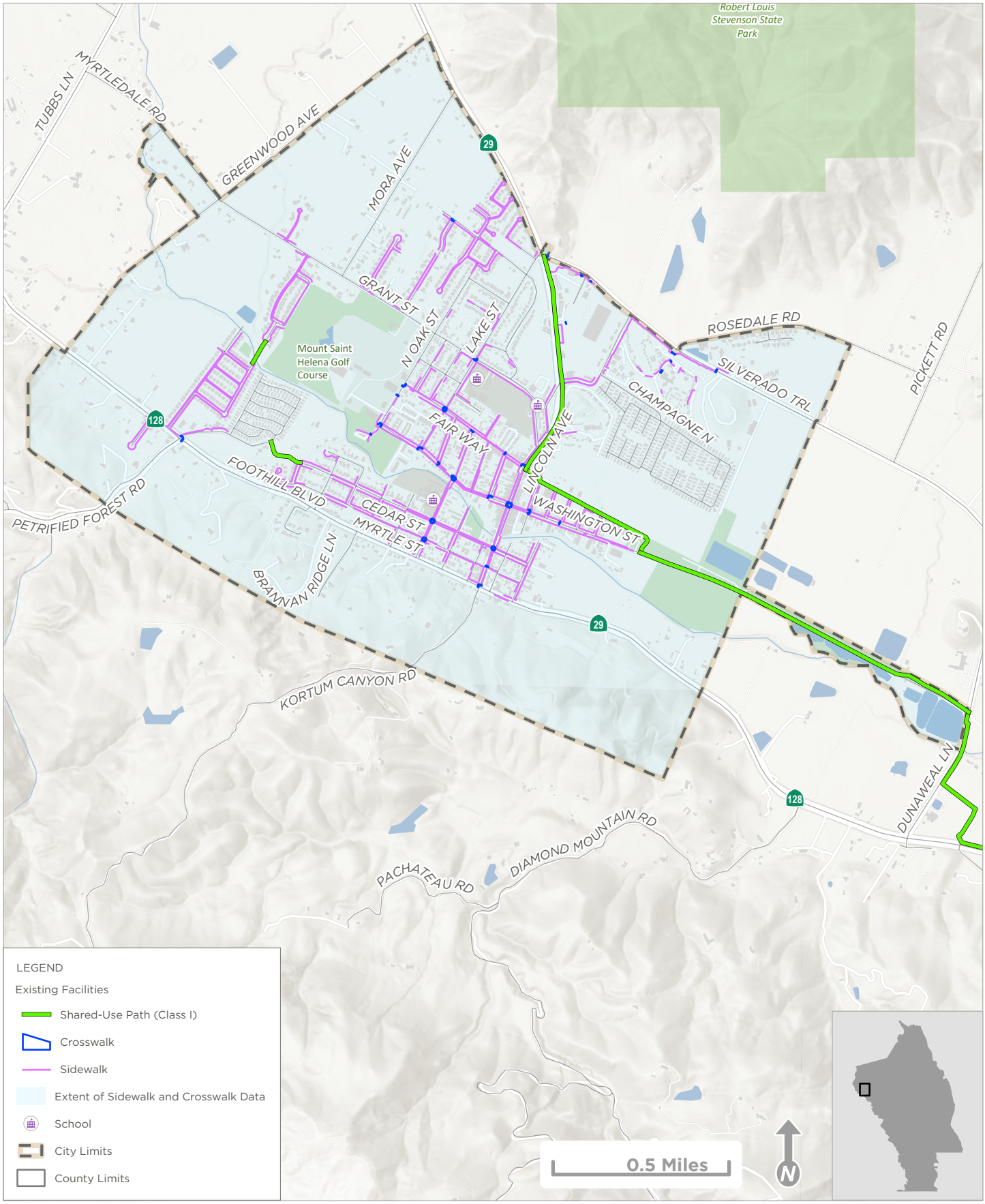
The pedestrian network provides some regional connections throughout the county, and efforts are being made to continue improving regional connectivity. Along SR 29, the Vine Trail has been constructed between Calistoga and St. Helena and between Yountville and the City of Napa. The future alignment will include connections between St. Helena and Yountville and between the City of Napa and American Canyon south to the City of Vallejo.

The unincorporated communities of Angwin, Deer Park, Rutherford, and Oakville have limited pedestrian facilities. Where present, sidewalks are generally of minimum width and offer limited connectivity to local destinations.

There are also numerous unincorporated islands or pockets of Napa County in and around the City of Napa. These areas have a limited or non-existent sidewalks with constrained right of way for new or expanded facilities, presenting long-term challenges for user safety and network connectivity.

Table 2.3: Napa Countywide Existing Pedestrian Facility Mileage

Jurisdiction	Shared Use Paths (Class I)	Sidewalks	Total Mileage
Calistoga	2.3	17.3	**19.6**
St. Helena	1.3	32.5	**33.8**
Yountville	2.4	15.0	**17.4**
City of Napa	18.6	344.5	**363.1**
American Canyon	11.0	108.1	**119.1**
County of Napa	11.5	9.3	**20.8**
Total	**47.0**	**523.1**	**570.1**



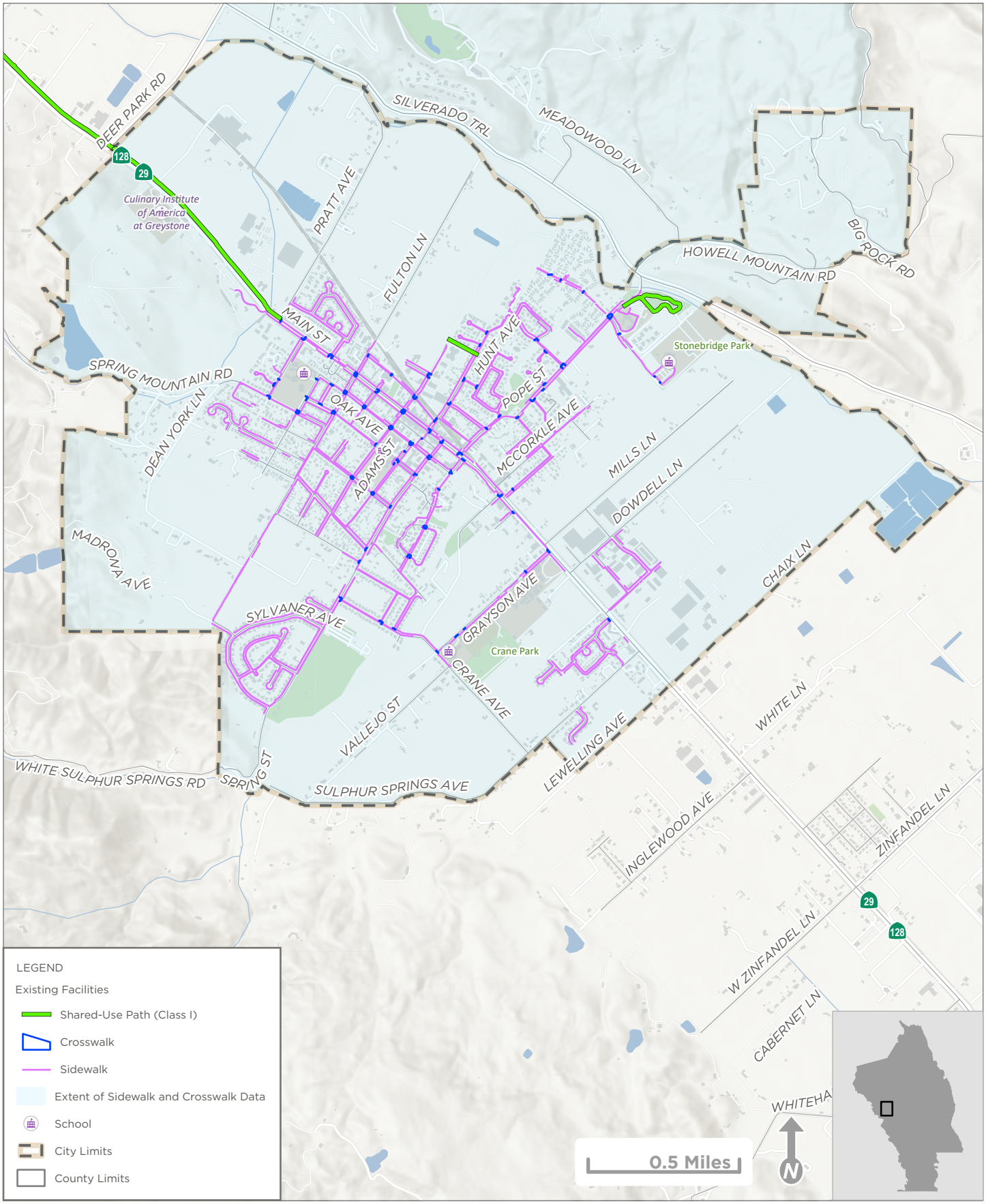
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga

Existing Pedestrian Facilities

FIGURE 2.22

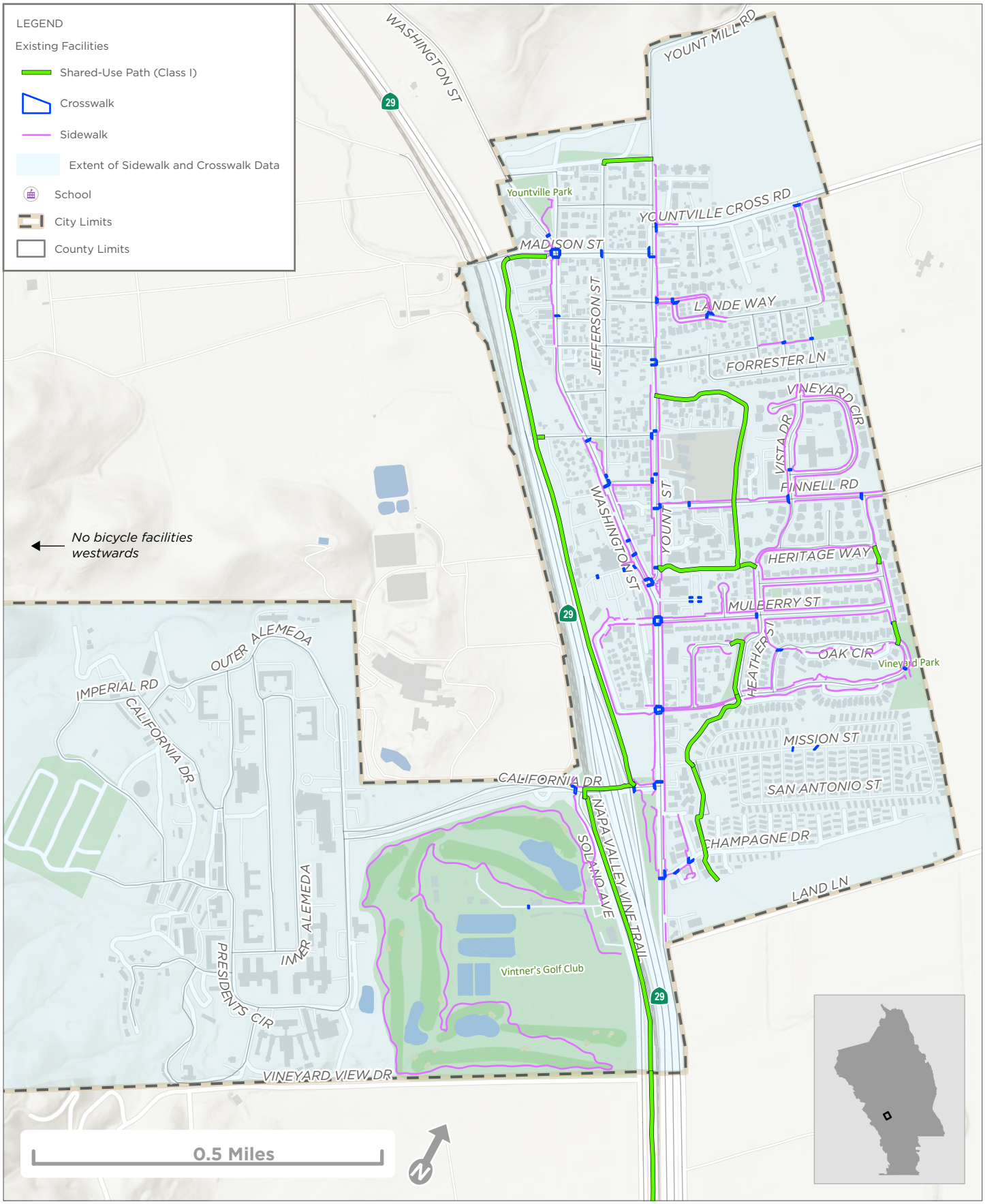


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena
Existing Pedestrian Facilities

FIGURE 2.23

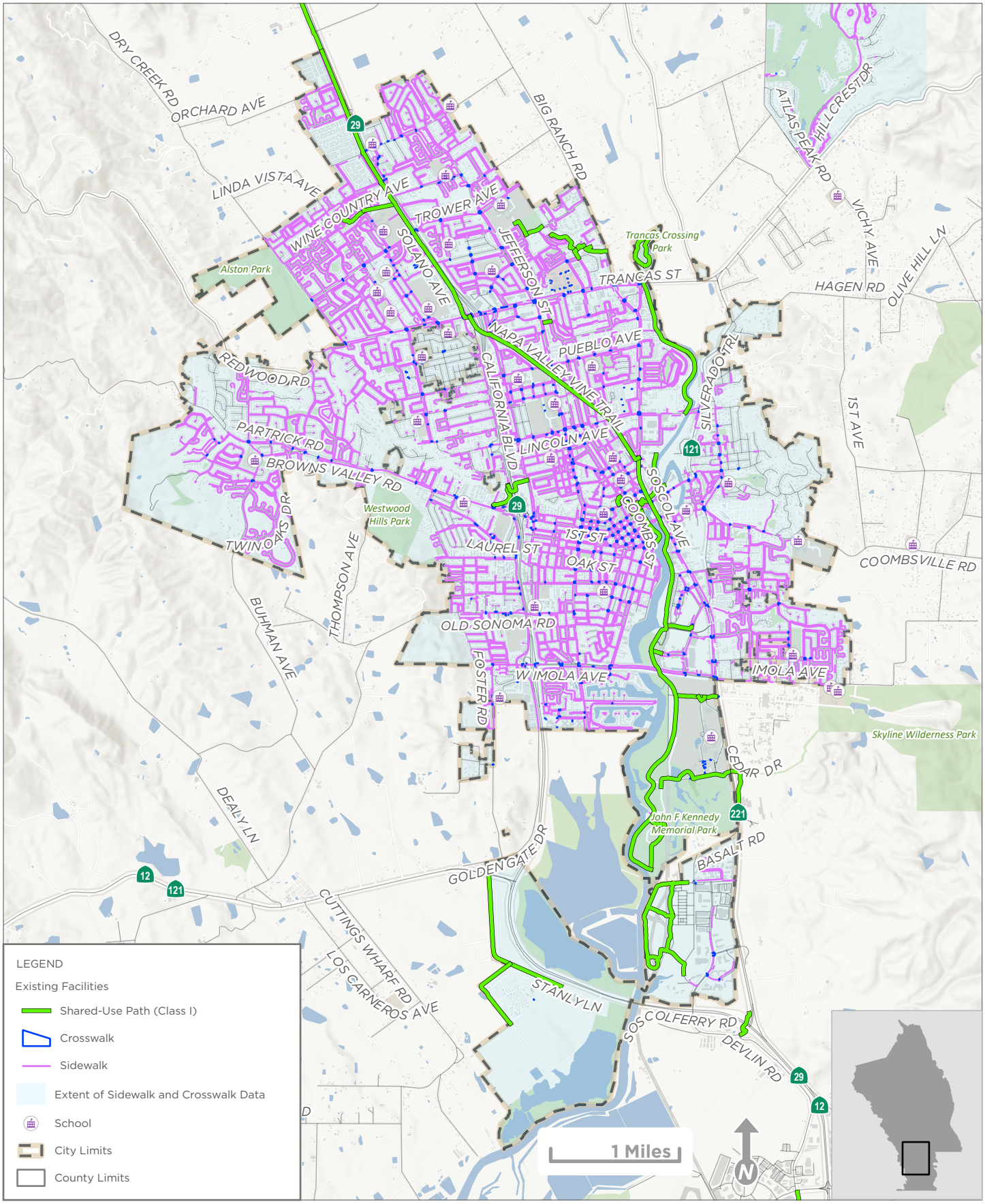


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville
Existing Pedestrian Facilities

FIGURE 2.24

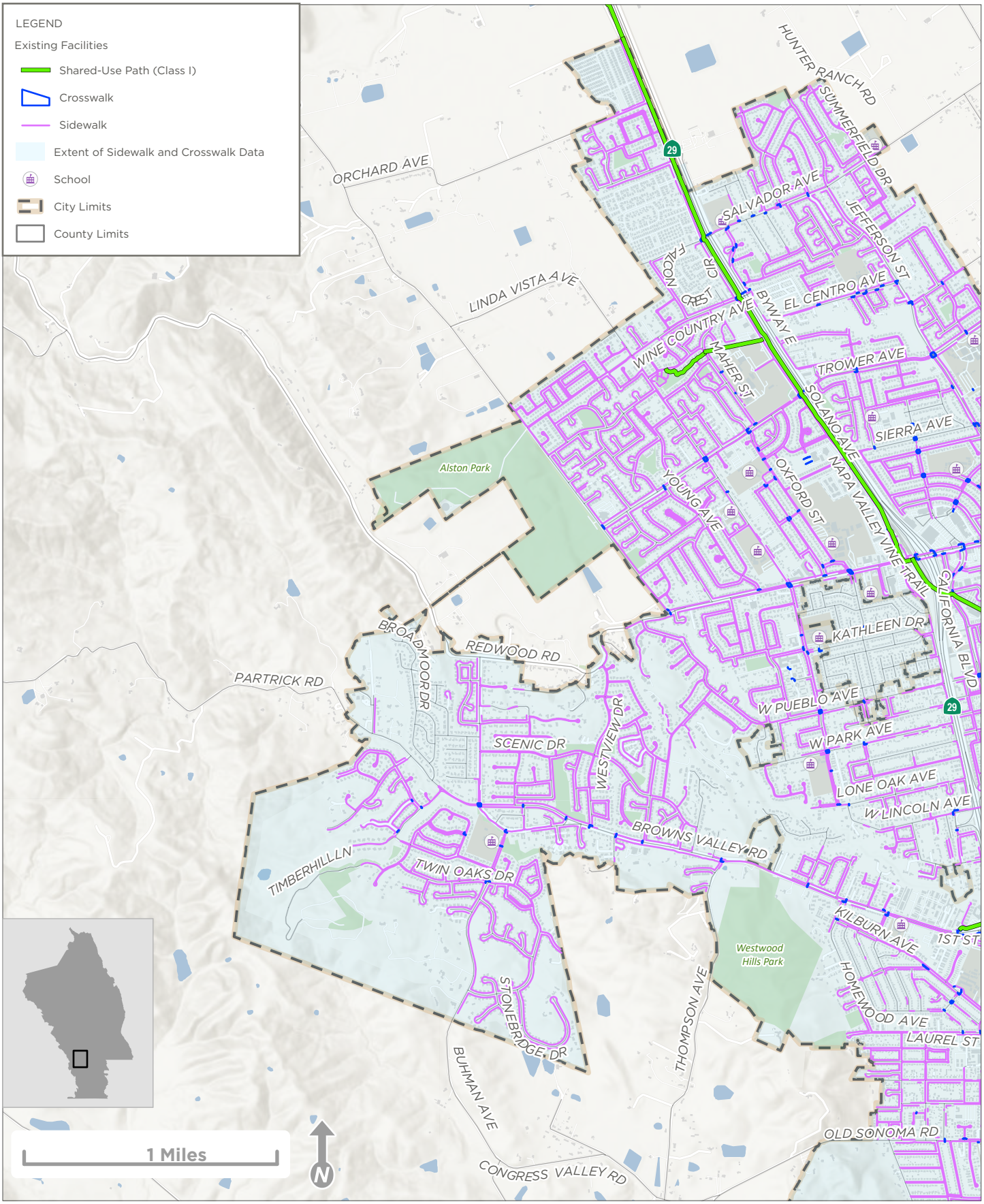


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa
Existing Pedestrian Facilities

FIGURE 2.25

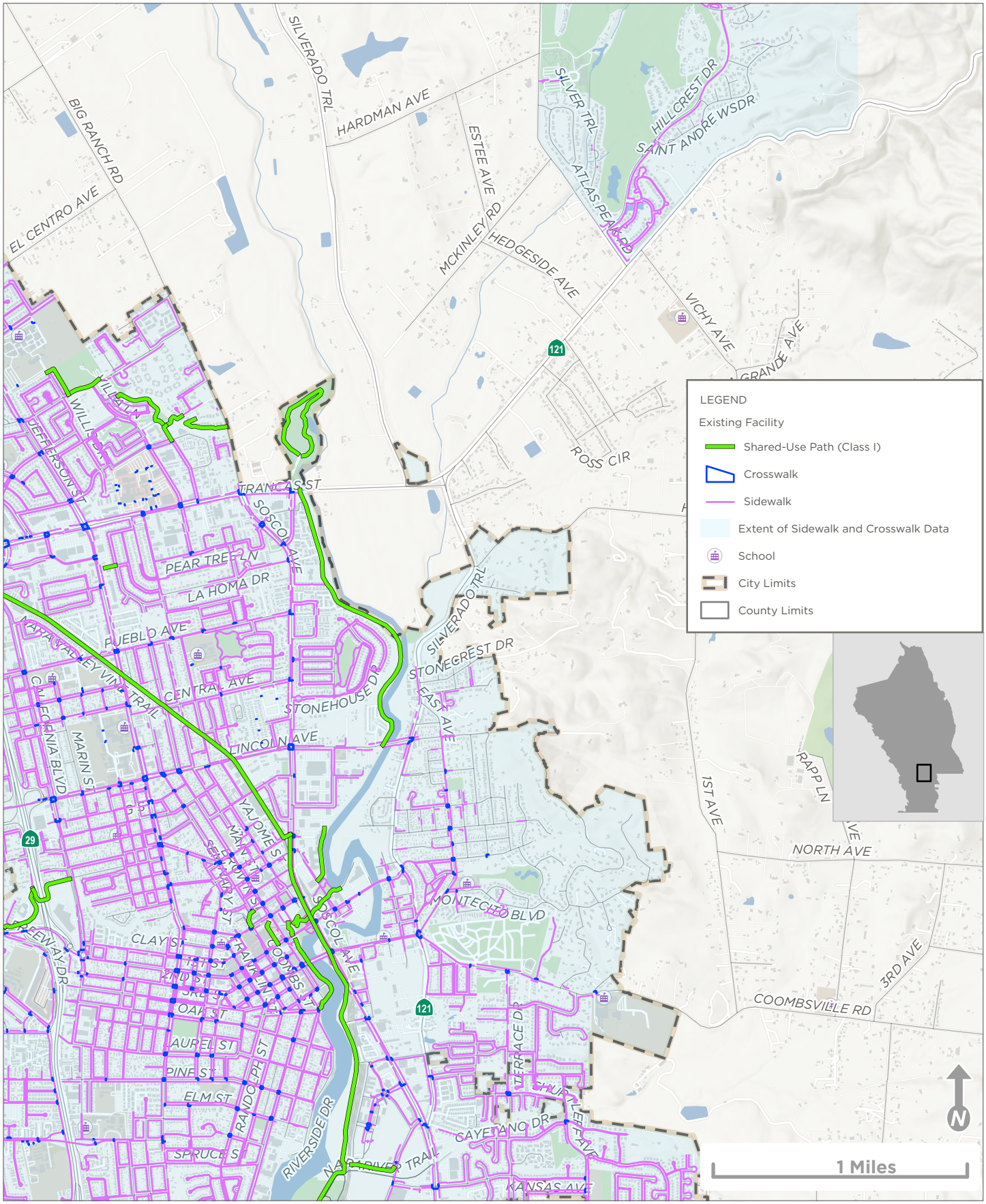


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest
Existing Pedestrian Facilities

FIGURE 2.26

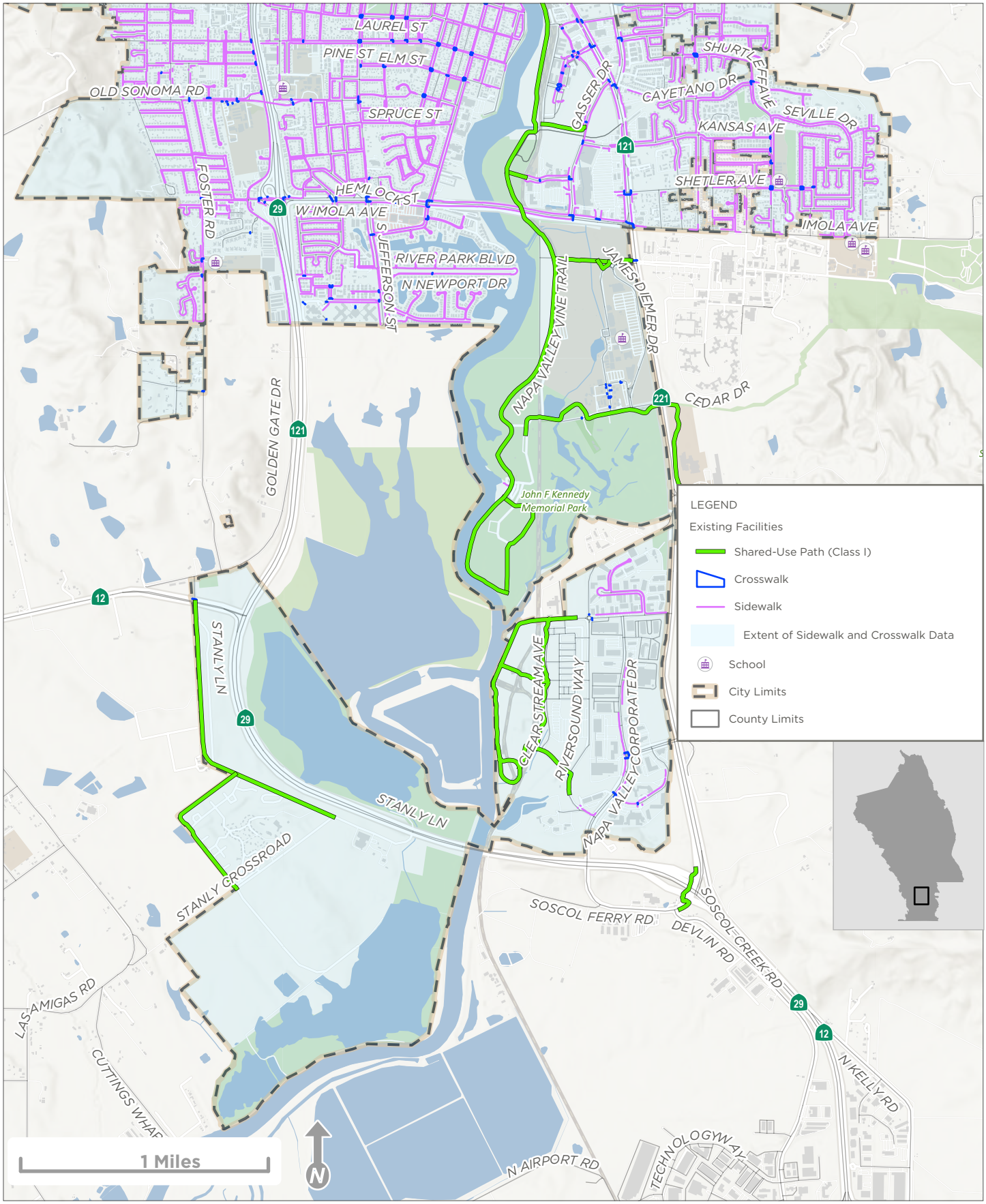


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast
Existing Pedestrian Facilities

FIGURE 2.27

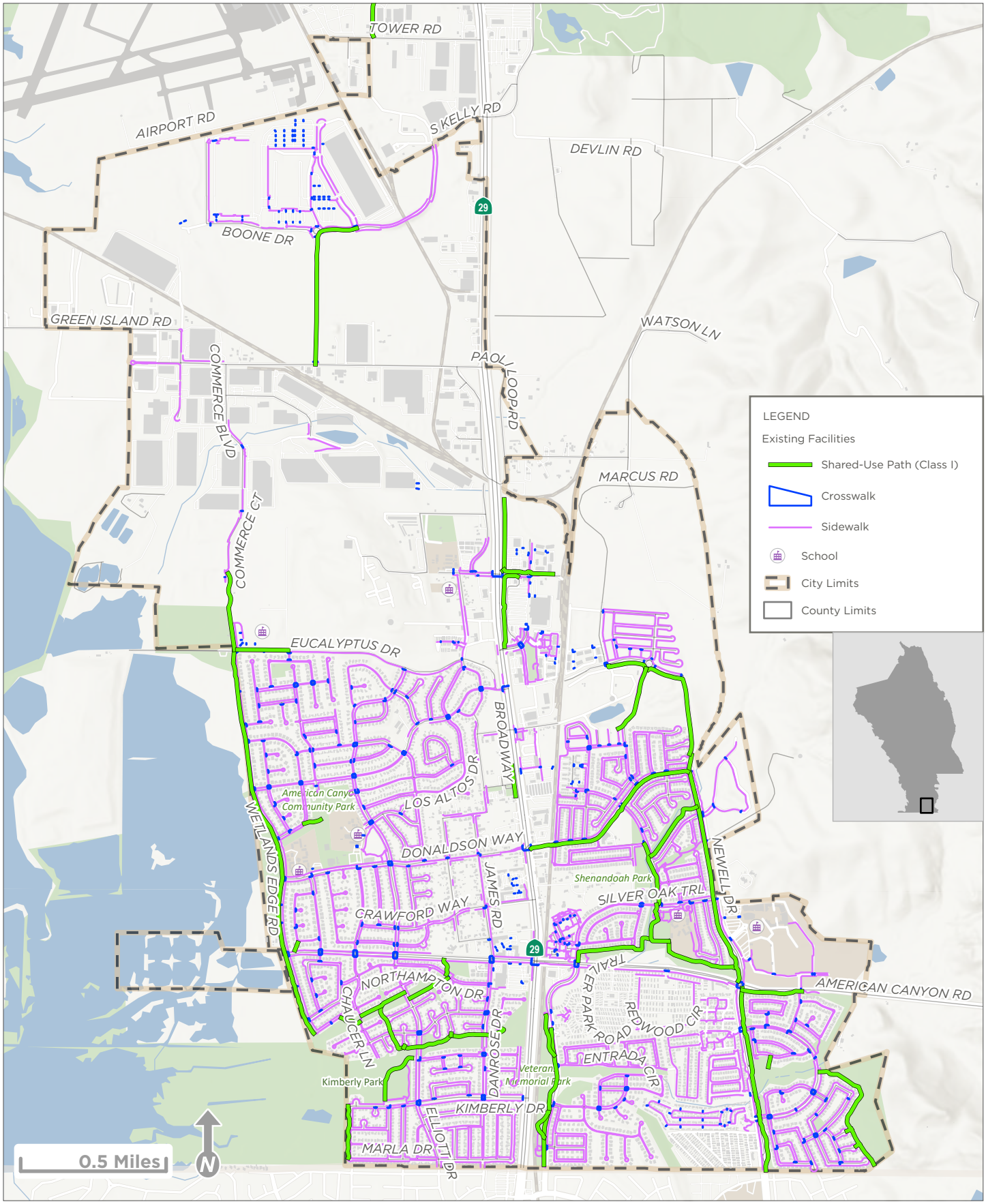


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South
Existing Pedestrian Facilities

FIGURE 2.28

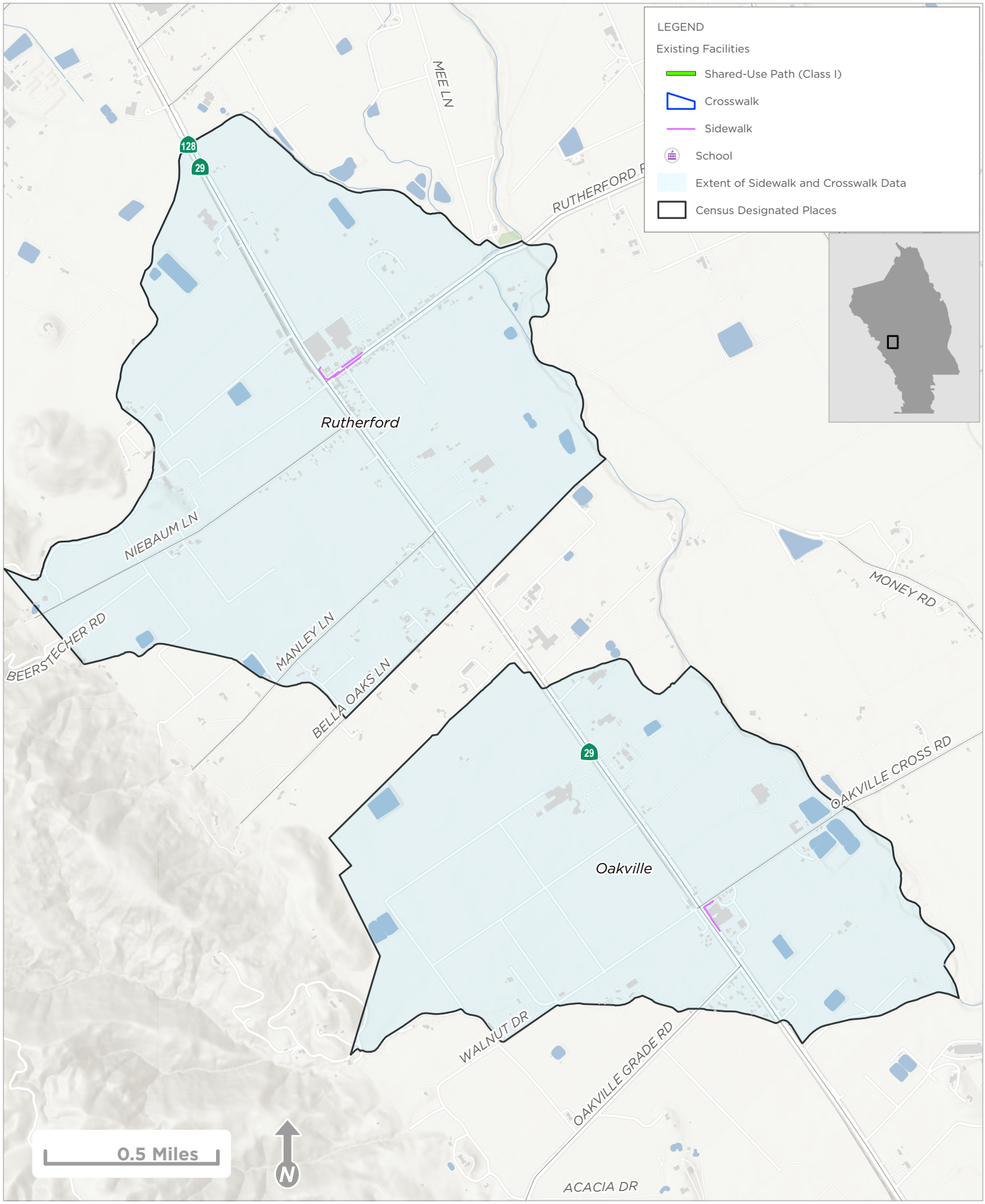


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing Pedestrian Facilities

FIGURE 2.29



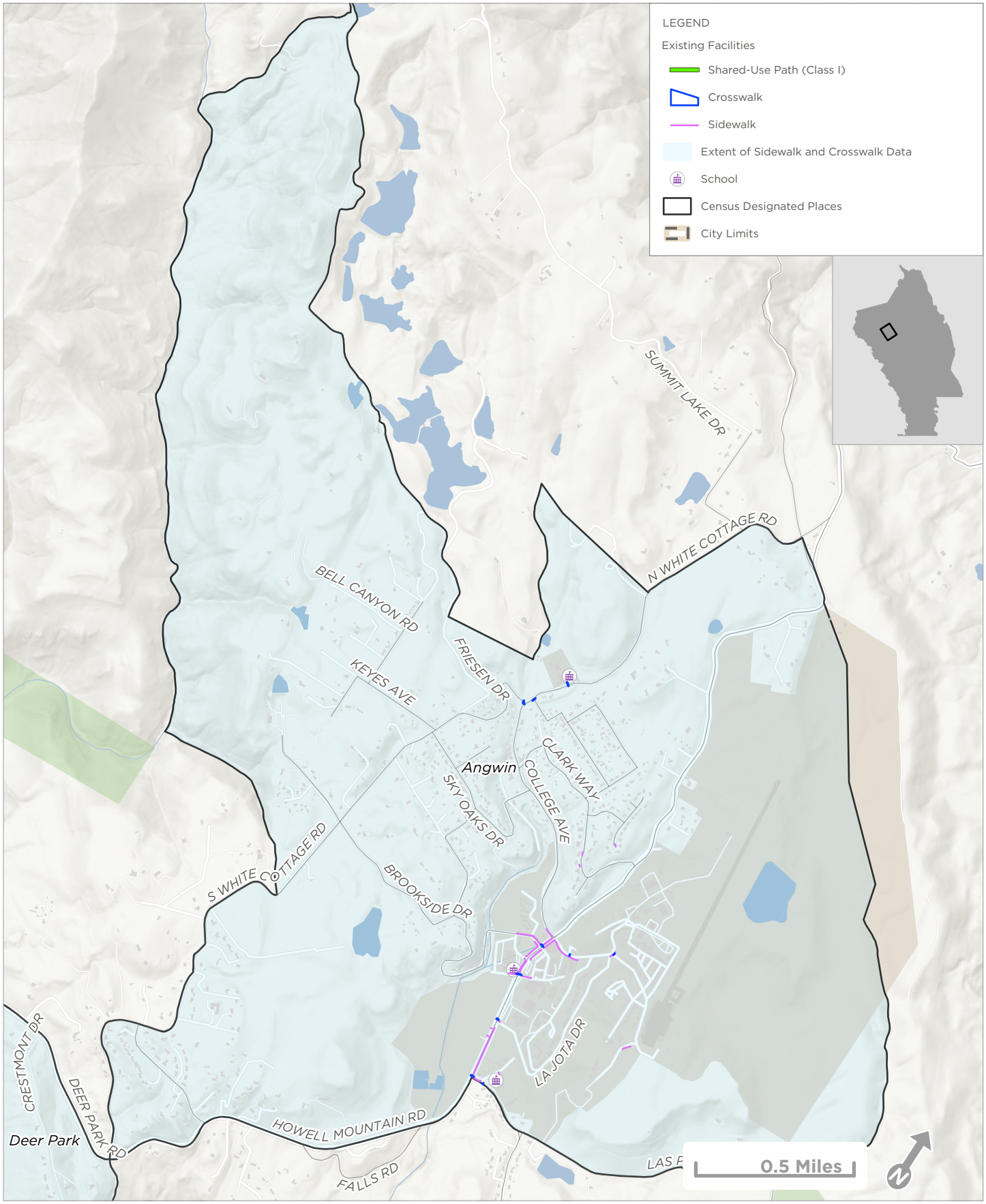
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Rutherford and Oakville

Existing Pedestrian Facilities

FIGURE 2.30



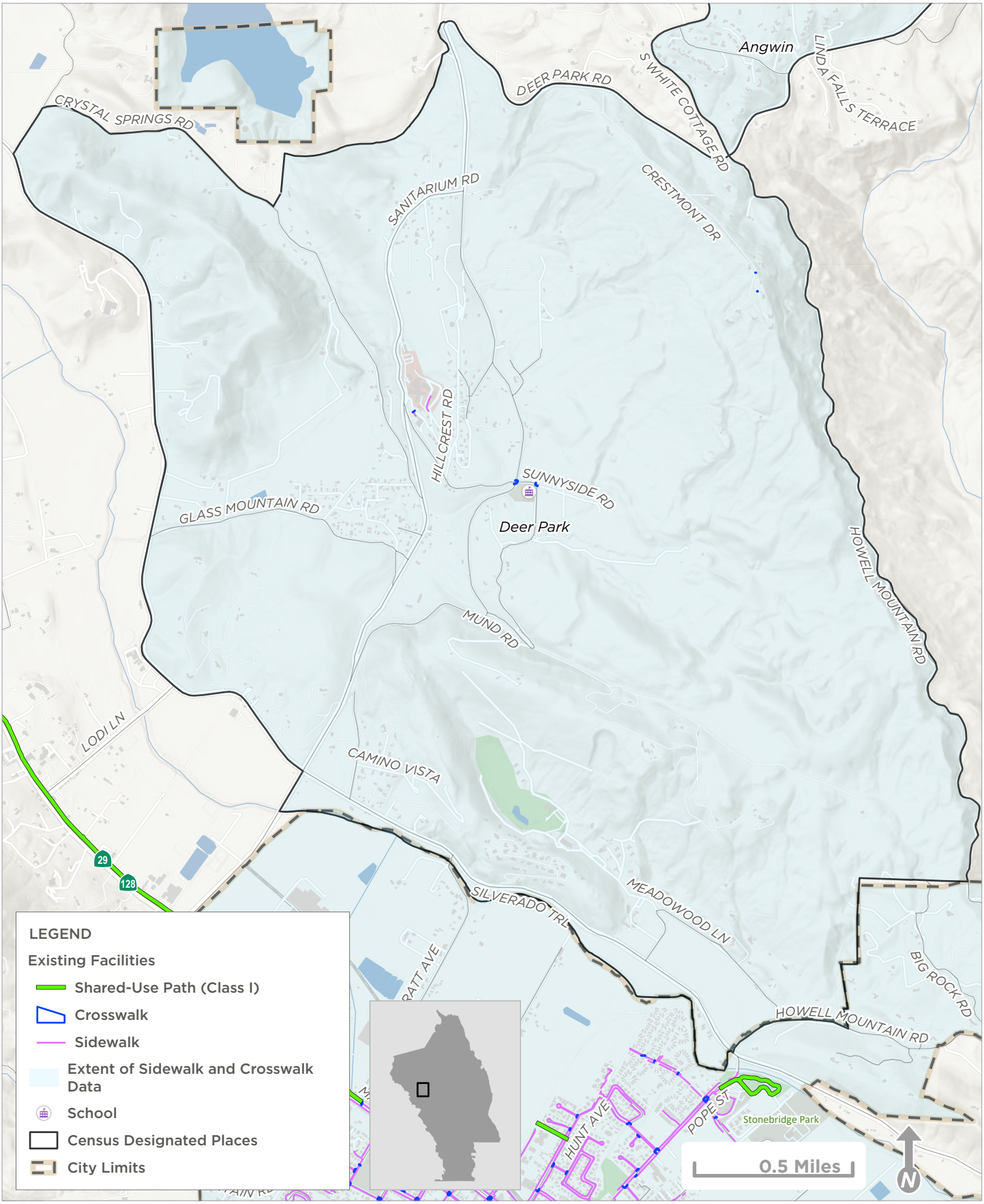
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Angwin

Existing Pedestrian Facilities

FIGURE 2.31



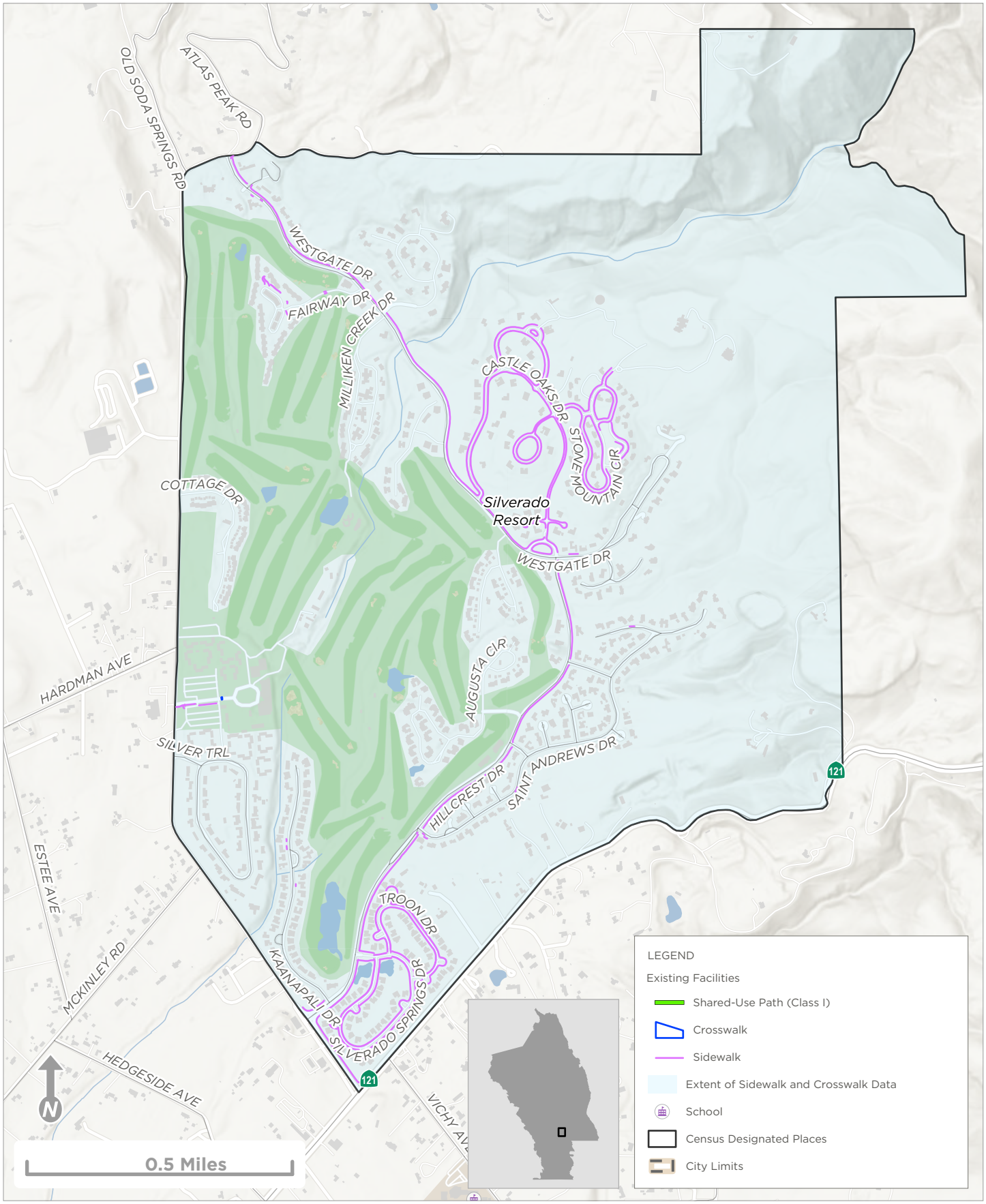
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Deer Park

Existing Pedestrian Facilities

FIGURE 2.32



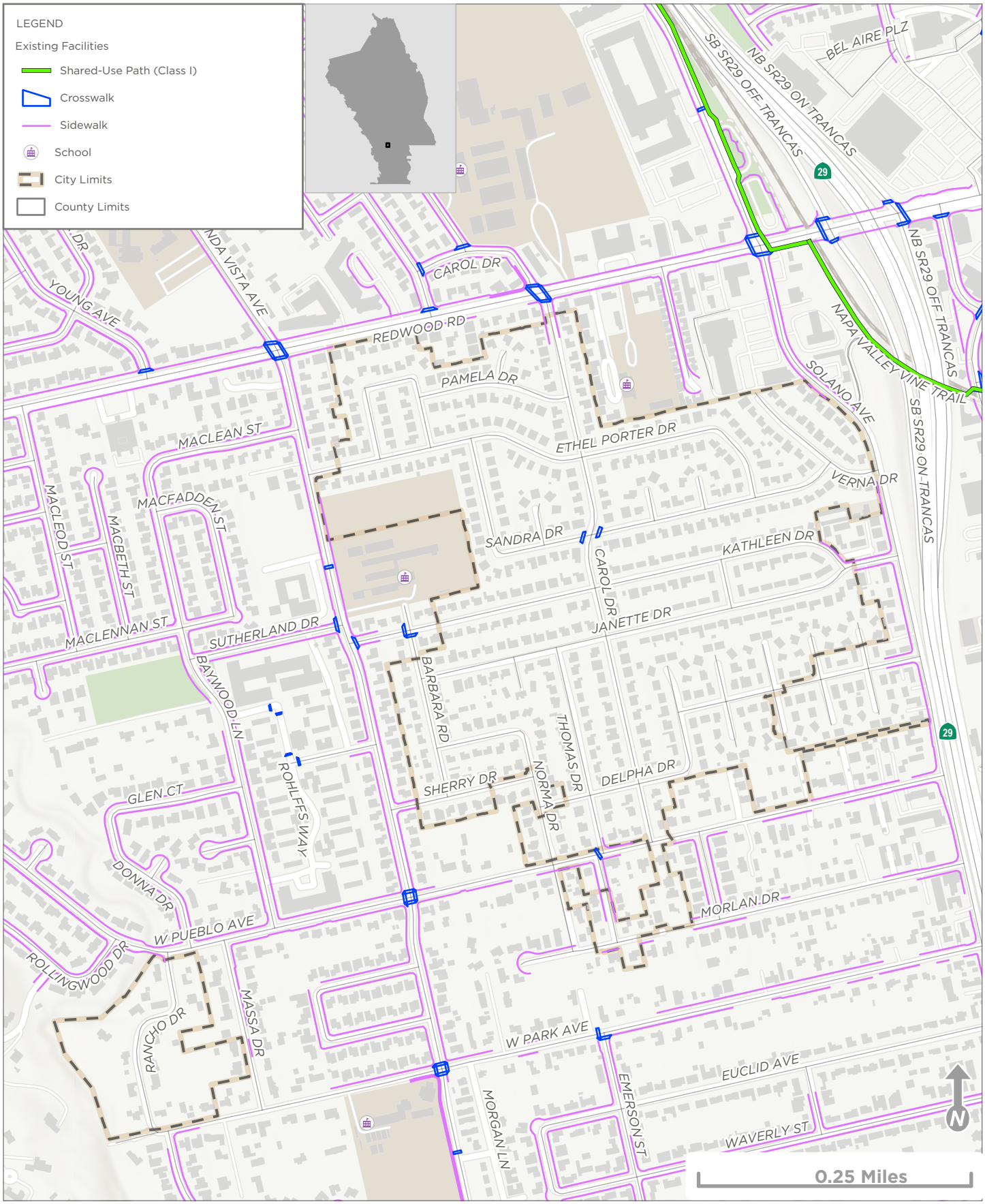
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Silverado Resort

Existing Pedestrian Facilities

FIGURE 2.33



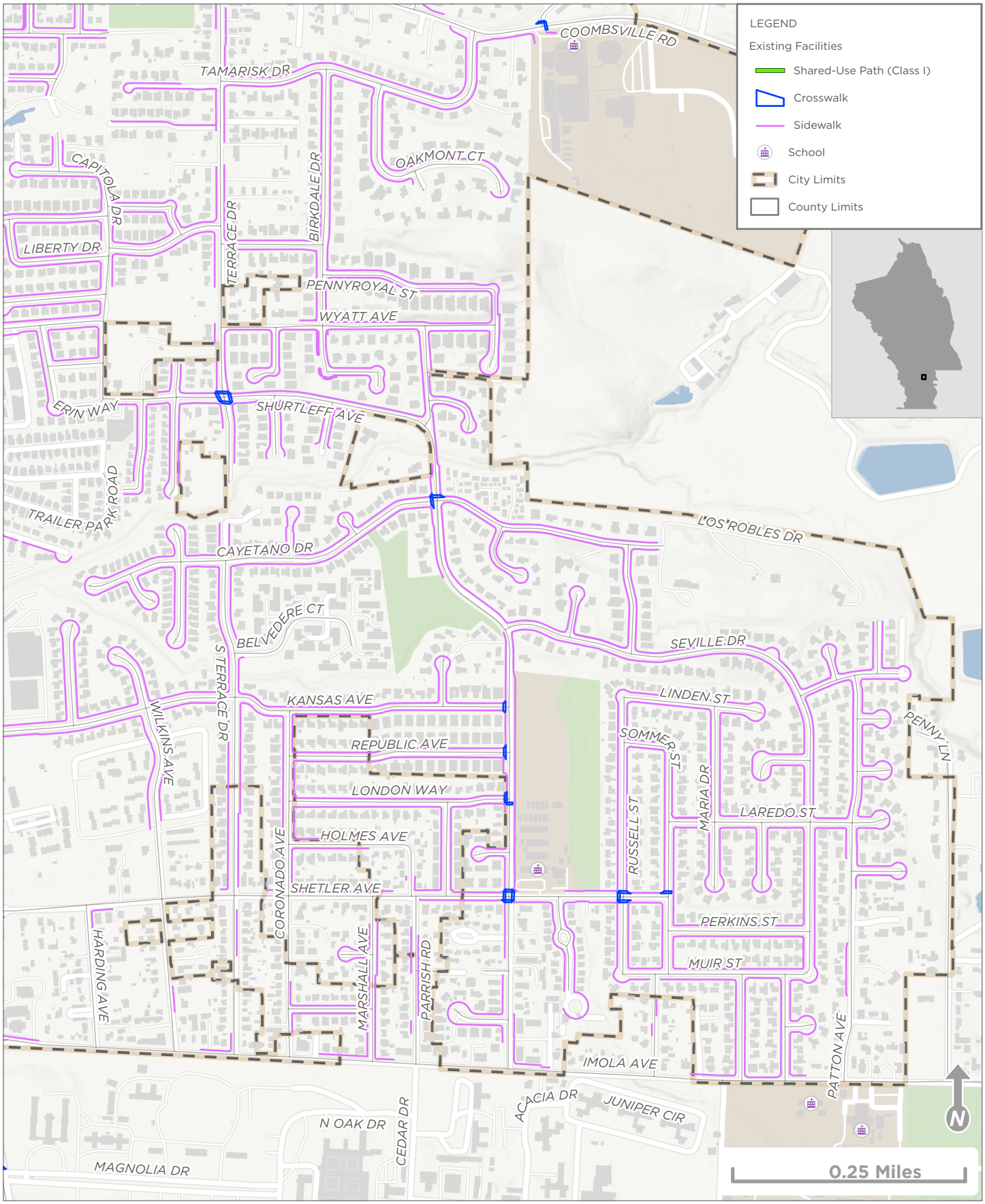
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - West Pueblo

Existing Pedestrian Facilities

FIGURE 2.34



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Southeast Napa Islands

Existing Pedestrian Facilities

FIGURE 2.35

Chapter 3
Community Engagement

A foundational element in the development of this AT Plan was gathering meaningful public input from community members across Napa County. Throughout the planning process, NVTA sought to better understand the needs of community members by encouraging broad participation at key milestones.

Community engagement efforts invited individuals to share their experiences, challenges, and priorities related to active transportation, helping to identify key issues such as pedestrian safety, connectivity gaps, improvement preferences, and location-specific barriers.

This feedback directly informed the development of the AT Plan, ultimately shaping a community-driven vision for improving safe, convenient, and accessible active transportation throughout Napa County. Over the year-long engagement period, more than 700 comments were received from community members throughout the county.

Communication Tools and Engagement Activities

Outreach for the AT Plan was conducted between October 2024 and October 2025. Communications tools included a project-specific website; informational materials including fact sheets; paid and organic social media; newsletters and e-blasts, and online surveys. Engagement activities included multiple community workshops held in person throughout the County as well as online, as well as presentations and conversations with stakeholders and local residents at community events, civic gatherings, and local agency meetings.



Workshop 2- Community Member adding comment

Website

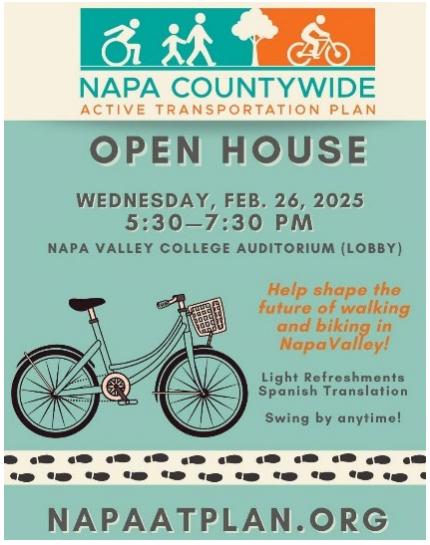
NVTA provided information about the AT Plan through a dedicated page on its site[4] and an engagement-specific webpage[5] that served as the central hub for information, plan development updates, information on upcoming and past public events, and resources for community participation, including links to the online survey, interactive map tool, and a project team contact form.

Fact Sheet

The AT Plan fact sheet included information on the project background, goals, how to get involved, and the project timeline. The fact sheet was updated throughout the development of the plan, with later versions including a link and QR code to the survey and interactive map. The fact sheet was distributed in-person at community events and electronically.

Social Media and Newsletters

Social media posts and newsletter updates for the project were released prior to community workshops, to promote surveys, and provide Plan development updates.



Community Open House Flyer

Online Map Tools and Survey

The engagement website included a mapping tool where community members were invited to share what they loved, wished for, and wondered about the future of the Napa County community. They could place pins for each prompt on a map of the county to identify specific locations in response to each prompt, which helped identify priority areas for improvements. The mapping tool received a total of 143 responses between October 2024 and June 2025.

A survey was also developed to better understand how local residents get around and their priorities for improving walking, biking, and rolling in their community. The survey was open from April 21 to June 23, 2025, and collected a total of 199 responses.

Once the proposed bicycle and pedestrian networks were developed, community members could also place comments via the interactive mapping tool with a similar framework of what they loved, wished for, and wondered about for the future of biking and walking in Napa County. During the comment period from September 26th through October 31, the proposed bicycle network map received 229 unique comments while the proposed pedestrian priority gap closure maps received 91 comments. A full list of all comments received through the map tool and survey, along with geographic coordinates, is available in Appendix B.

[4] nvta.ca.gov/planning-and-projects/planning/regional/active-transportation-plan

[5] ghd.mysocialpinpoint.com/napaatplan

Events

NVTA organized three in-person outreach opportunities and attended 33 events and meetings to reach community members throughout the County, provide details about the AT Plan, and collect input. Nearly 2,000 people were engaged at various events during the engagement period, which may include some individuals who attended more than one event.

NVTA hosted the following community meetings to share updates about the AT Plan and collect input on projects, programs, and policies.

Table 3.1: NVTA-Hosted Community Meetings

Event	Location	Date
Community Open House	Napa Valley College Performing Arts Center	Wednesday, February 26, 2025
Up-Valley (Calistoga) Focus Workshop	Calistoga Community Center	Wednesday, April 2, 2025
Virtual Open House	Zoom Meeting	Tuesday, October 21, 2025

The project team attended the following meetings and events between summer 2024 and winter 2026.

Table 3.2: Community Meetings and Events Attended by NVTA

Event	Location	Date
City of St. Helena Active Transportation & Sustainability Committee	St. Helena City Hall	July 3, 2024
City of Calistoga Active Transportation Advisory Committee	Calistoga Community Center	August 7, 2024
City of American Canyon Open Space, Active Transportation, and Sustainability Commission	American Canyon City Hall	September 4, 2024
NVTA Technical Advisory Committee	NVTA Board Room	September 5, 2024
City of Calistoga Active Transportation Advisory Committee	Calistoga Community Center	October 2, 2024
City of Napa Bicycle and Pedestrian Advisory Commission	City of Napa City Hall	October 10, 2024
City of American Canyon Open Space, Active Transportation, and Sustainability Commission	American Canyon City Hall	November 6, 2024
City of St. Helena Active Transportation & Sustainability Committee	St. Helena City Hall	November 6, 2024
City of Napa Bicycle and Pedestrian Advisory Commission	City of Napa Committee Hearing Room	February 13, 2025
Napa Valley Vine Trail Board Meeting	Virtual (Zoom)	February 20, 2025
NCOE 8th Grade Career Fair	Napa Valley Expo	March 13, 2025
Napa Earth Day	Napa Oxbow Commons	April 12, 2025
League of Women Voters of Napa County	Unitarian Universalist Church Napa	April 16, 2025
Napa BikeFest	Napa Century Cinemas Lot	May 4, 2025
American Canyon Middle School (ACMS) Fair	ACMS	May 7, 2025

Event	Location	Date
NVTA Active Transportation Advisory Committee	NVTA Board Room	May 19, 2025
Democrats of Napa Valley Monthly Meeting	American Legion Napa	July 21, 2025
American Canyon Meet Me in the Street	American Canyon Rd	June 10, 2025
American Canyon Meet Me in the Street	American Canyon Rd	August 12, 2025
NVTA Board Presentation	NVTA Board Room	September 17, 2025
St. Helena Active Transportation & Sustainability Committee	St. Helena City Hall	October 1, 2025
City of Napa Bicycle and Pedestrian Advisory Commission Presentation	City of Napa Committee Hearing Room	October 9, 2025
City of Calistoga Council Presentation	Calistoga Council Chambers	October 14, 2025
Napa Vine Trail Board Presentation	Virtual (Zoom)	October 16, 2025
St. Helena Harvest Festival	Street Festival, St. Helena	October 19, 2025
St. Helena City Council Presentation	St. Helena High – Council Chambers	October 28, 2025
NVTA Paratransit Coordinating Committee	NVTA Board Room	November 6, 2025
NVTA Community Advisory Committee	NVTA Board Room	November 5, 2025
NVTA Active Transportation Advisory Committee	NVTA Board Room	November 17, 2025
Napa County Board of Supervisors Meeting	Napa Board of Supervisors Chambers	January 13, 2026

Key Findings from Community Engagement

Community input was key to the development of the final AT Plan. Across all communication tools and engagement events, the following themes emerged. These comments directly informed the contents of this AT Plan, including as proposed bicycle or pedestrian facilities, recommended policies and programs, or criteria for project prioritization.

Pedestrian Infrastructure and Safety

Community members expressed strong support for improving pedestrian safety and comfort, noting that sidewalk gaps, fractured or broken concrete, a lack of curb ramps, and other issues create daily barriers to safe and convenient pedestrian access. Crossing safety was a major concern, with high vehicle speeds, limited visibility, and insufficient lighting making intersections difficult to navigate. Community members suggested improvements such as curb extensions, raised crosswalks, added beacons, and daylighting to enhance safety, especially around schools. Maintenance issues such as uneven pavement, flooding, and debris were also frequently cited, emphasizing that both repairs and new infrastructure are needed.

Connectivity

A consistent theme across feedback was the need for a more connected and comprehensive active transportation network for walking and biking, particularly with connections to transit. Respondents stressed the importance of linking neighborhoods with schools, parks, shopping areas, and nearby cities to make active travel a practical option. Survey results reinforced this sentiment, with the most frequent highest-rated priority being the creation of a countywide network of safe, accessible bikeways. Participants emphasized that improving connectivity is essential for expanding mobility choices and reducing reliance on driving, especially when it comes to multimodal transportation.

Encouraging Multimodality

Community members expressed that transportation projects should balance the needs of drivers, pedestrians, and bicyclists rather than prioritizing any single mode. Many supported encouraging walking and biking for short trips, and some expressed openness to reducing on-street parking when it improves safety. While some residents reported easy access to local destinations, others noted that concern over infrastructure or conditions prevent them from choosing active transportation more often.

Priority Improvements and Amenities

Community members strongly supported a wide range of safety and mobility initiatives, with especially high enthusiasm for expanding a countywide network of low-stress bikeways for all ages and abilities (AAA). Intersection redesigns, protected bike lanes, wayfinding, sidewalk gap closures, improved lighting, school-based bike education, and more secure bike parking were also frequently rated as important. There was mixed support for increased traffic enforcement.

Location Specific Barriers for Active Transportation

Community members identified numerous locations across the county where walking, biking, and rolling feel unsafe or unreliable, underscoring the need for targeted improvements. Intersections and segments in Napa, such as Solano Avenue at Redwood Road, Jefferson Street, Trancas Street, West Lincoln Avenue, Imola Avenue, Silverado Trail, and multiple points along Soscol Avenue and SR 121 were consistent points of concern. SR 29 in American Canyon and countywide corridors like SR 128, Big Ranch Road, and areas east of St. Helena also marked major concerns for cyclists.

Chapter 4
Needs Assessment

The following needs assessment builds upon the review of the existing transportation environment to identify specific areas for active transportation improvements. The assessment includes an evaluation of bicycle connectivity based on the existing roadway and bicycle facility network. It also includes a summary of priorities identified through the community engagement process, and outlines the methodology used to develop the proposed project list.

Bicycle Connectivity

The following assessment of connectivity considers level of traffic stress (LTS), or how safe a bicyclist might feel on a given roadway, and how LTS impacts bicyclist connectivity to nearby destinations. Higher stress roadways are likely barriers for many bicyclists, and can limit connectivity throughout a city, county, or region.

Bicycle Level of Traffic Stress

Level of Traffic Stress (LTS) is the perceived sense of safety associated with bicycling with or adjacent to vehicular traffic. Studies have shown that traffic stress is one of the biggest deterrents to walking and bicycling. The less stressful the experience (the lower the LTS score), the more likely it is to appeal to a broader segment of the population.

Bicycle facilities are considered low stress if they have fewer interactions with vehicular traffic (such as slow, low-traffic neighborhood streets) or if greater separation is provided between people walking or bicycling and vehicular traffic.

LTS 1 indicates a street with low stress and high comfort for bicyclists, while LTS 4 reflects a street with high stress and low comfort for bicyclists. LTS scores are used to identify locations for project recommendations that create lower stress networks for people of different ages, abilities, and comfort walking and bicycling in Napa County.

Methodology

For the bicycle LTS analysis, road segments were scored from LTS 1 to LTS 4 based on a variety of roadway infrastructure characteristics, including:

- Posted and prevailing speeds
- Number of vehicle lanes
- Roadway functional classification
- Bicycle facility classification
- Separation between bicycle facilities and vehicles
- Parking alongside bike lanes
- Width of bike and parking lanes

Types of Bicyclists

Research conducted by the Portland Bureau of Transportation and later updated with national data indicates that most people in the United States would bike if dedicated bicycle facilities were provided. Based on their skill level and confidence, most people self-identify as one of the four “types of

bicyclists" shown in Figure 4.1.[6] Only a small percentage of Americans are willing to ride on busy streets if no facilities are provided—the so-called "Strong and Fearless" bicyclists.

To better meet the needs of "Interested but Concerned" bicyclists, it is recommended that communities work to decrease stress and improve comfort on their bikeway network. LTS 1 and 2 roads are typically appealing to these bicyclists.

Results

LTS of roadways varies throughout the county. Each jurisdiction is typically made up of a lower stress residential street network divided by higher stress arterial and collector roads. In the unincorporated county, roads are typically higher stress, higher volume, and seldom feature dedicated bicycle facilities. As a result, these corridors are generally taken by more experienced recreational bicyclists and not by residents commuting to their destinations. LTS results for individual jurisdictions can be found in Chapter 7 through Chapter 12.

Safety and Vision Zero

Bicycle LTS is one way of assessing bicyclist safety along the roadway network, but another common way to quantify safety is through a collision analysis. The 2023 NVTA Vision Zero Plan analyzed collisions in the county between 2015 and 2021 and identifies roadways with a high frequency of collisions (also known as the High Injury Network). Local Road Safety Plans (LRSP) conducted at the local and county level provide similar information about high injury and high severity corridors.

While collision analysis shows where collisions have occurred in the past, LTS analysis highlights roads that may feel uncomfortable for bicyclists to ride on and therefore are barriers to active transportation. A high stress road may not have a history of frequent collisions if bicyclists avoid that route.

Figure 4.1: Bicyclist Comfort Typology



Comfort Typology of Bicyclists

Design User Profile	Non-Bicyclist	Interested but Concerned	Somewhat Confident	Highly Confident
Bicycling Preferences	Uncomfortable bicycling in any condition, have no interest in bicycling, or are physically unable to bicycle.	Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separate bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.	Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.	Comfortable riding with traffic, will use roads without bike lanes.
Percent of General Public	31-37%	51-56%	5-9%	4-7%

[6] Dill, J., & McNeil, N. (2016). Revisiting the Four Types of Cyclists: Findings from a National Survey. Transportation Research Record: Journal of the Transportation Research Board, 2587(1), 90-99

Low Stress Bicycle Connectivity

Bicycle connectivity throughout Napa County was analyzed using LTS scores and origin and destination points. In this assessment, bicycle connectivity is defined as either high-stress or low-stress. Destinations with low-stress connectivity are connected to residential units (origins) along the low-stress bicycle network, or roads that score LTS 2 or lower. Providing low-stress connectivity improves bicycle access for a wider range of ages and abilities and induces bicycle demand.

An example of this analysis in the City of American Canyon is shown in Figure 4.2. The heat map indicates concentrations of low-stress connectivity, where darker green indicates more low-stress connection. The red and orange lines along the road network represent high stress streets, while green and yellow lines represent lower stress streets.

As you can see, many residents can connect to Canyon Oaks Elementary School (the school west of Newell Drive) on the low-stress bicycle network. On the other hand, low-stress connectivity to American Canyon High School (east of Newell Drive) is poor because Newell Drive and American Canyon Road create high stress barriers.

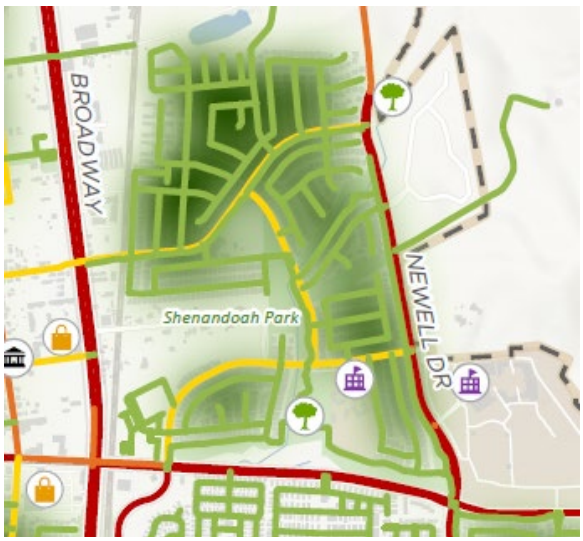


Figure 4.2: Example of Connectivity Analysis

Results from the bicycle connectivity analysis show areas of low stress connectivity are separated by high stress streets creating barriers to bicycling in neighborhoods across the county. Most low stress bicycle corridors in Napa County are along the Napa Valley Vine Trail or other Class I pathways, or within incorporated cities where residents are within convenient walking and bicycling distances of their destinations[7]. Every community in Napa County has at least one higher stress corridor or intersection that serves as a barrier to key destinations. Investing in lower stress improvements at these locations can increase active transportation use and reduce potential for future collisions.

In the unincorporated county, bicyclists typically begin trips further from their destinations. Much of the current bicycling occurring in this part of the county is for recreational purposes rather than commuting, and bicyclists here are typically more experienced at riding on higher stress roads with vehicles.

Further discussion on low stress bicycle connectivity for individual jurisdictions can be found in Chapter 7 through Chapter 12.

Community Priorities

Through community engagement across Napa County, in-person and online, the priorities of the community were used to develop the current Plan. Key feedback themes from each community included the following:

- Calistoga
  - Pedestrian and bicycle crossing improvements at Tubbs Lane/Myrtledale Road, and along Foothill Boulevard
  - Sidewalks along Grant Street
  - Concerns about pavement quality
  - Safe Routes to School

[7] A convenient walking distance is typically assumed to be less than one half-mile, while an acceptable bicycling distance is assumed to be two miles or less.

- St. Helena
  - Safe Routes to School, including on Main Street (SR 29), Madrona Avenue, Hunt Avenue, Valley View Street, Crane Avenue, Sulfur Springs Road, and Spring Street
  - Traffic calming to reduce speeding
  - Sidewalks on SR 29
  - Visibility challenges and narrow streets
  - Complete the Vine Trail
- Yountville
  - SR 29 undercrossing – bicycle and pedestrian improvements
  - Bicycle facilities on Washington Street and Yount Street
  - Sidewalks and paved pathways in neighborhoods
- City of Napa
  - Sidewalk gaps on key corridors, near neighborhood schools, and in older residential neighborhoods
  - Bicycle connectivity to and through downtown
  - Safe Routes to School
  - Vine Trail improvements
- American Canyon
  - Safe Routes to School
  - Improve existing bicycle lanes
  - Traffic calming to reduce speeding
  - Improve intersections along SR 29
  - Connections to industrial areas
  - Vine Trail opportunities
- County of Napa
  - Improve major bicycle corridors, including Silverado Trail and SR 29
  - Upgrade bicycle facilities between cities, including Devlin Road and Solano Avenue
  - Pavement quality and bicycle lane maintenance

Developing the Active Transportation Network

Using the findings from the bicycle connectivity analysis and community engagement priorities, the proposed active transportation network was developed. The draft network was created in July 2025 and went through extensive review by NVTA and local jurisdiction staff. Following agency review, the network was refined and shared with the community during a virtual workshop in October 2025. Community members also had the opportunity to comment on the network using an interactive map hosted on the project website. Feedback gathered during the workshop and from the interactive map was vetted by NVTA and local jurisdictions, and the proposed active transportation network was finalized in early 2026.

Developing the Bicycle Network

The development of the proposed bicycle network considered a variety of factors, including past planning efforts, the existing transportation environment, and community feedback.

First, the bicycle network proposed in the 2019 Countywide Bicycle Plan was incorporated. Facilities were upgraded to meet current best practices where possible. In some cases, planned bicycle facilities were removed if they were redundant or infeasible to implement. Proposed bicycle facilities from local plans were also incorporated and updated to align with the goals of the AT Plan.

Bicycle facilities were then developed based on the existing network, bicycle LTS scores, and proximity to destinations. Destinations with low bicycle connectivity were considered for bicycle improvements. Bicycle facilities were also considered to expand the existing network, especially if they improve connectivity to key destinations. Where possible, bicycle facilities were proposed to reduce LTS, especially along routes where no parallel, lower stress option was available.

Qualitative feedback from the community was key to understanding barriers to active transportation not identified in the quantitative analysis described above. Residents highlighted commonly used routes that needed improvements, streets that were barriers to safe active transportation, and destinations that lacked adequate connectivity. This feedback was incorporated throughout the proposed bicycle network.

In some cases, study corridors were recommended. These are streets that were identified through the needs assessment or by the community for future improvements but require a greater level of study than is possible within this planning effort to determine the most appropriate improvements for the corridor.

Developing the Pedestrian Network

Shared-Use Paths

Shared-use paths were largely identified as part of the bicycle facilities development process, but they also contribute to a connected, low-stress pedestrian network. Shared-use paths were considered in the development of the sidewalk gap closure projects.

Sidewalk Gap Closure Projects

Using satellite imagery, the roadway network was mapped, and each roadway segment was categorized as having sidewalks or no sidewalks. Potential sidewalk gap projects were then determined based on a series of factors including roadway context and proximity to walkable destinations. Roadways that would provide pedestrian connectivity to nearby destinations or existing sidewalks and paths were considered for potential sidewalk projects.

Roadways were typically removed from the list of potential gap projects if they were rural in nature, did not provide connectivity to key destinations, or right-of-way was severely limited. Gaps along vacant lots were also excluded, as developers of property would be responsible for implementing sidewalks Local sidewalk policies and jurisdictional discretion were also used to eliminate potential sidewalk gap projects. This manual review of the network provided a list of potential sidewalk gap projects.

Once the list of potential sidewalk gap projects was identified, the projects were proposed based on how beneficial they would be to pedestrian travel. Sidewalk gap projects were added to the final list of projects if:

- The gap is located within 500 feet of a point of interest, including parks, schools, transit stops, etc.
- The gap is located along a corridor with an existing or proposed bicycle improvement. The goal of this criterion is to create multimodal corridors that prioritize both pedestrians and bicyclists.

If gaps are present on both sides of the street, the AT Plan proposes a sidewalk on the side of the street closest to the point of interest.

In addition to the methodology described above, a manual review was conducted to add or exclude projects where necessary. This methodology used to develop the pedestrian network aims to allocate resources to pedestrian projects that would provide the highest pedestrian benefit. NVTA recognizes that additional sidewalk projects throughout the county may provide safety and connectivity benefits but may be longer term projects due to funding limitations.

Chapter 5 Countywide Recommendations

Based on prior planning efforts, findings from the existing conditions analysis and needs assessment, and feedback from the community, the countywide active transportation network was developed. Site specific infrastructure improvements included a network of proposed bicycle facilities and a pedestrian network of proposed sidewalk gap closure projects. To accompany the network improvements and crossing policy, a treatment toolkit was developed with bicycle and pedestrian improvement design guidance. See Appendix D for the Treatment Toolkit.

The pedestrian and bicycle network recommendations were vetted through a collaborative process with local jurisdiction staff. Staff reviewed and provided edits to the network to ensure that the recommended improvements aligned with local planning projects and priorities.

In addition, a set of non-infrastructure policies and programs were developed to support the infrastructure recommendations and help Napa County move towards countywide transportation goals identified in the Plan. Recommended policies and programs can be found beginning on Page 99.

Proposed Bicycle Network

The proposed bicycle network aims to improve connectivity for bicyclists throughout the county. The network includes a variety of bicycle facility types to address various user needs and abilities, including off-street paths, on-street bicycle lanes and protected bikeways, and mixed traffic facilities (bicycle routes and bicycle boulevards). The network also includes study corridors that may be prioritized for future planning efforts.

The bicycle network is intended to be implemented over time as funding opportunities arise. To help NVTA and local jurisdictions prioritize bicycle projects for implementation, a list of near-term projects is provided in Chapter 6.

Bicycle Facility Selection

Bicycle facility types were selected in accordance with the bicycle facility selection guidance outlined in the treatment toolkit. The guide recommends bicycle facility types based on posted speeds and average daily traffic volumes. Other factors considered include whether there was room within the existing right of way for dedicated bicycle facilities, to which destinations the bicycle facilities connect and who the target users would be. In addition to the toolkit guidance, feedback from the jurisdiction, prior planning efforts, and local knowledge informed facility selection.

The proposed bicycle projects include a network of rural bicycle routes throughout Unincorporated County of Napa. These proposed routes do not adhere to the bicycle facility selection guidance as they are typically travelled by more experienced riders and serve recreational purposes. In many cases, the bicycle routes are along roads where there is no room for a dedicated bicycle facility.

Proposed Bicycle Network

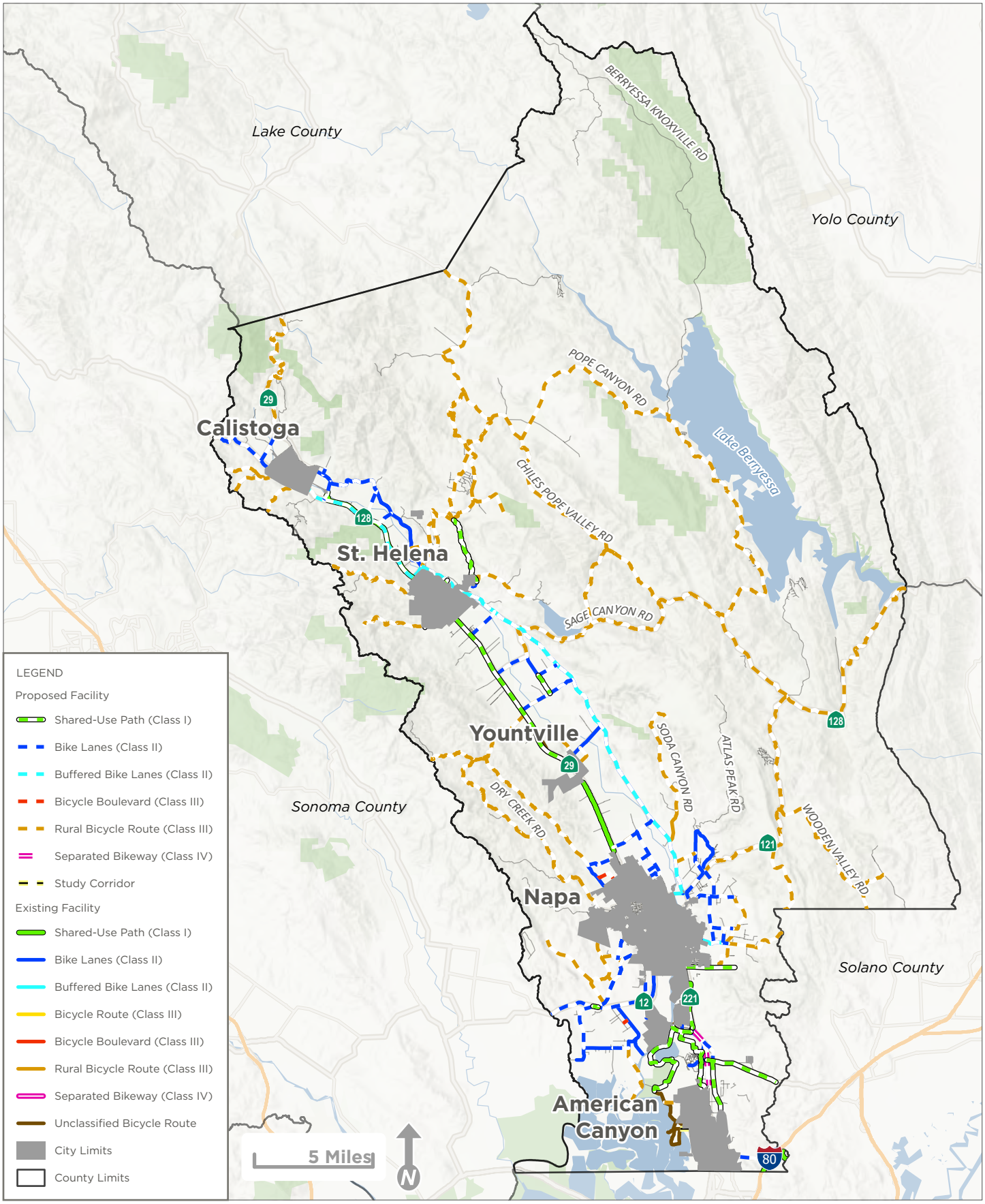
Table 5.1 provides the total existing, proposed, and future mileage of the countywide bicycle network by facility type. For detailed project recommendations for each jurisdiction, see Chapter 7 through Chapter 12. For the full list of bicycle network recommendations, see Appendix E.

The proposed bicycle network also includes several study corridors that were identified through the needs assessment or by the community but require further study to determine the most appropriate facility type. These studies may be conducted by individual jurisdictions or by partnerships between jurisdictions and NVTA.

Table 5.1: Napa Countywide Proposed Bicycle Network Mileage

Facility Type	2019 Existing Mileage	2025 Existing Mileage*	Change 2019 to 2025	2025 Proposed Mileage	Total Future Mileage
Shared Use Path (Class I)	40.9	47.0	+6.1	66.2	**113.3**
Bicycle Lanes (Class II)	87.8	87.1	-0.7	79.7	**166.8**
Buffered Bicycle Lanes (Class II)	-	3.7	+3.7	30.9	**34.6**
Bicycle Route (Class III)	13.5	6.8	-6.7	-	**6.8**
Bicycle Boulevard (Class III)	-	0.1	+0.1	52.4	**52.4**
Rural Bicycle Route (Class III)	-	9.1	+9.1	201.0	**210.1**
Separated Bikeway (Class IV)	-	1.9	+1.9	5.8	**7.7**
Unclassified Bike Route	-	17.9	+17.9	0.8	**18.7**
Total	**142.2**	**173.6**	**+31.4**	**436.9**	**610.4**

**2025 Existing mileage totals are derived from a comprehensive review of existing bicycle facilities, which in some cases resulted in removal or re-categorization of facilities.*

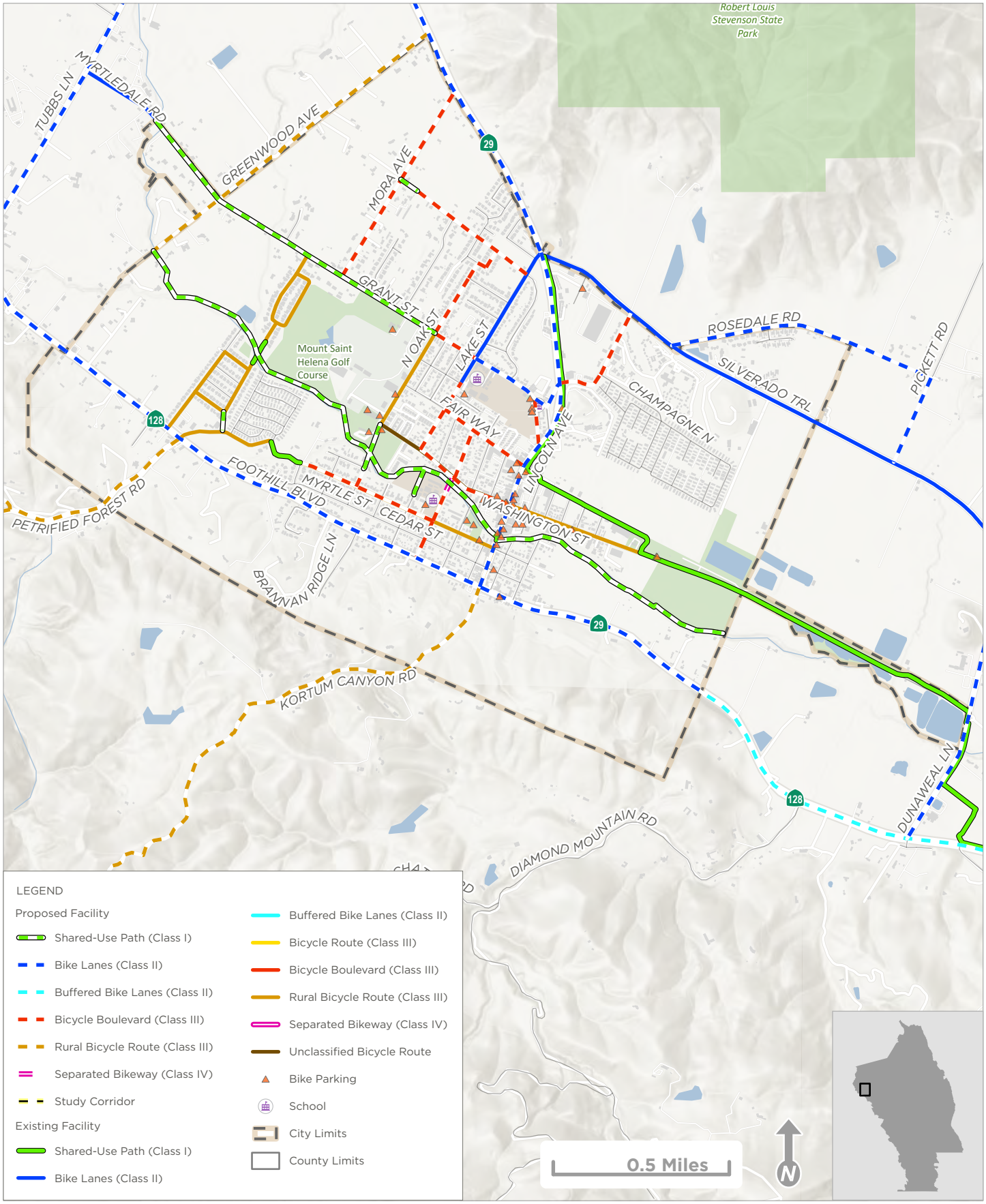


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Napa Countywide
Existing and Proposed Bicycle Facilities

FIGURE 5.1



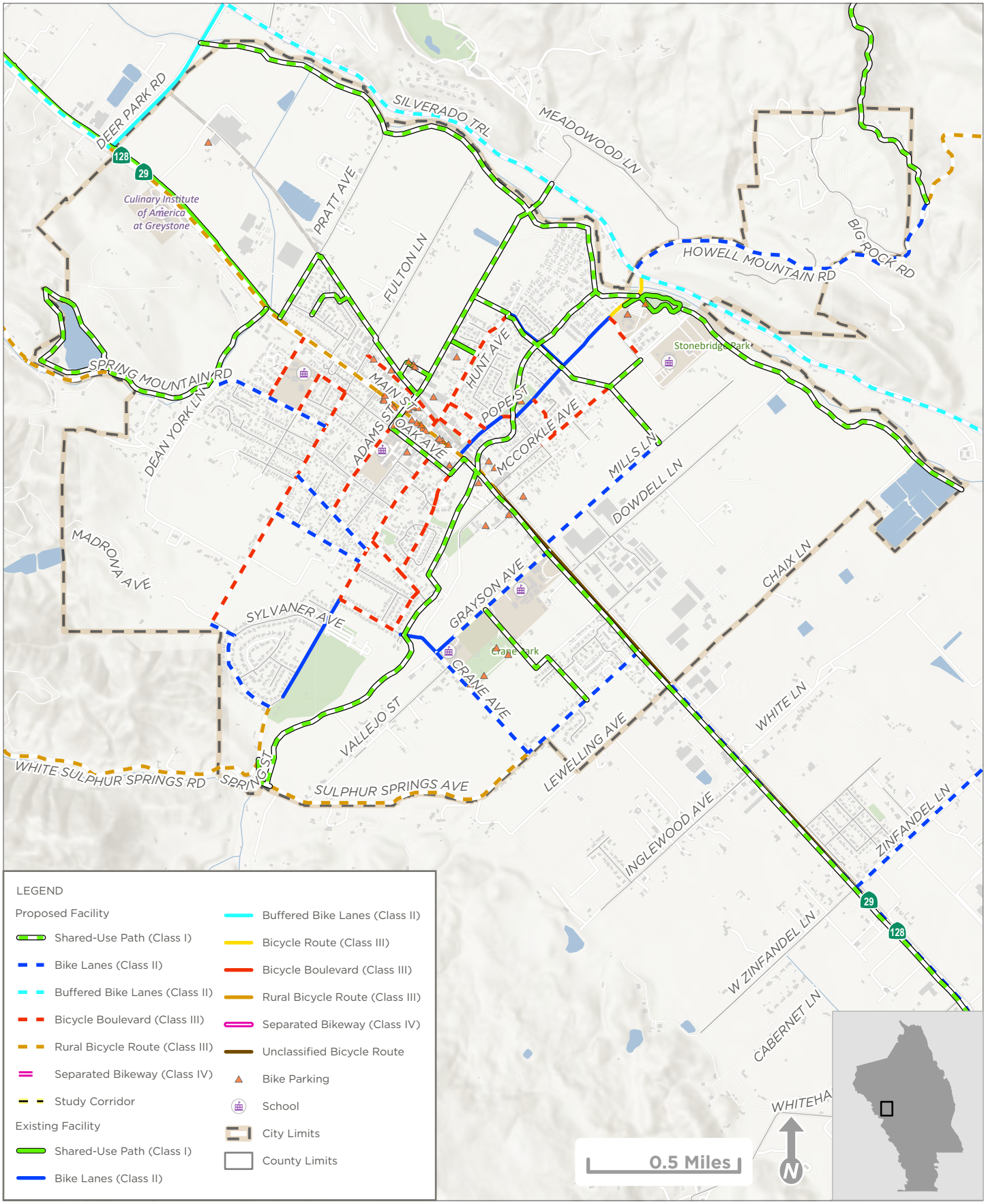
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga

Existing and Proposed Bicycle Facilities

FIGURE 5.2

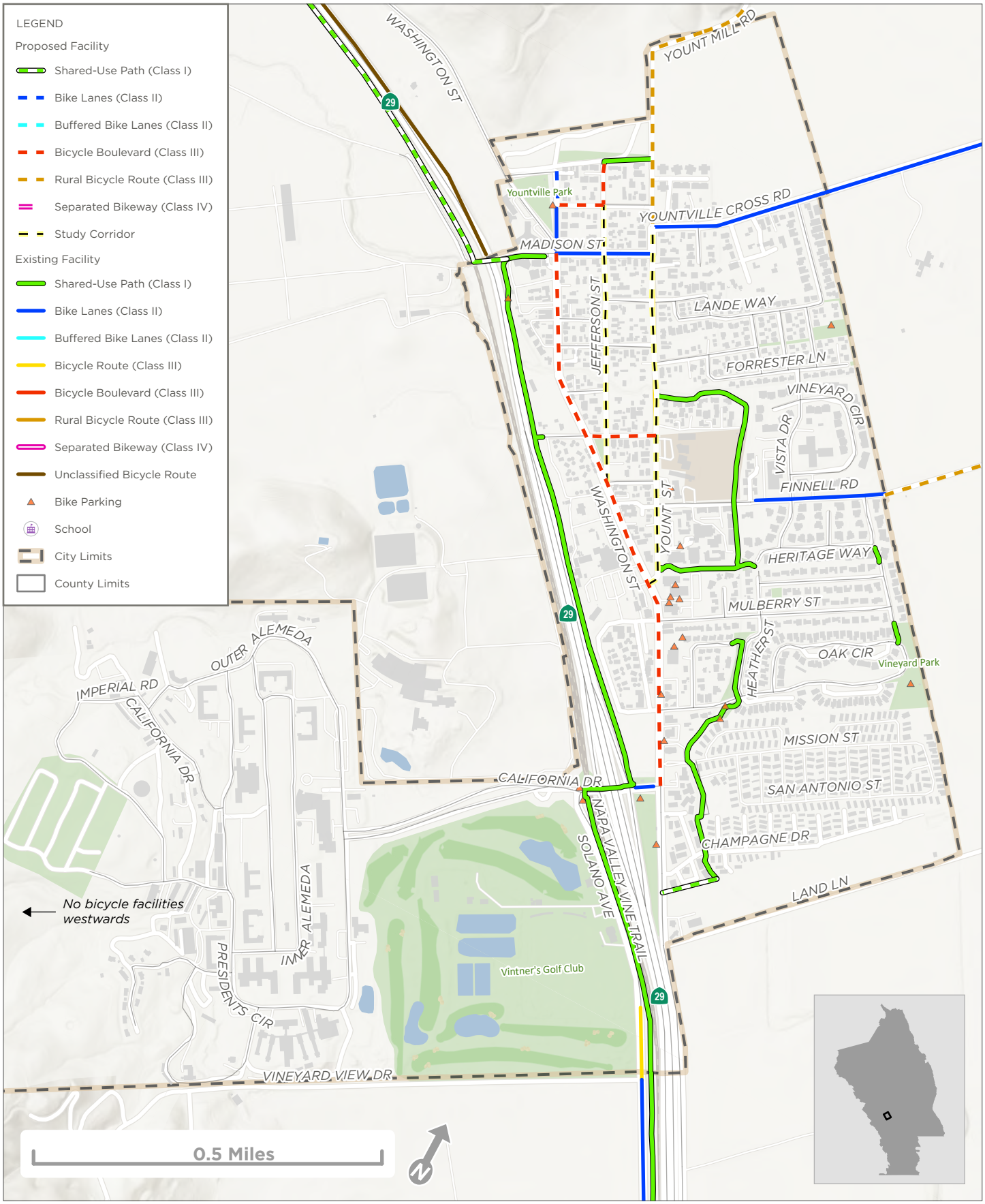


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena
Existing and Proposed Bicycle Facilities

FIGURE 5.3

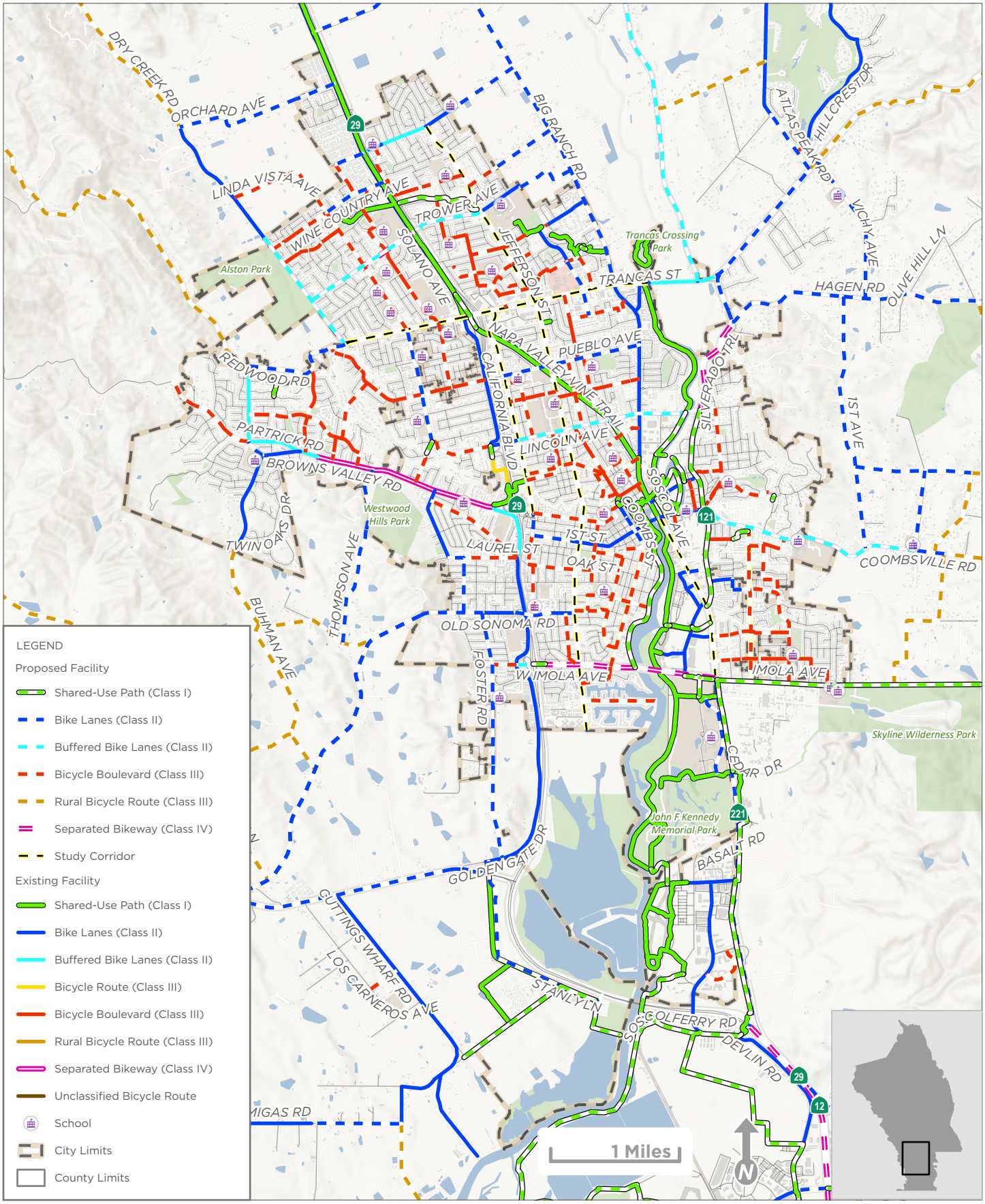


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville
Existing and Proposed Bicycle Facilities

FIGURE 5.4

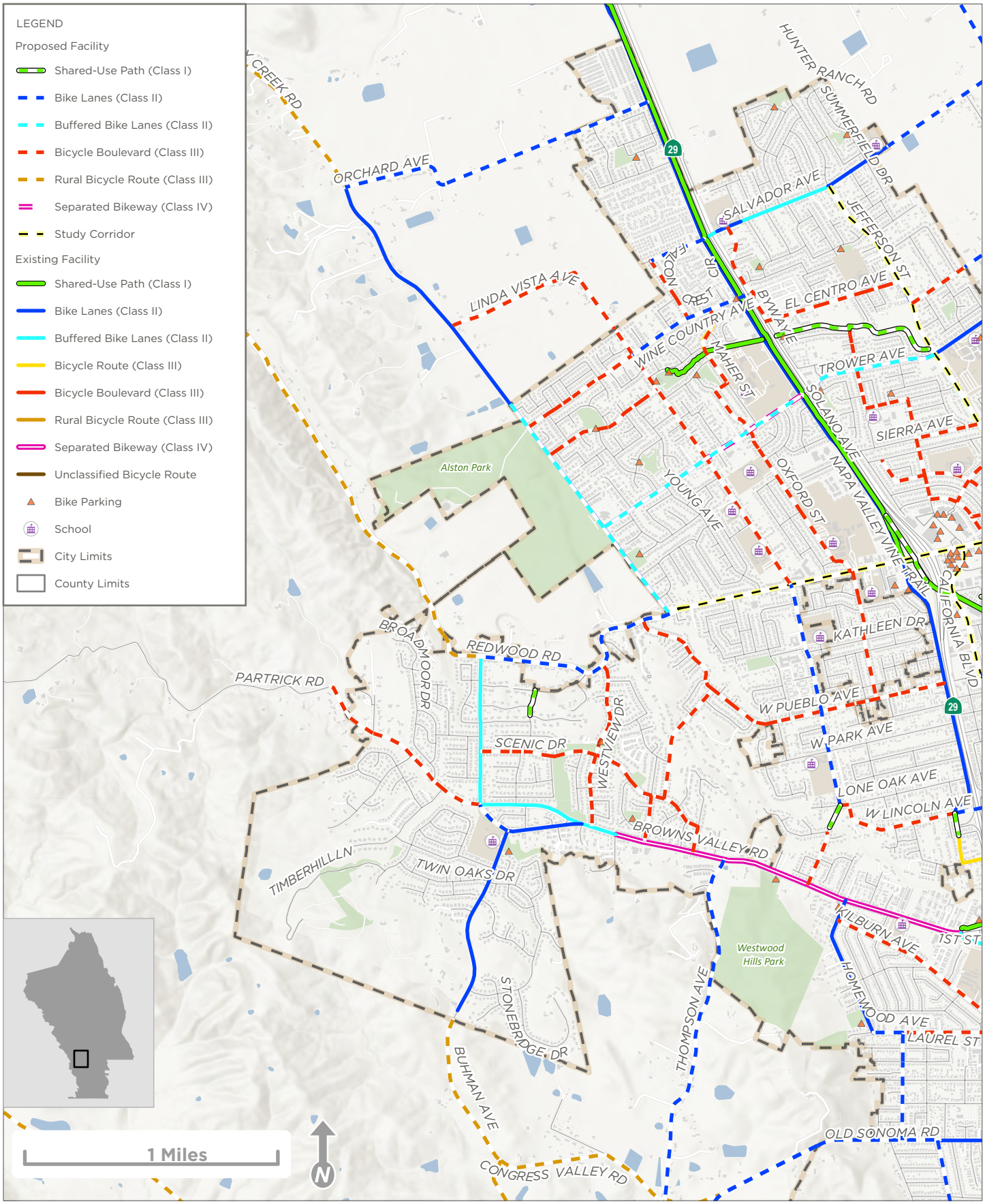


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa
Existing and Proposed Bicycle Facilities

FIGURE 5.5

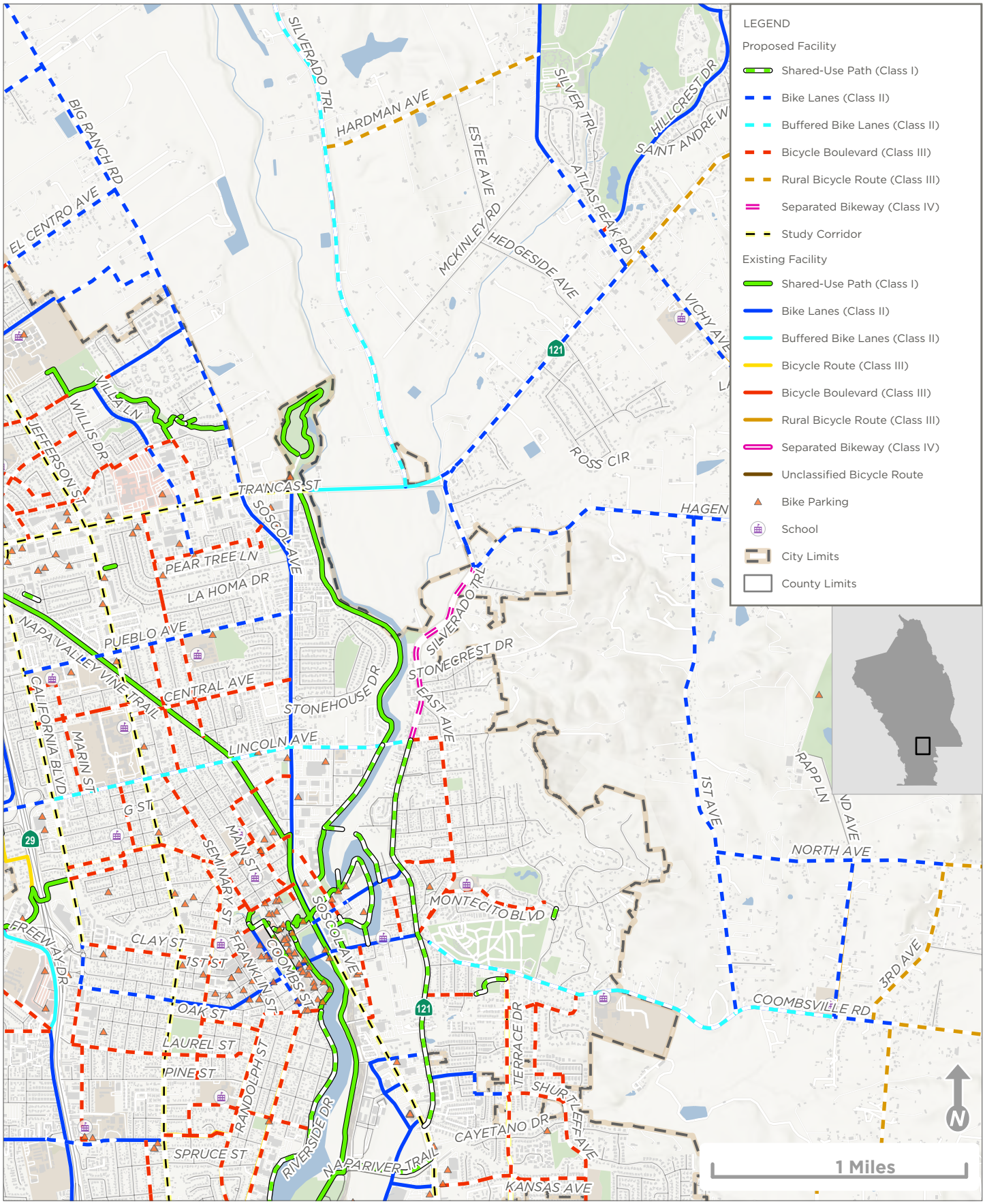


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest
Existing and Proposed Bicycle Facilities

FIGURE 5.6

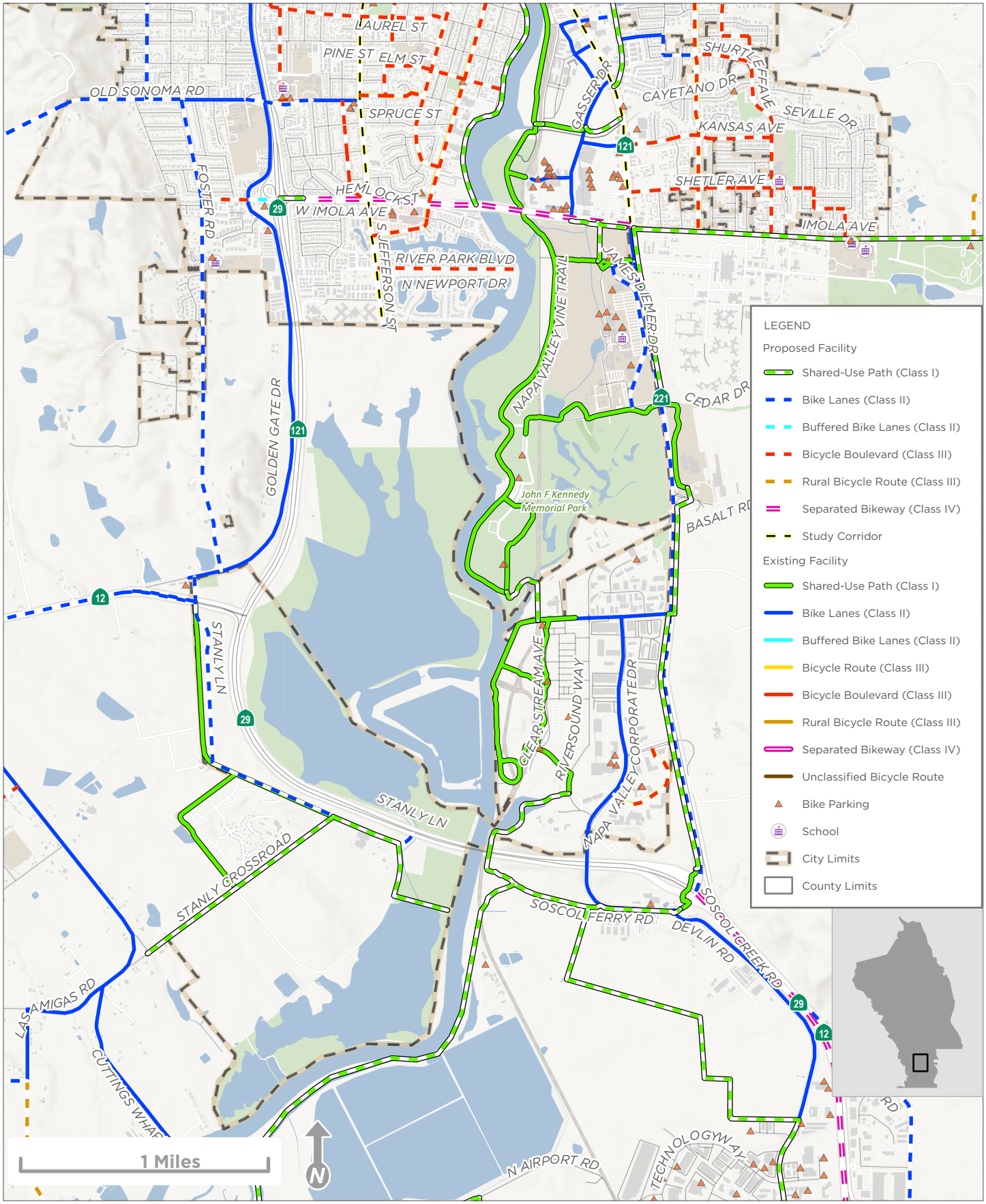


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast
Existing and Proposed Bicycle Facilities

FIGURE 5.7

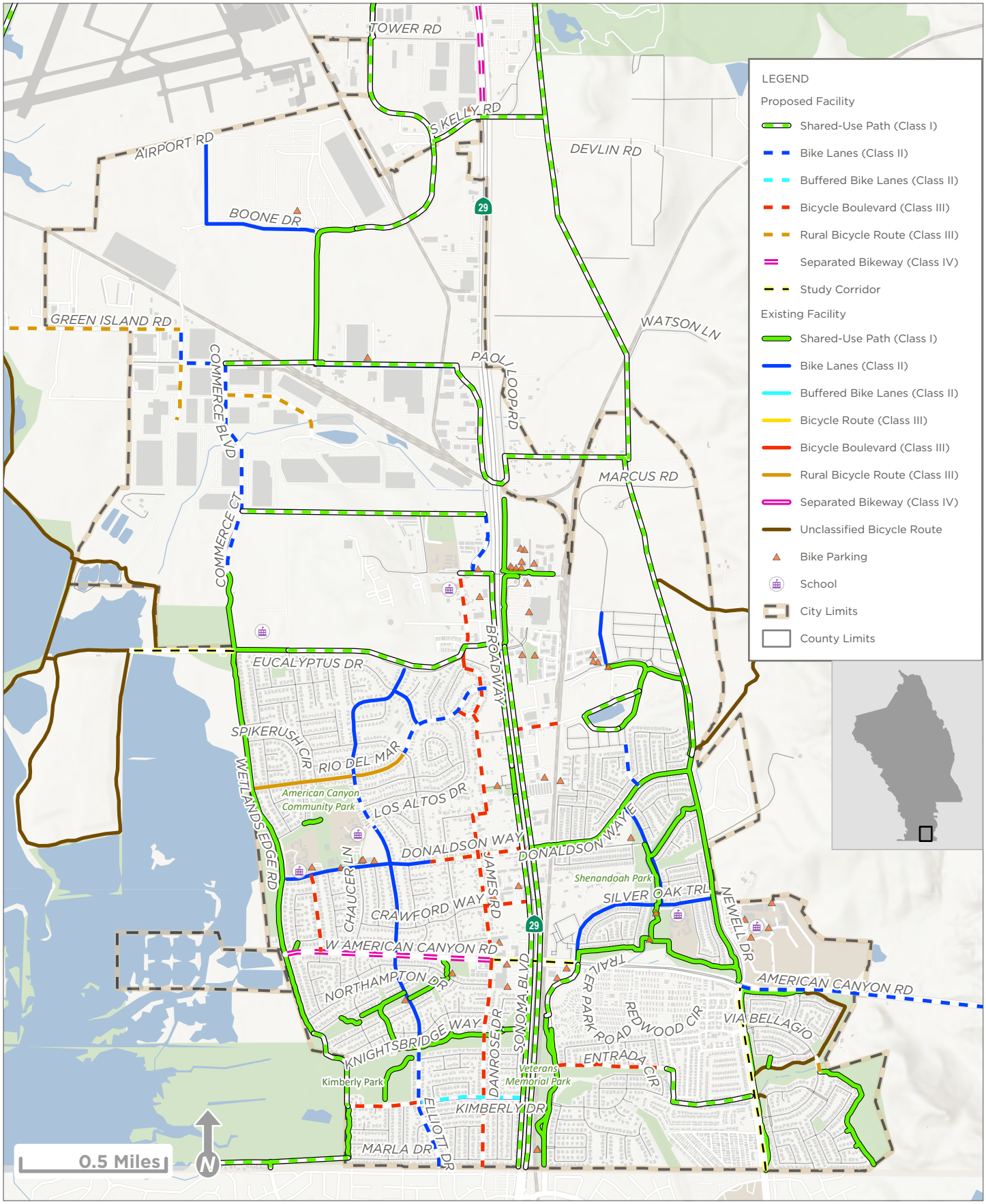


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South
Existing and Proposed Bicycle Facilities

FIGURE 5.8

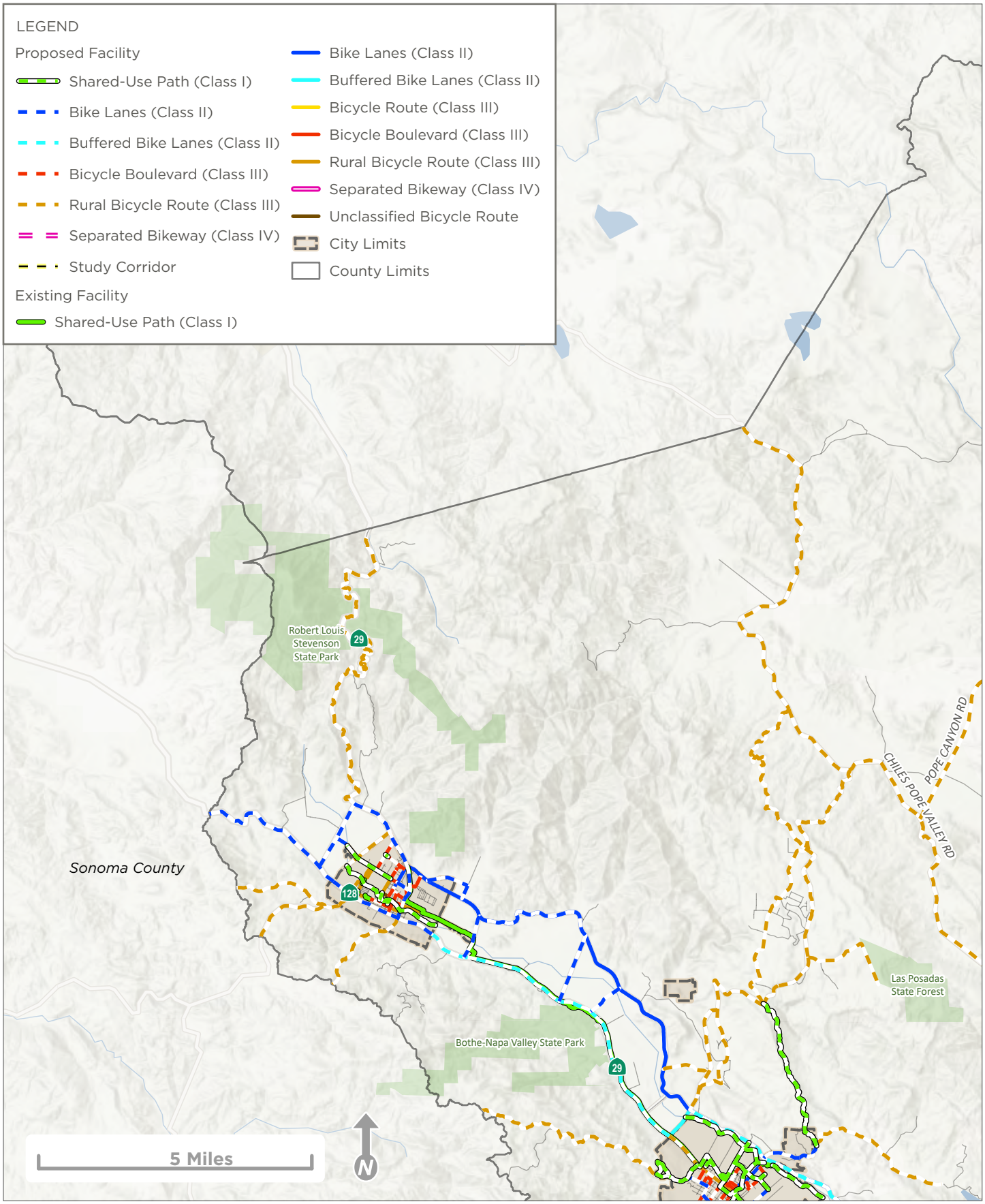


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing and Proposed Bicycle Facilities

FIGURE 5.9

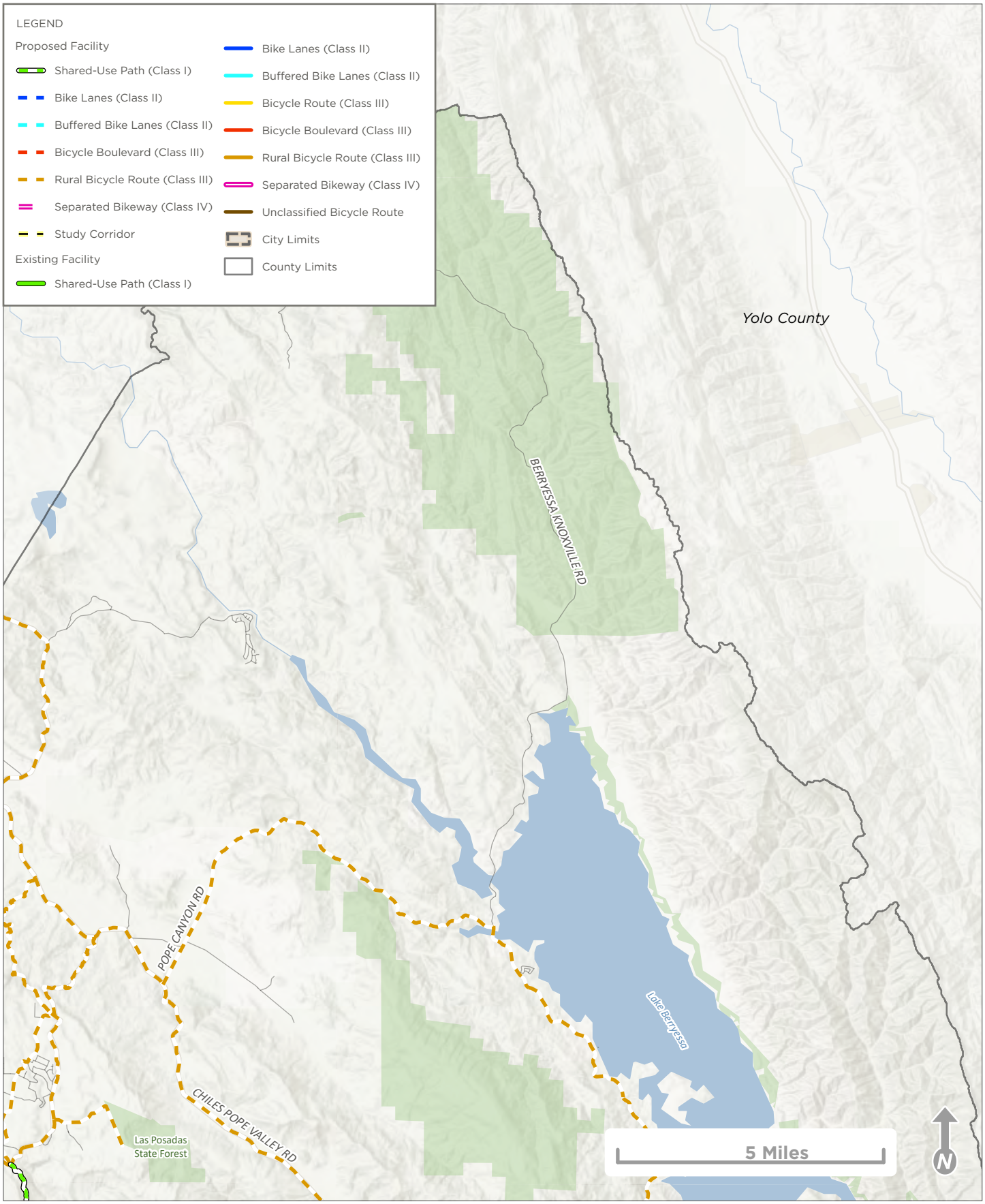


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northwest
Existing and Proposed Bicycle Facilities

FIGURE 5.10

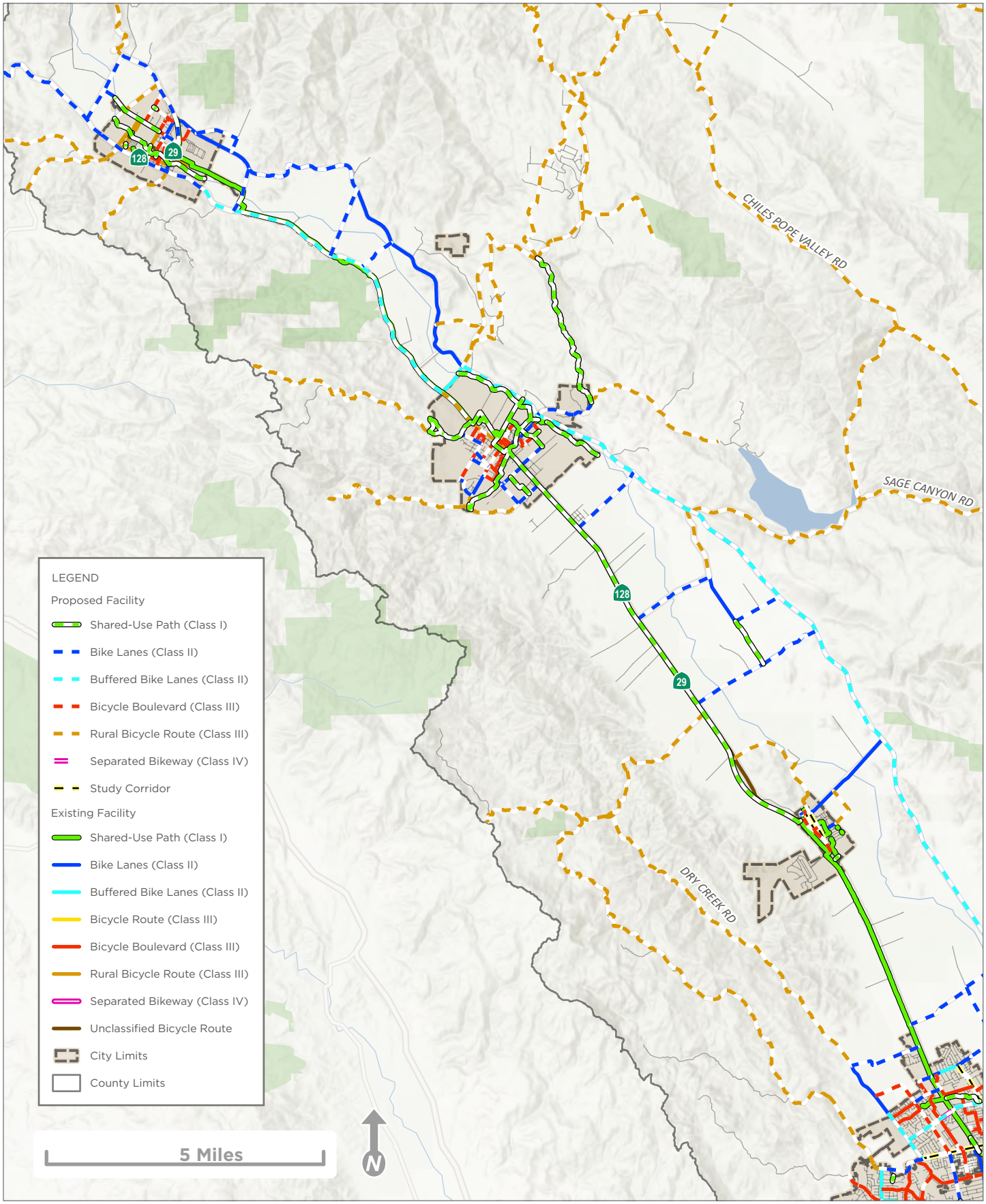


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northeast
Existing and Proposed Bicycle Facilities

FIGURE 5.11

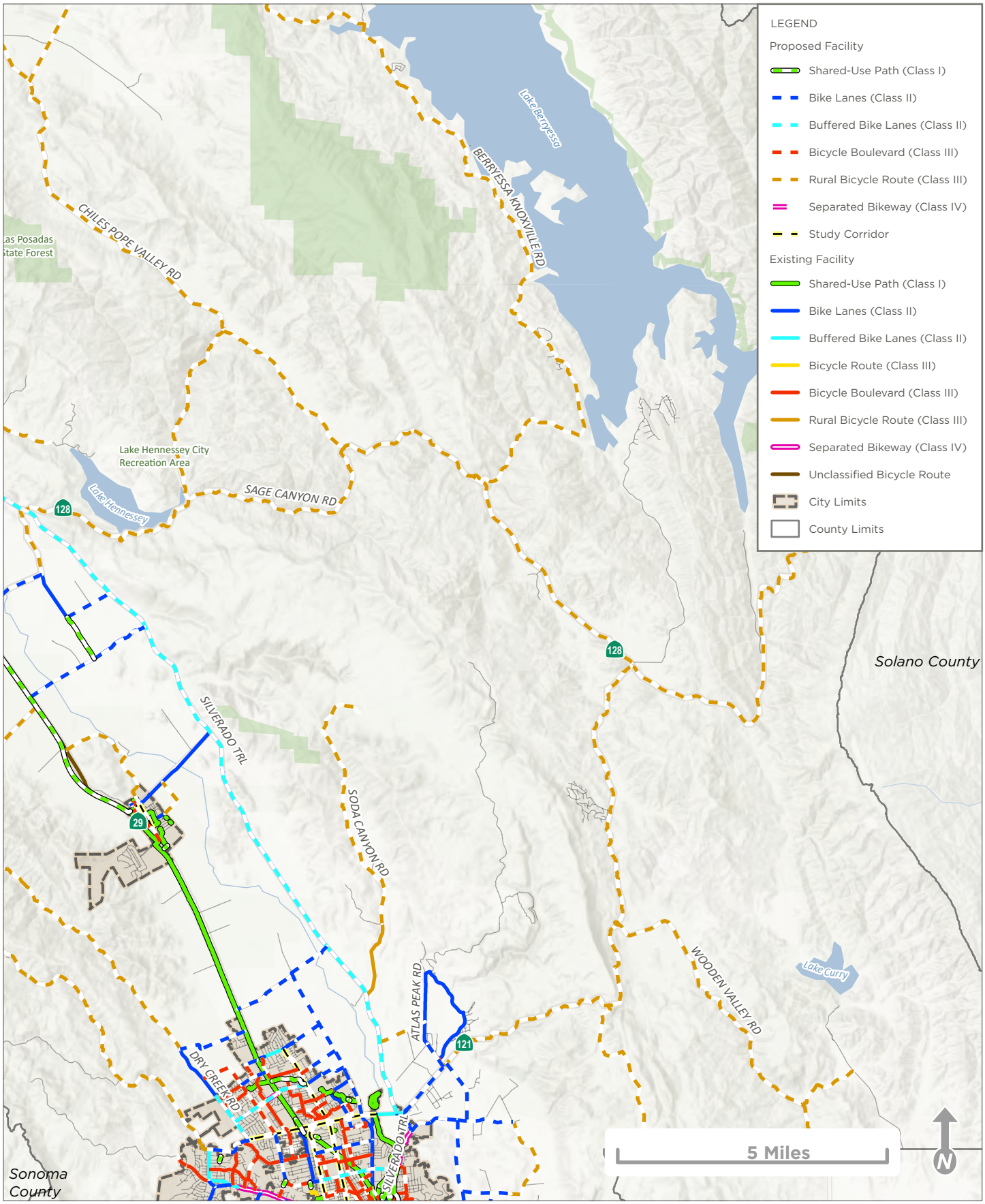


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central West
Existing and Proposed Bicycle Facilities

FIGURE 5.12

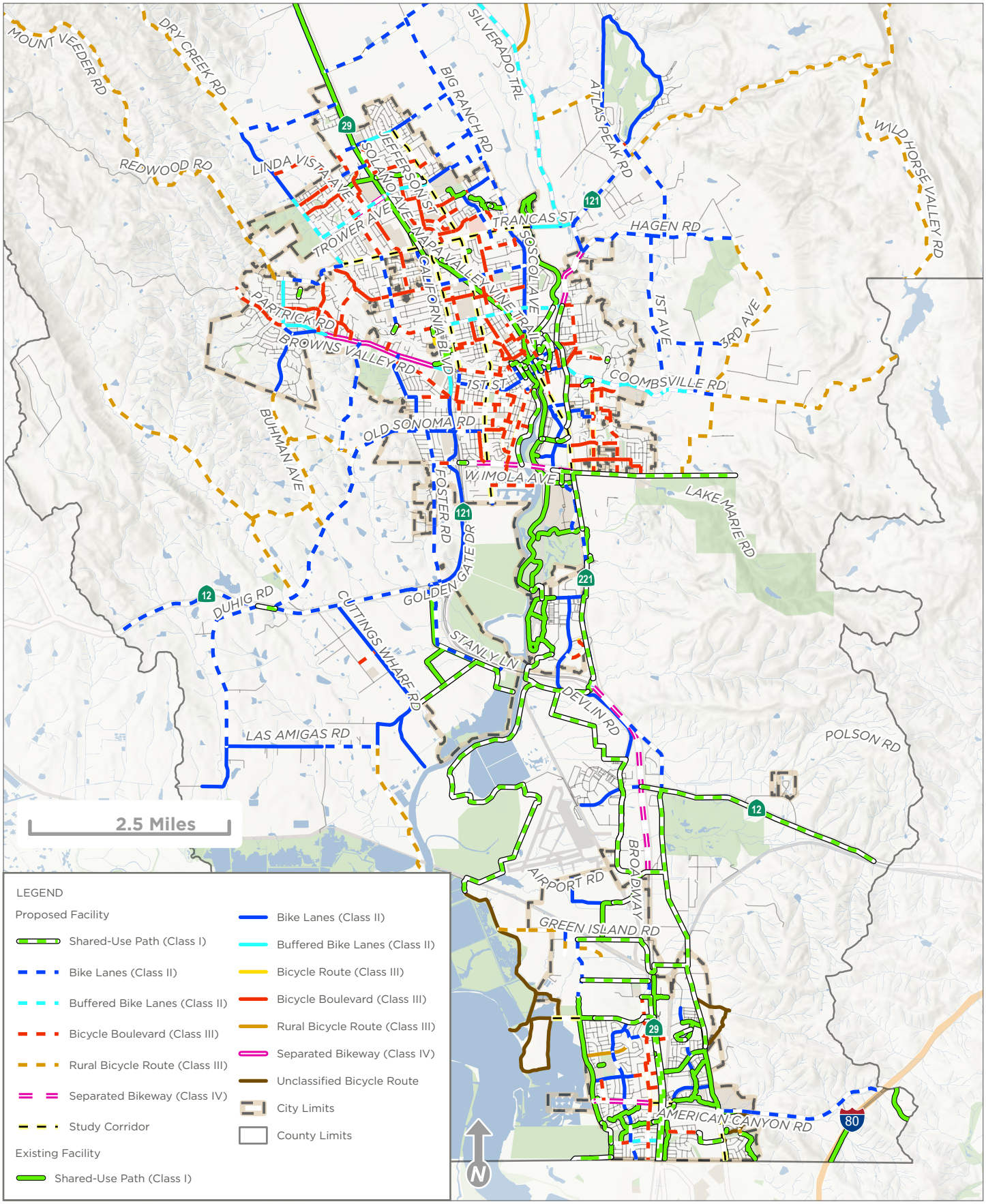


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central East
Existing and Proposed Bicycle Facilities

FIGURE 5.13



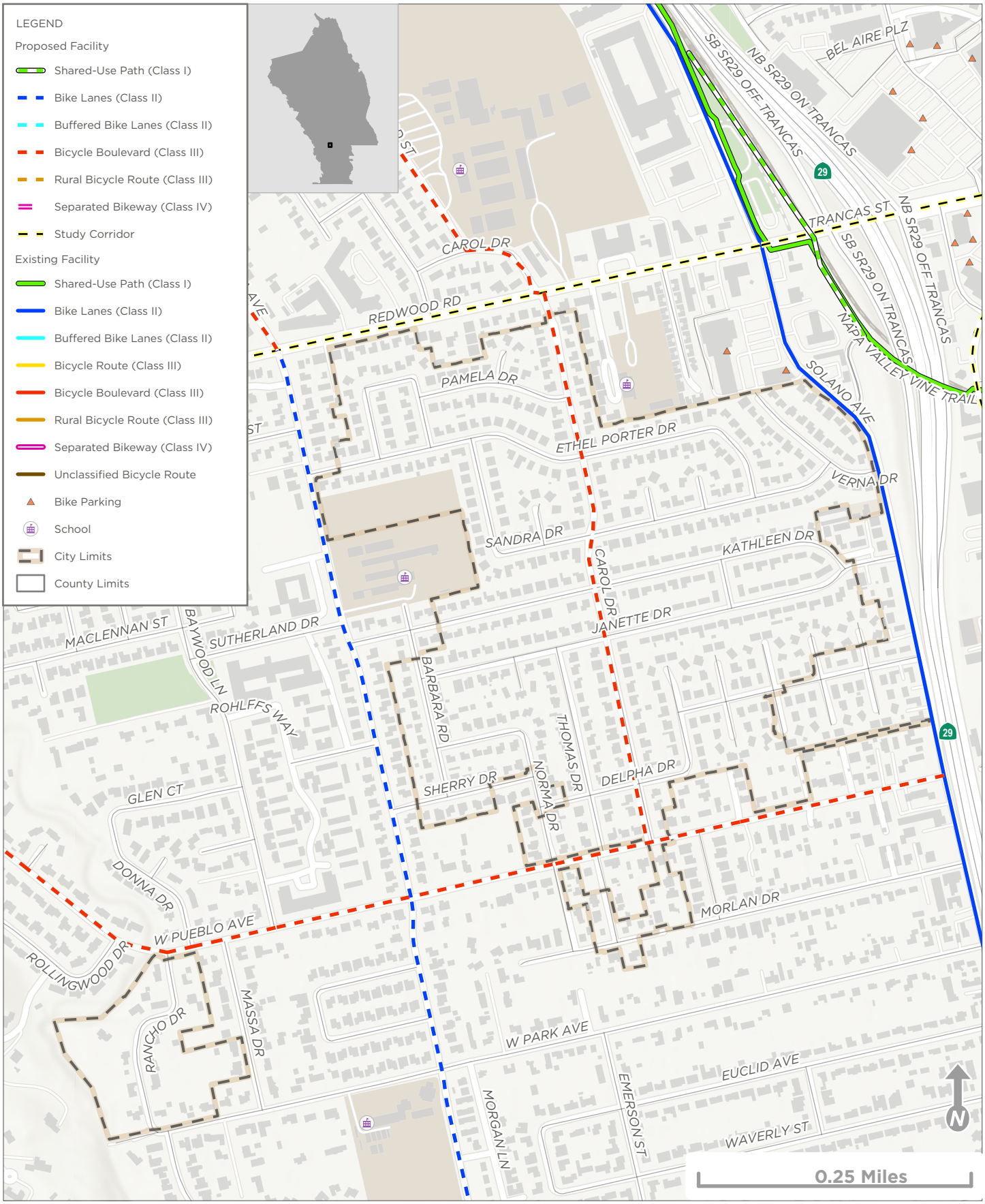
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - South

Existing and Proposed Bicycle Facilities

FIGURE 5.14

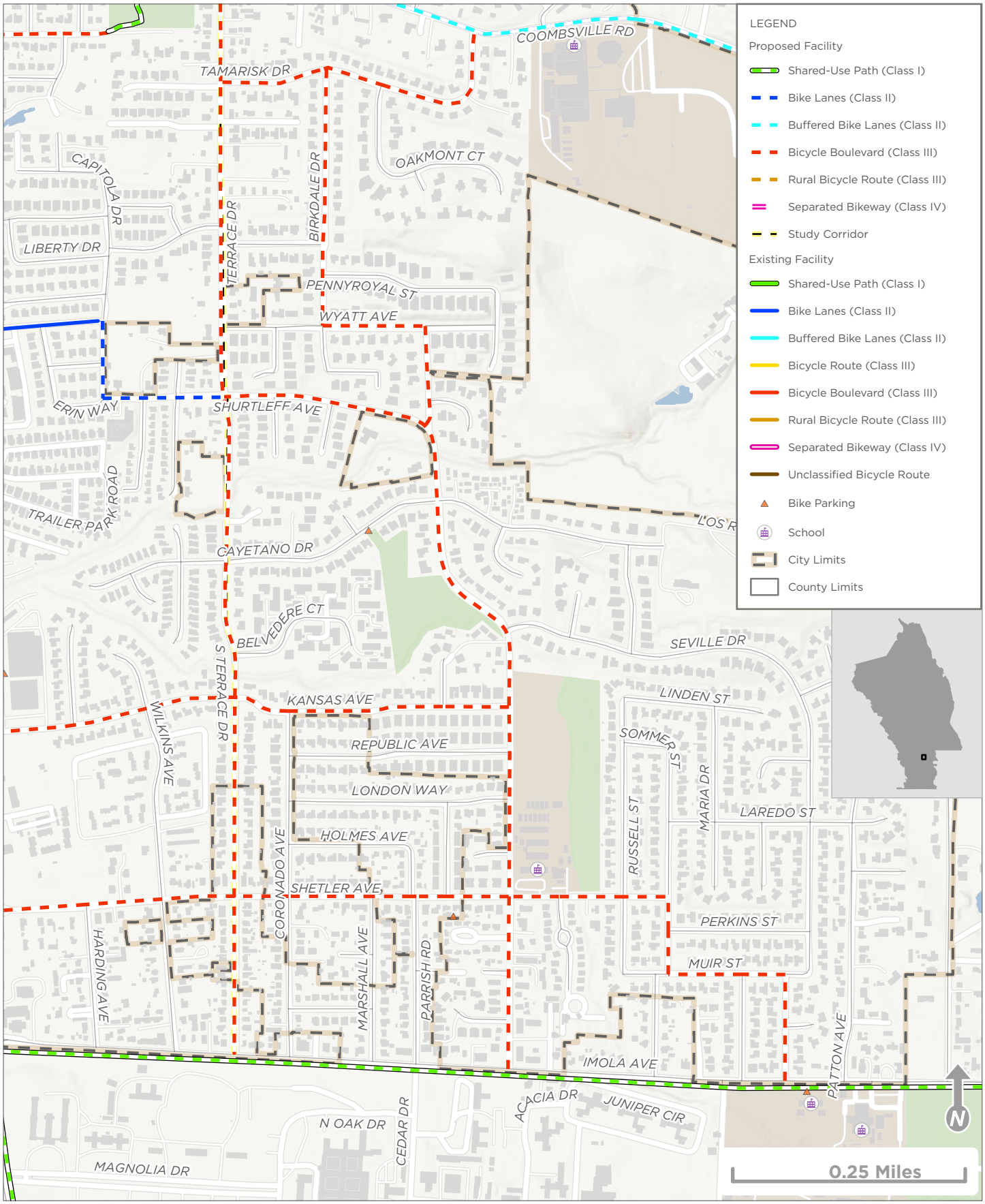


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - West Pueblo
Existing and Proposed Bicycle Facilities

FIGURE 5.15



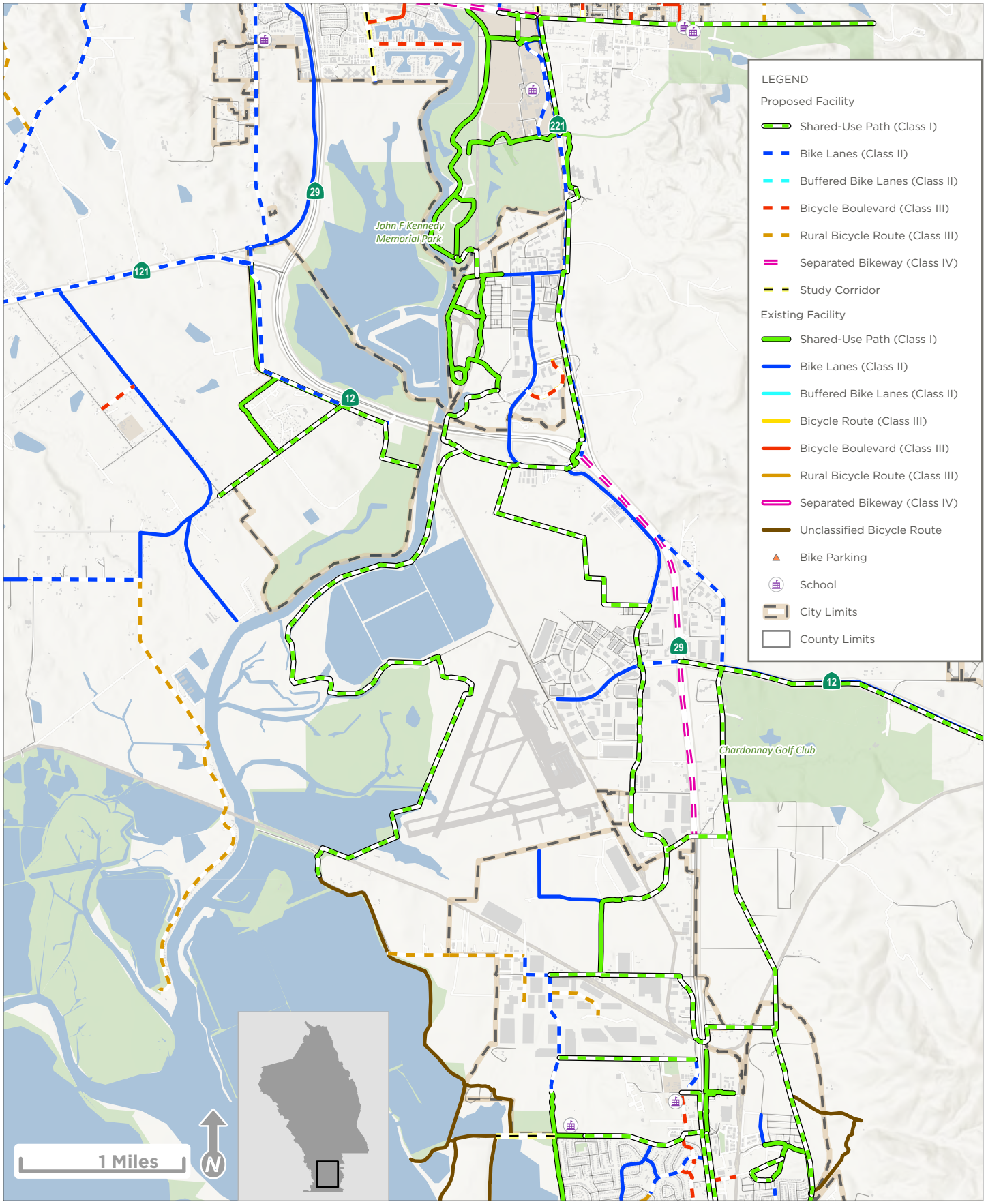
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Southeast Napa Islands

Existing and Proposed Bicycle Facilities

FIGURE 5.16



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Napa / American Canyon
Existing and Proposed Bicycle Facilities

FIGURE 5.17

Proposed Pedestrian Network

Recommended pedestrian projects aim to create a more complete, more connected pedestrian network. Proposed projects include off-street, shared-use paths as well as sidewalk gap closure projects near key destinations.

Providing dedicated pedestrian facilities separate from vehicle traffic decreases potential conflict with motorists. A complete pedestrian network is more accessible to a wide range of users, including people with physical disabilities, as well as people with strollers, shopping carts, suitcases, or bicycles. It also supports first- and last-mile trips to and from transit stops, improved public health by encouraging walking, and drives foot traffic to local businesses.

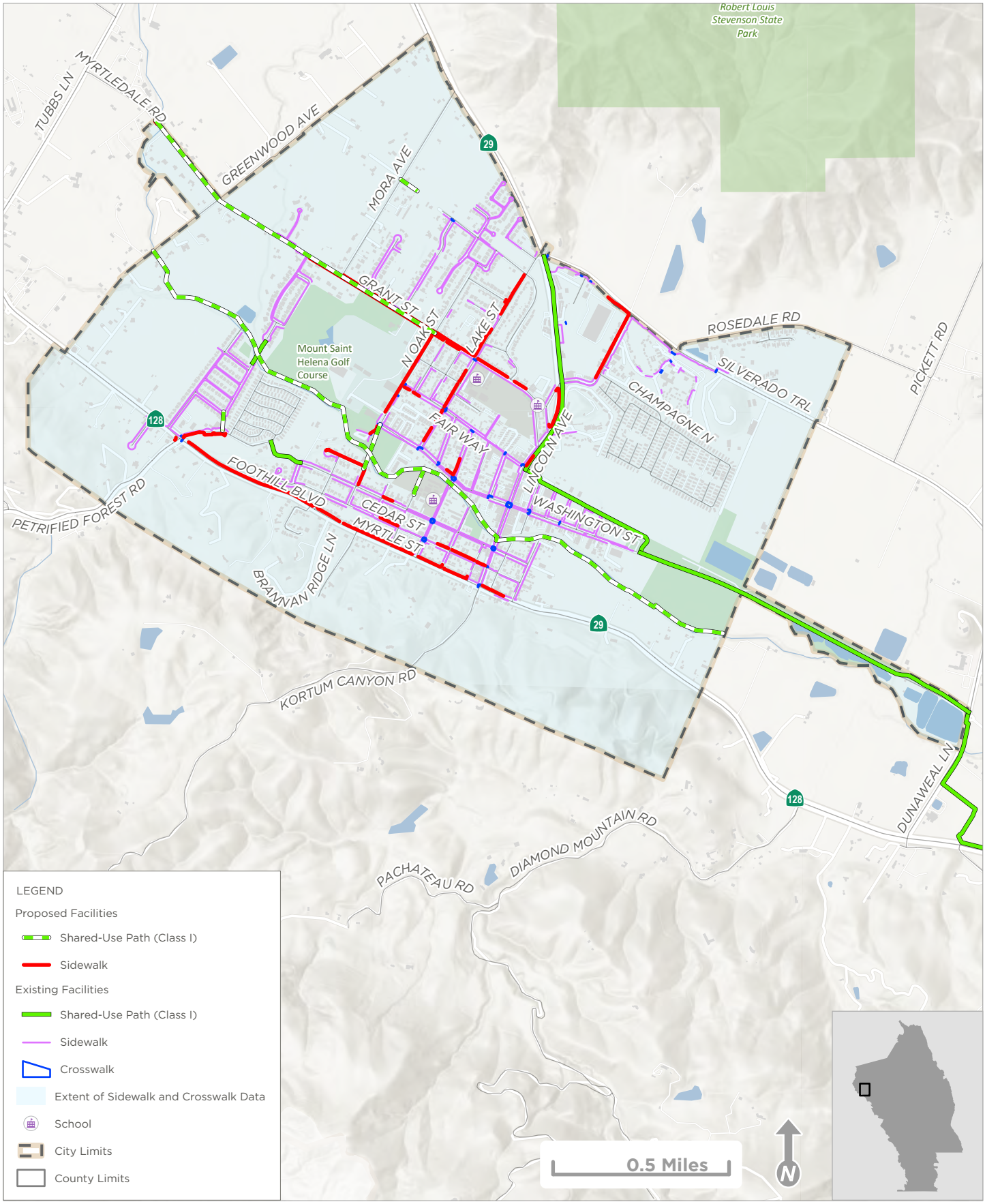
The proposed network does not include specific locations for crossing or intersection improvements, but rather a crosswalk policy that may be employed by the jurisdictions. The Treatment Toolkit in Appendix D provides a host of potential crossing improvement measures, including signage, lighting, physical infrastructure improvements, and parking policy. Jurisdictions may use this toolkit at their own discretion to develop site specific crossing improvement projects.

Proposed Pedestrian Network

Table 5.2 provides existing and proposed mileage of the pedestrian network by facility type. For detailed project recommendations for each jurisdiction, see Chapter 7 through Chapter 12.

Table 5.2: Napa Countywide Proposed Pedestrian Network Mileage

Facility Type	Existing Mileage	Proposed Mileage	Total
Shared Use Path (Class I)	47.0	66.2	**113.3**
Sidewalk	523.1	18.3	**541.4**
Total	**570.1**	**84.6**	**654.7**



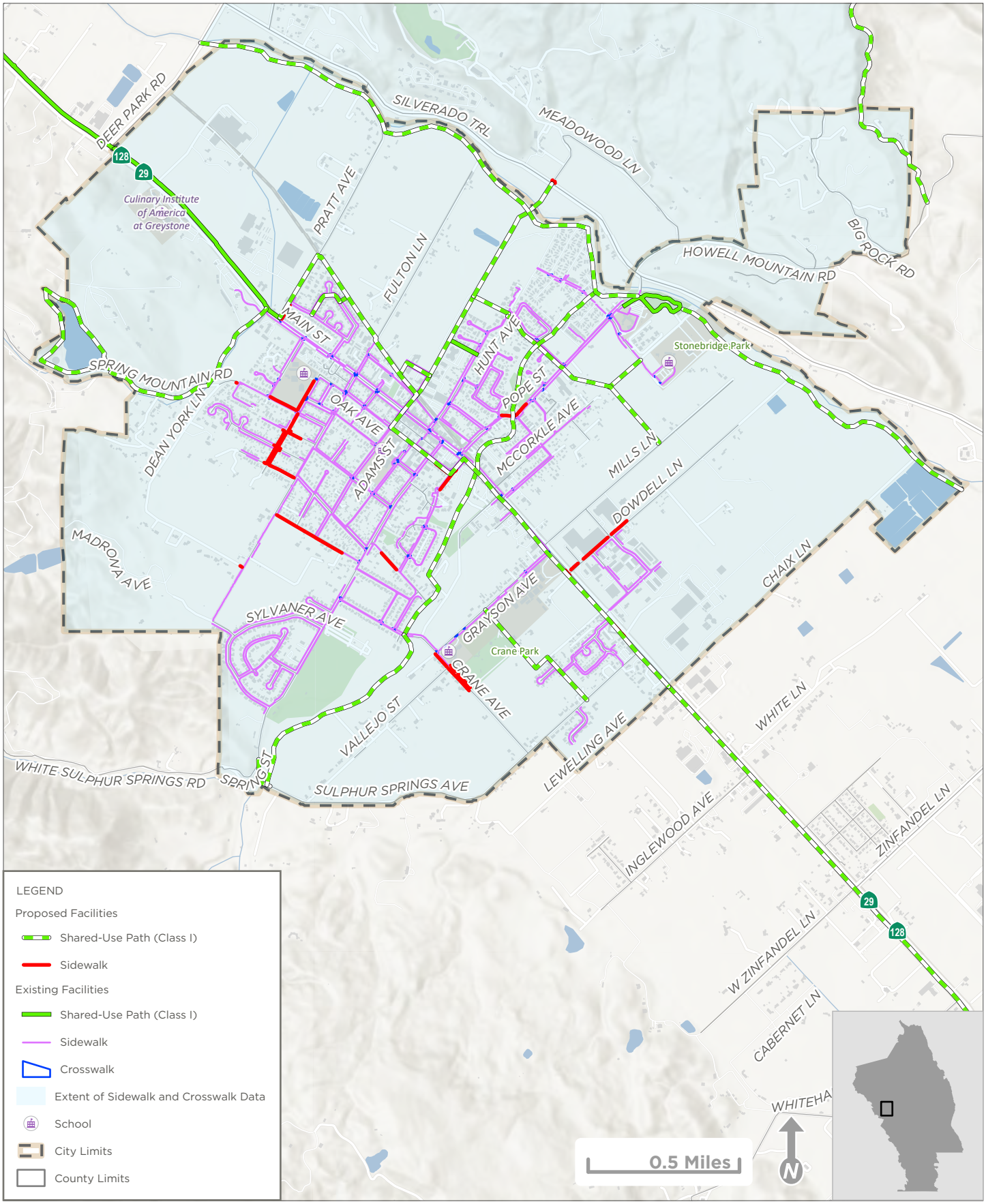
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga

Existing and Proposed Pedestrian Facilities

FIGURE 5.18

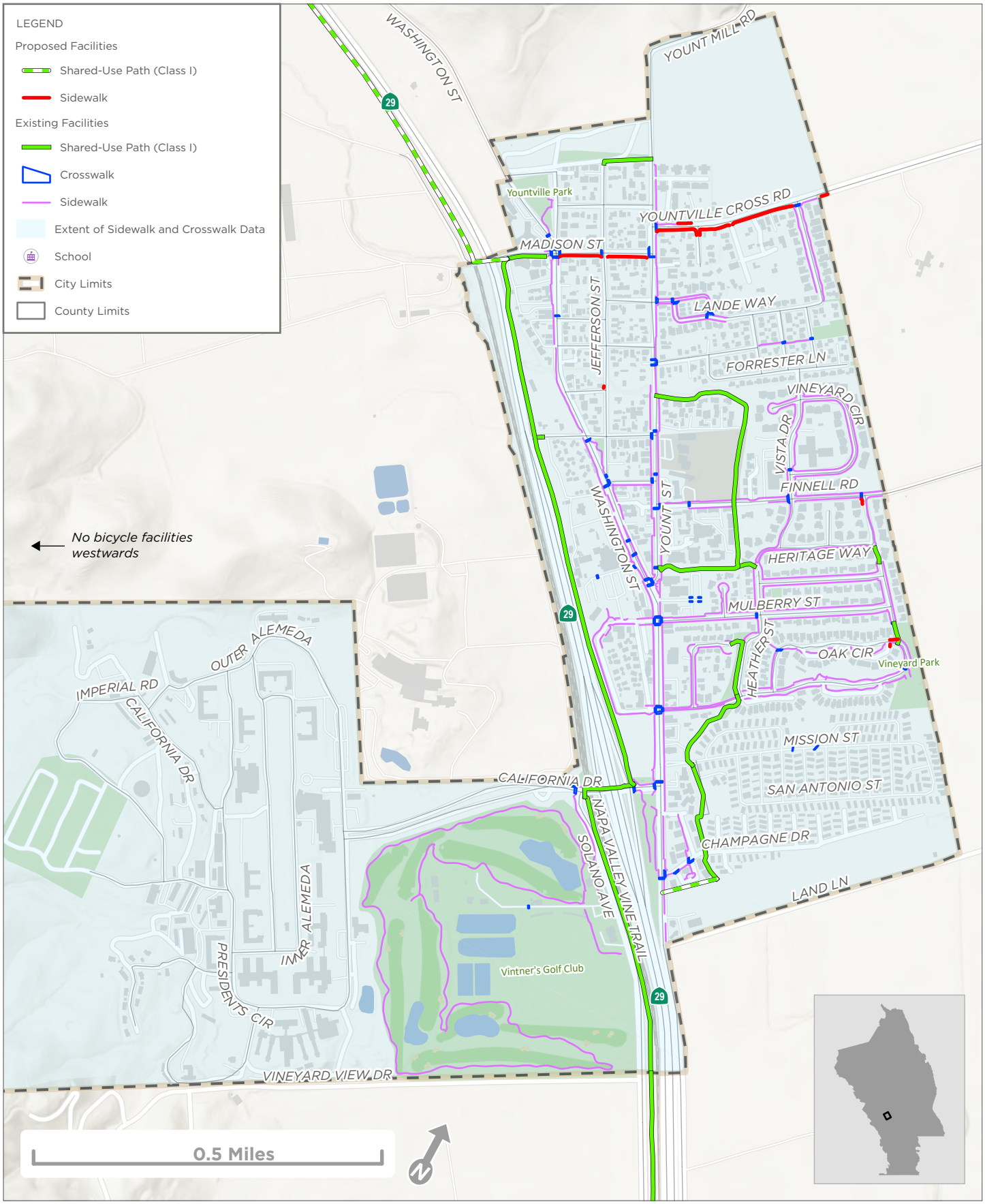


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena
Existing and Proposed Pedestrian Facilities

FIGURE 5.19

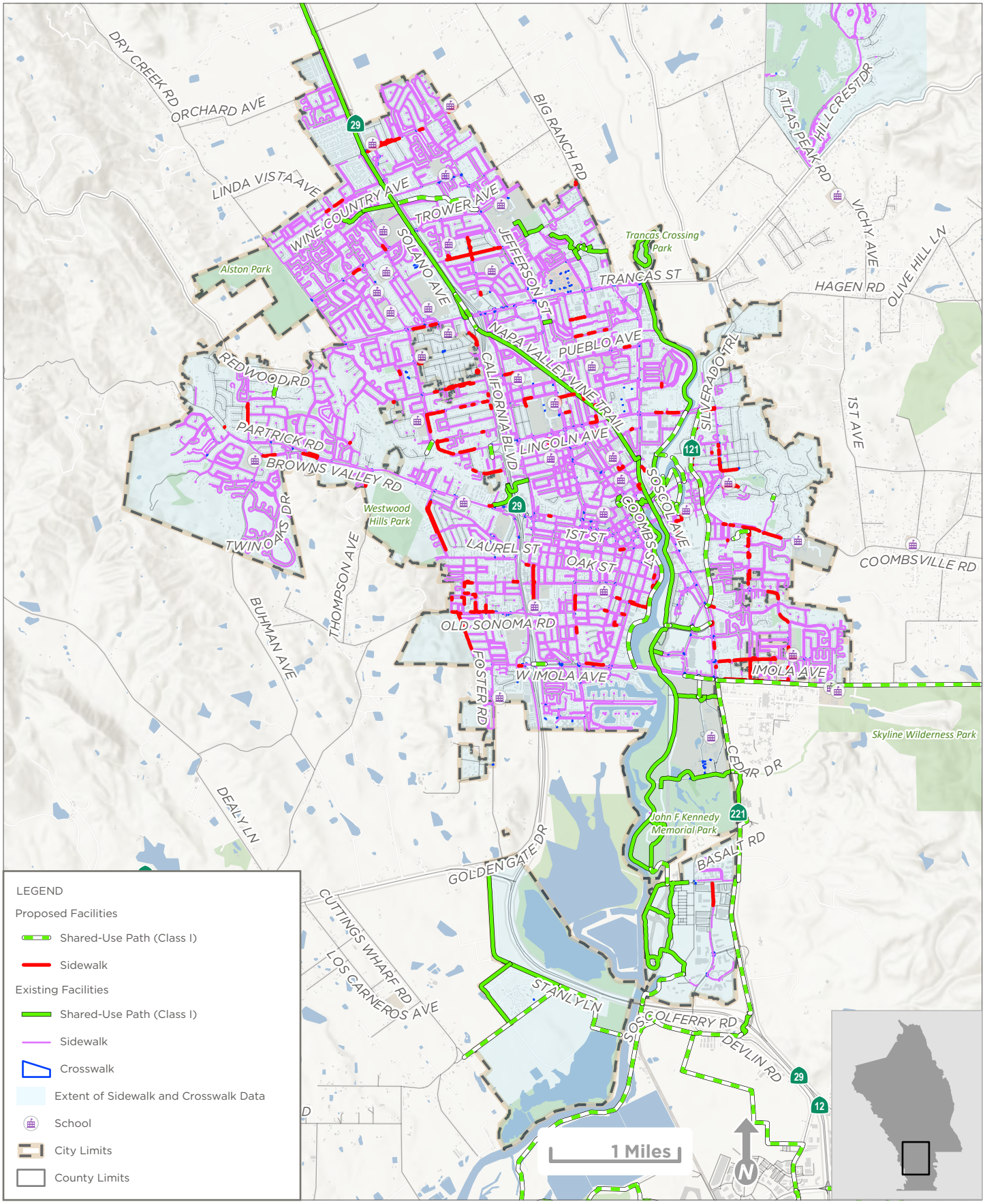


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville
Existing and Proposed Pedestrian Facilities

FIGURE 5.20



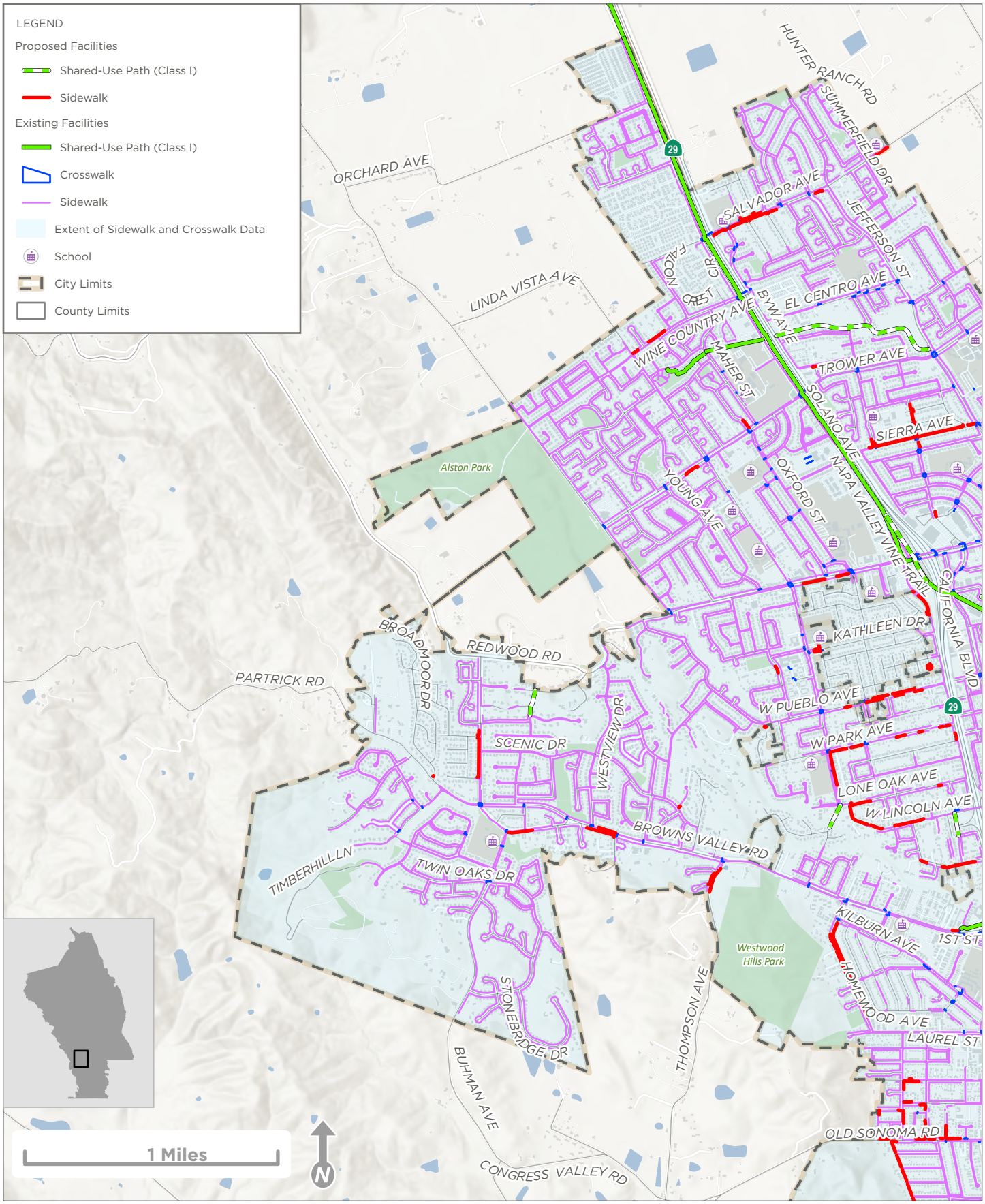
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa

Existing and Proposed Pedestrian Facilities

FIGURE 5.21

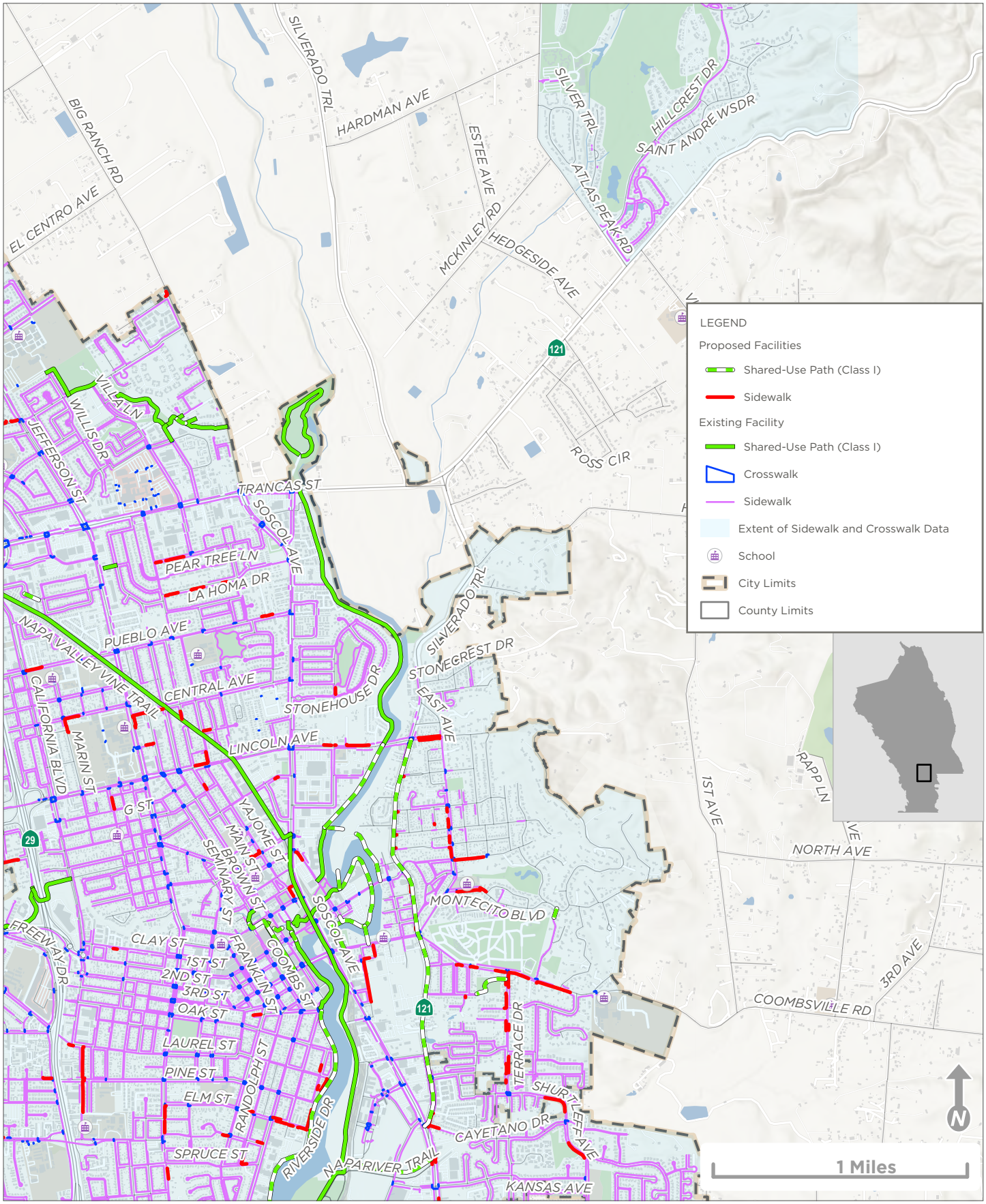


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest
Existing and Proposed Pedestrian Facilities

FIGURE 5.22

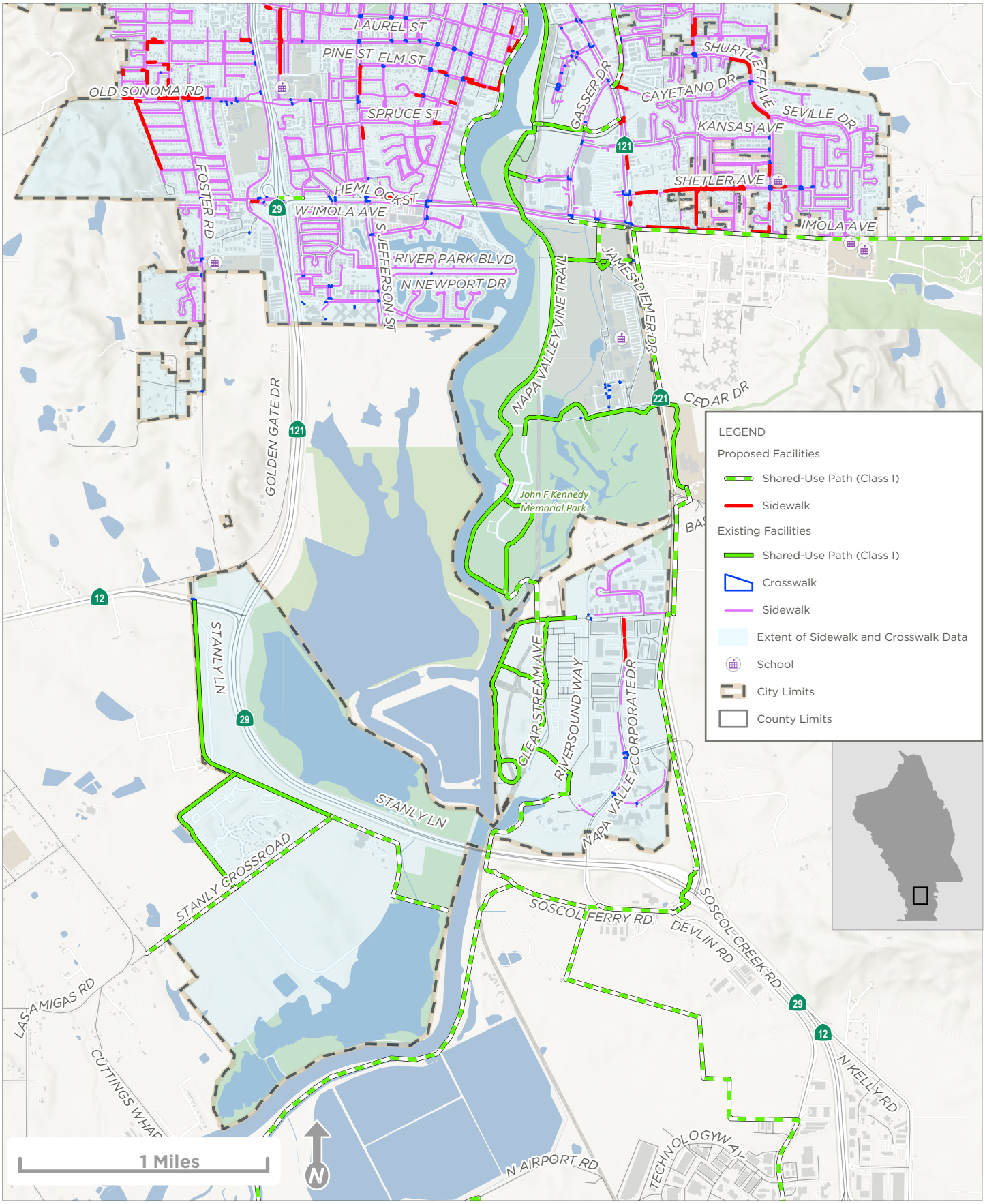


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast
Existing and Proposed Pedestrian Facilities

FIGURE 5.23

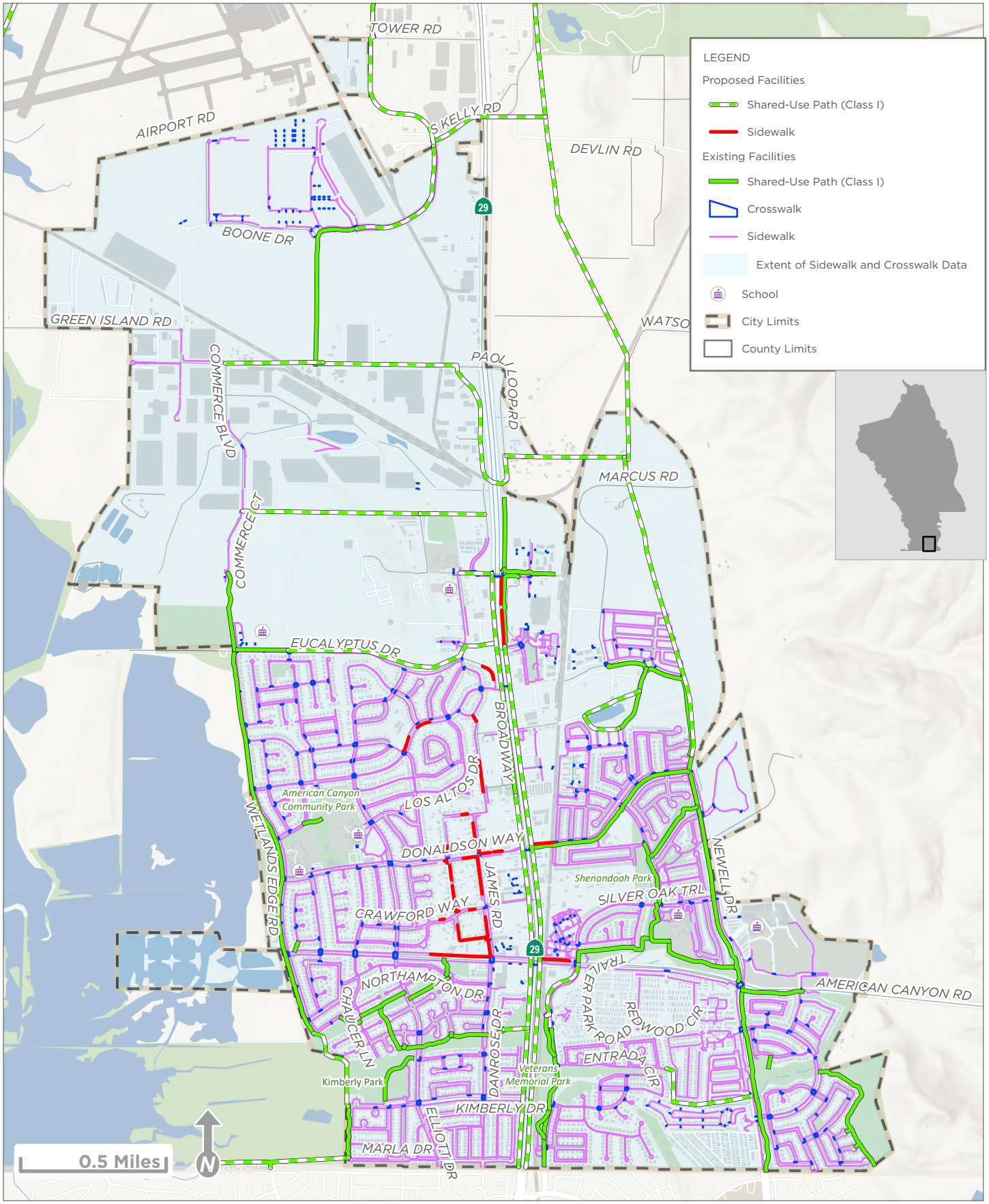


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South
Existing and Proposed Pedestrian Facilities

FIGURE 5.24

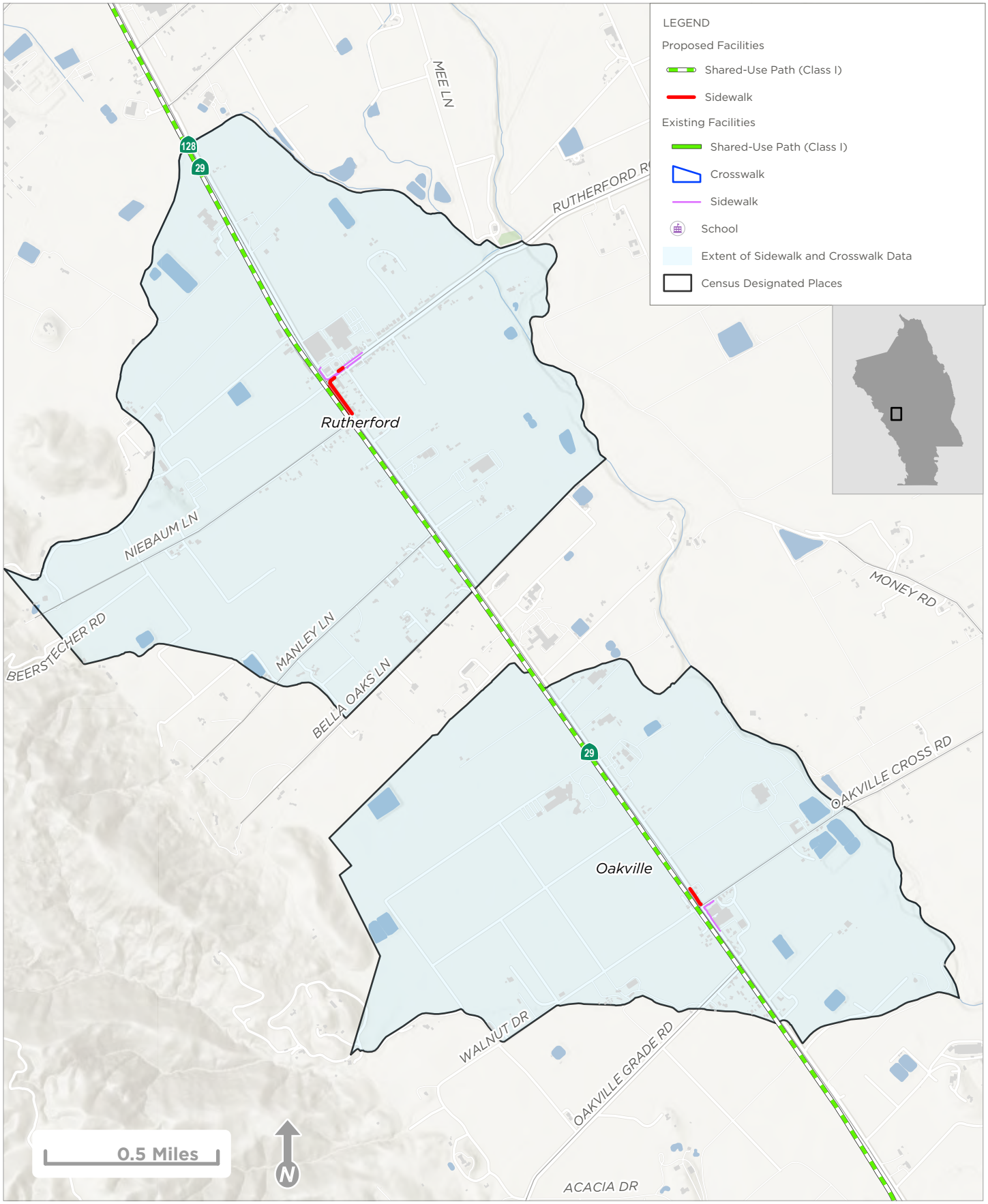


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing and Proposed Pedestrian Facilities

FIGURE 5.25



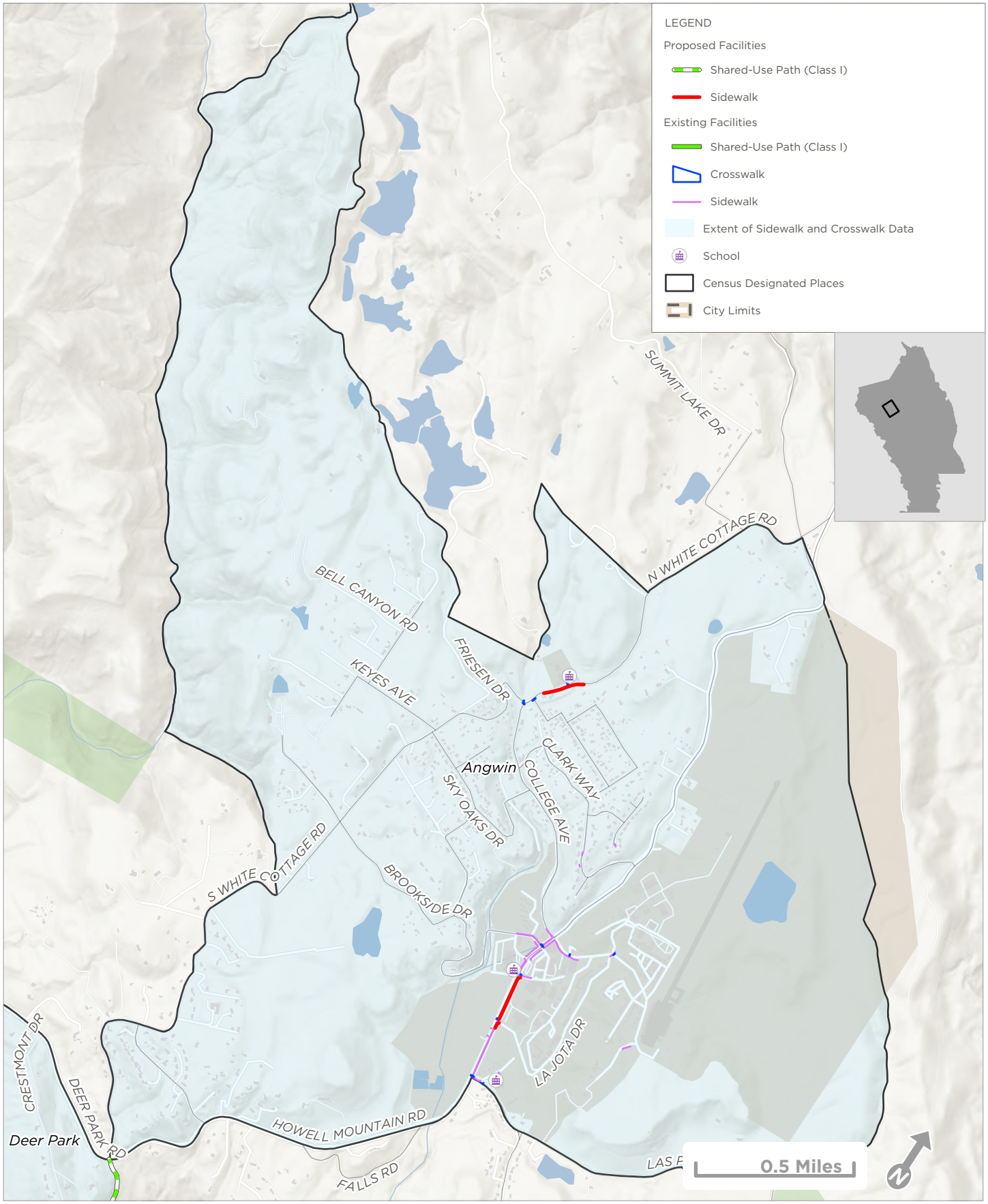
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Rutherford and Oakville

Existing and Proposed Pedestrian Facilities

FIGURE 5.26



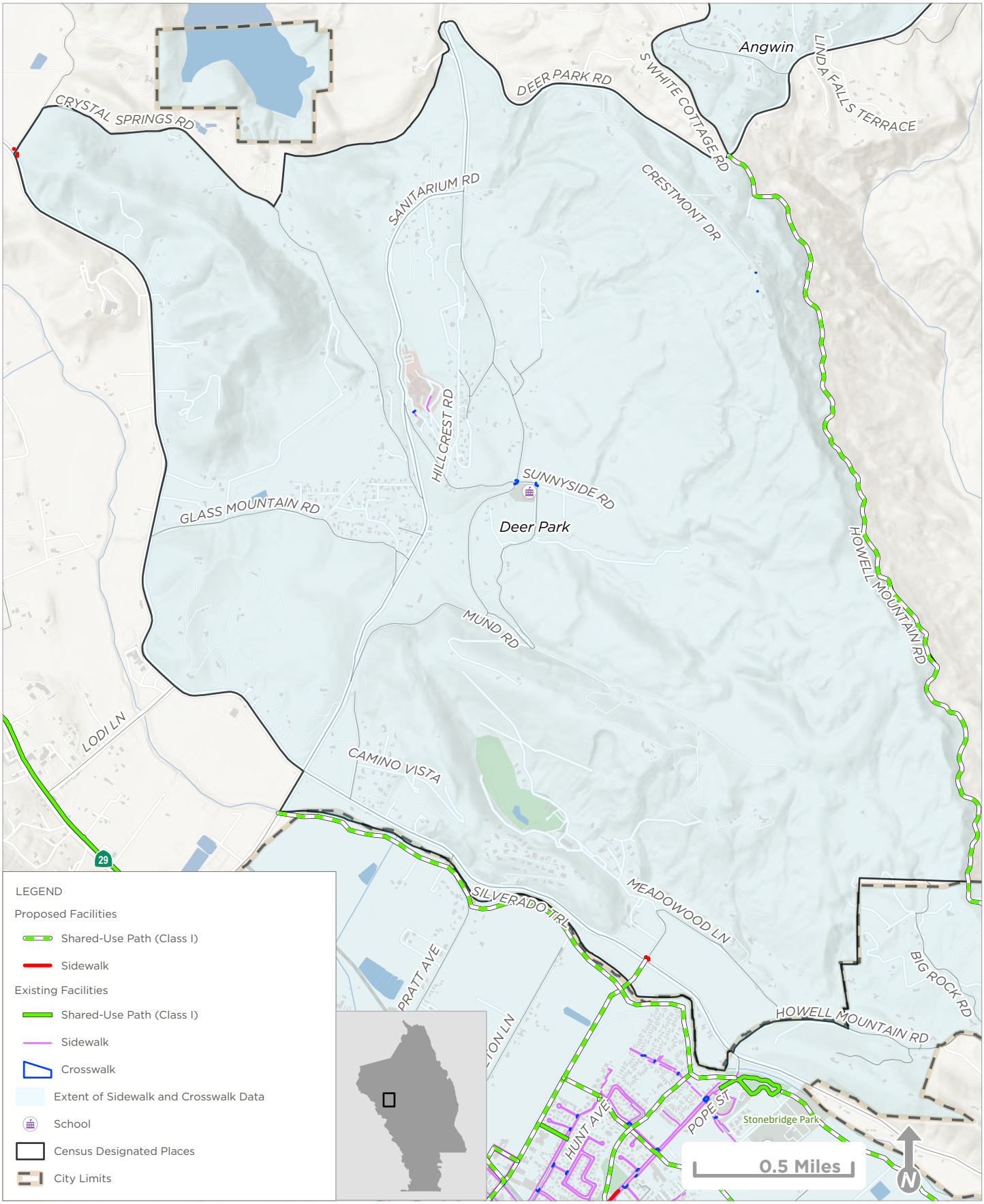
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Angwin

Existing and Proposed Pedestrian Facilities

FIGURE 5.27



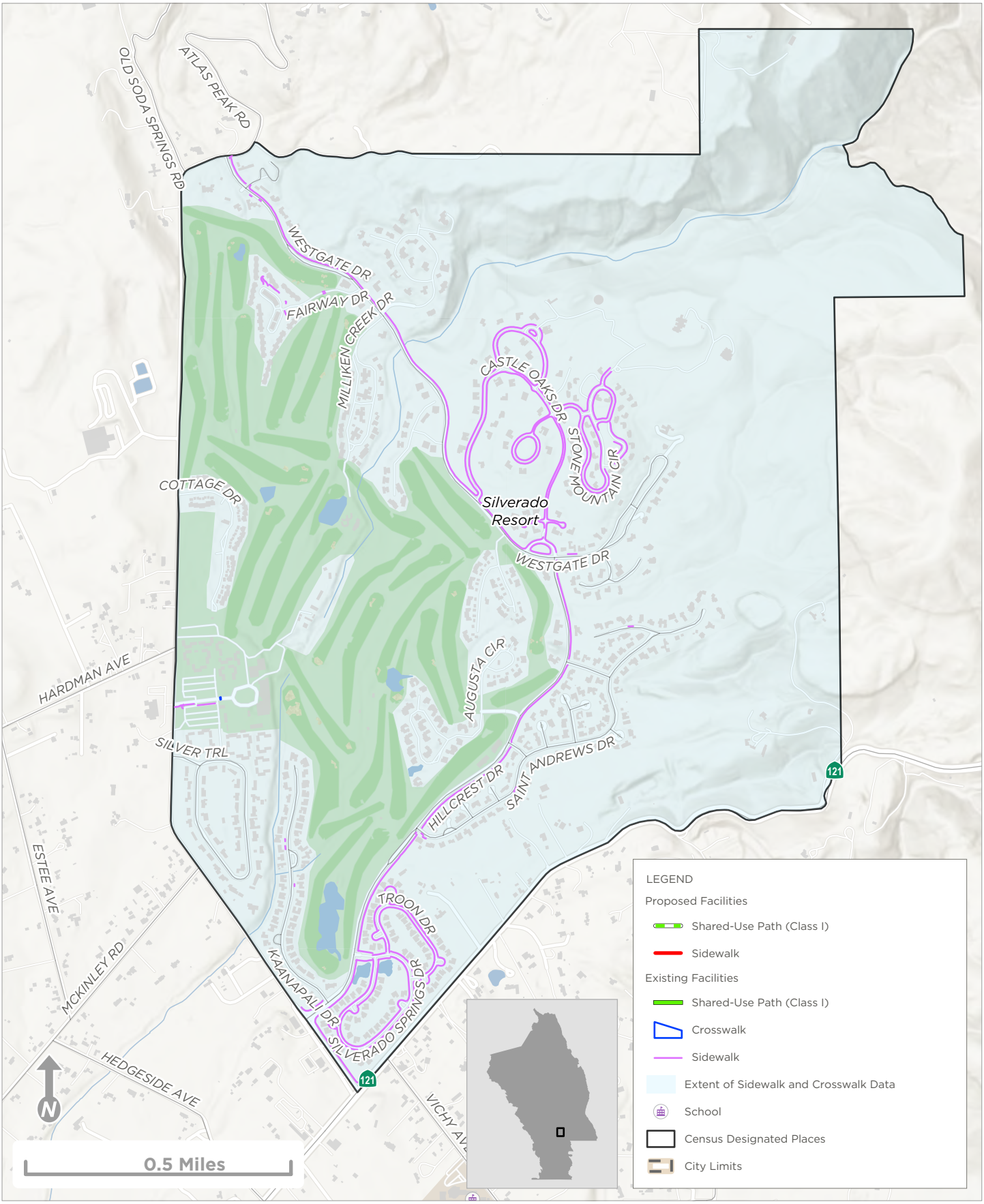
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Deer Park

Existing and Proposed Pedestrian Facilities

FIGURE 5.28



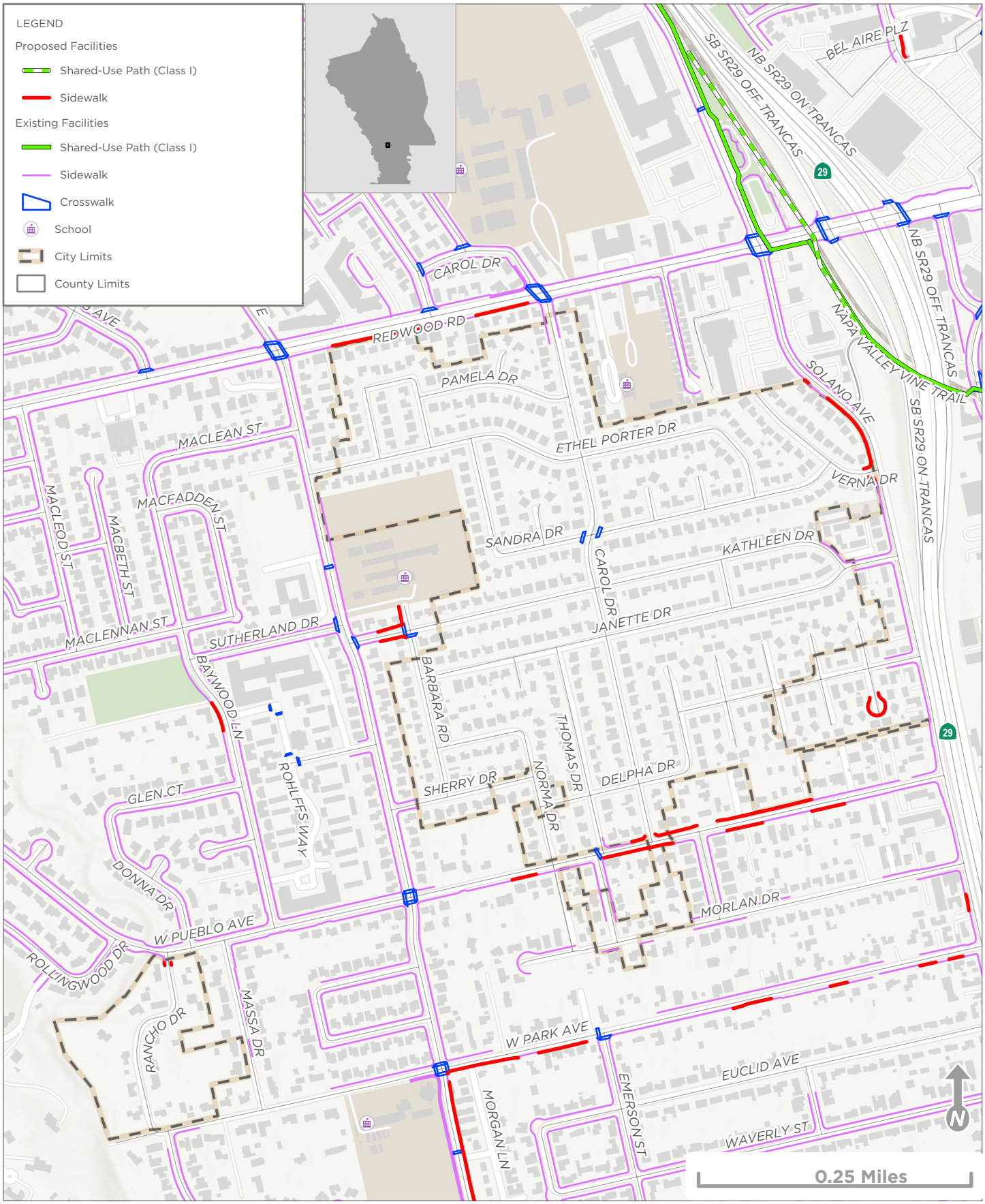
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Silverado Resort

Existing and Proposed Pedestrian Facilities

FIGURE 5.29



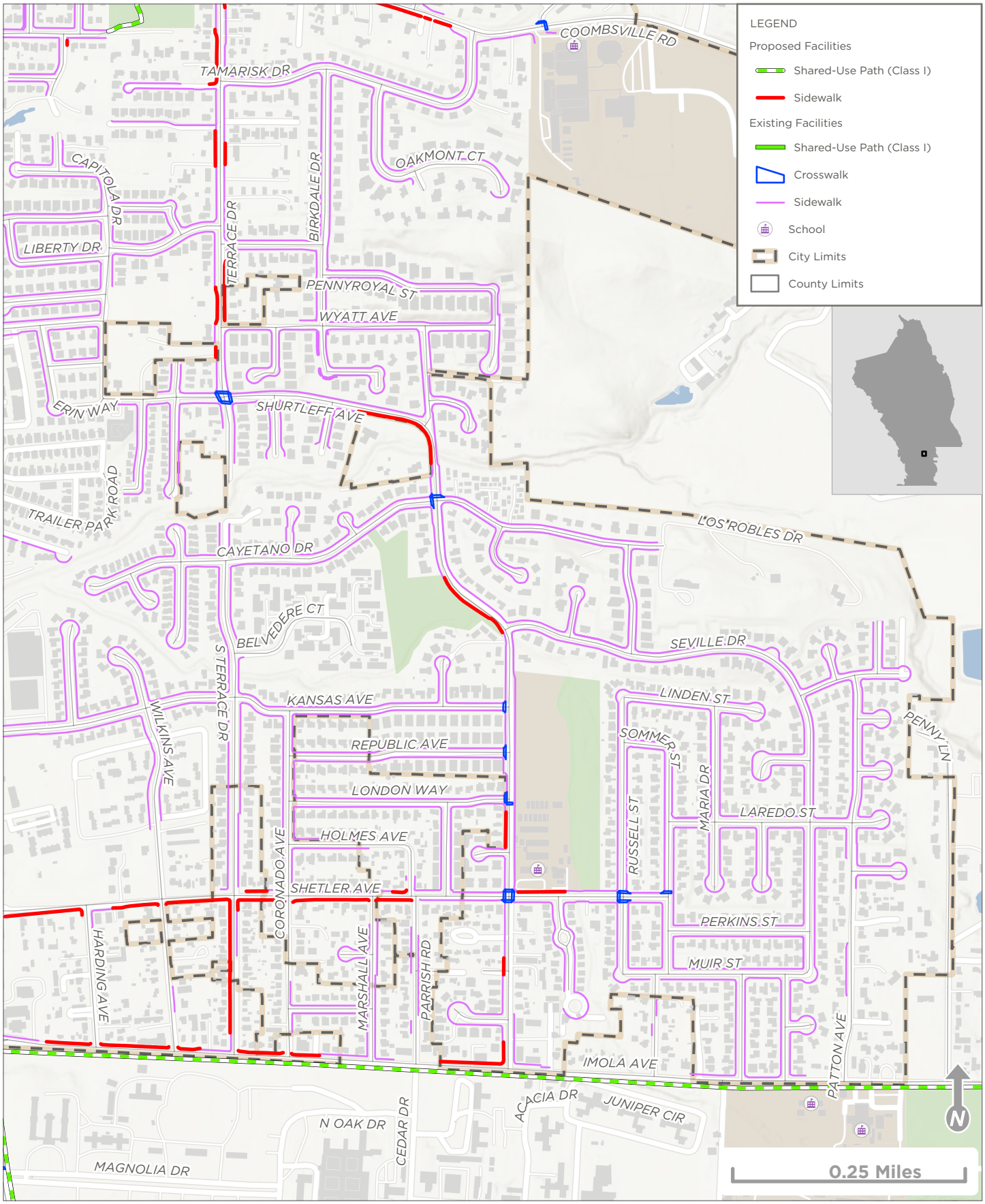
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - West Pueblo

Existing and Proposed Pedestrian Facilities

FIGURE 5.30



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Southeast Napa Islands

Existing and Proposed Pedestrian Facilities

FIGURE 5.31

Marked Crosswalk Strategies

The following crosswalk strategy may be used to determine locations for new or improved marked crosswalks and prioritize key crossing opportunities. For a menu of crossing safety treatments, refer to the Treatment Toolkit in Appendix D.

Three factors must be considered when identifying locations for marked crosswalks:

- Where is there a demand for a crosswalk?
- Is there a history of collisions?
- Where can people cross safely?

In addition to this strategy, jurisdictions should refer to the NVTA Community Based Transportation Plan (CBTP) recommended project list, which includes more than 80 potential projects and programs recommended by disadvantaged community members. The CBTP seeks to address transportation access issues for disadvantaged residents who are more likely to be dependent upon transit or other forms of transportation besides a car but may have less resources or access to travel where they need to go. By considering crosswalks requested by this community, it will ensure that some of the county's most vulnerable residents have a voice in steering transportation policy and improving their day-to-day lives.

Crossing Demand

Marked crosswalks should be prioritized at locations where there is existing crossing demand, including at community destinations such as schools, parks, commercial centers, wineries, and transit stops.

Choosing crossing locations will depend on pedestrian desire lines, which are the most direct, desirable crossing route locations to key destinations. According to the National Association of City Transportation Officials (NACTO), where the walking distance to a crosswalk exceeds three minutes, pedestrians are more likely to cross at unmarked, unsafe locations for a more direct route. Long wait times at signalized intersection may also encourage risky crossing behavior. Crosswalks at uncontrolled intersections or midblock locations should be considered, where appropriate, to follow pedestrian desire lines and create more convenient crossing opportunities. Caltrans Design Information Bulletin (DIB) 94 recommends guidance for identifying locations for marked crosswalks, listed in Table 5.3.

DIB 94 specifies that crosswalks should be within 250-500 feet of each other in urban areas, and within 500 feet of each other in suburban areas or along rural main streets. Transit stops and key community destinations should have crosswalks within 50 to 200 feet.

Crosswalks should be prioritized at schools, commercial centers, hospitals, government buildings, tourist attractions, and other destinations where 1) pedestrians are encouraged to walk and 2) may be used by vulnerable road users (children, seniors, etc.). Crosswalks and pedestrian facilities should be considered in large commercial parking lots as well.

Table 5.3: Caltrans DIB 94 Crosswalk Location Guidance

Destination/Land Use Context	Crosswalk Location
Transit Stop	50-200 feet to destination
Community Destination	50-200 feet to destination
Urban Areas	Every 250 to 500 feet
Suburban Areas/Rural Main Streets	Every 500 feet

Collision History

Another way to identify potential marked crosswalk locations is through an analysis of local collision history. Identifying collision hot spots will highlight areas for potential pedestrian improvements, and shared roadway characteristics that may contribute to high collision frequency. A collision analysis will also help identify places where pedestrians are crossing often, but adequate crossing safety features are not present. Collision history may be used in tandem with crossing demand to prioritize crossing locations to key destinations.

Some commonly used sources for collision data, such as the Transportation Injury Mapping System (TIMS), only report collisions that result in a fatality or injury and therefore underreport total collisions by excluding non-injury or property damage only crashes. Street Story Reports by Berkeley SafeTREC provide supplemental information about collisions, near-misses, and other roadway safety concerns.

Crossing Safety

Once crossing demand is established and collision hotspots are located, potential crossing locations should be evaluated for safety. The number of lanes, posted speed, and volume of vehicles—measured as the Annual Average Daily Traffic (AADT)—all impact pedestrian crossing safety, and appropriate pedestrian crossing treatments should be considered and implemented. Stopping sight distance should also be evaluated when identifying appropriate locations for midblock or uncontrolled crosswalks.

Selecting Crossing Treatments

After selecting marked crosswalk locations for implementation, pedestrian crossing treatments should be considered based on intersection context.

Figure 5.32 provides crossing treatments and where they are deemed most appropriate based on intersection characteristics. Figure 5.33 provides the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (STEP Guide), which includes appropriate crossing treatments based on roadway configuration, speed limit, and average daily traffic volumes. See Appendix D for a list of potential pedestrian crossing treatments.

Figure 5.32: Crossing Treatments by Intersection Type

CROSSING TREATMENT	APPLICATION	APPROPRIATE AT...			
		SIGNALIZED INTERSECTIONS	STOP-CONTROLLED INTERSECTIONS	UNCONTROLLED INTERSECTIONS	MID-BLOCK CROSSINGS
HIGH-VISIBILITY CROSSWALK	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
DIRECTIONAL CURB RAMPS	MANDATORY AT ALL LOCATIONS, PER PROWAG	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
PEDESTRIAN-SCALE LIGHTING	ALWAYS APPROPRIATE, ESPECIALLY AT AREAS WITH COMMON NIGHTTIME PEDESTRIAN ACTIVITY	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
DAYLIGHTING	TYPICALLY APPLIED AT CROSSING LOCATIONS WITH ON-STREET PARKING	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
CROSSING ISLAND (MEDIAN, PEDESTRIAN REFUGE ISLAND)	TYPICALLY APPLIED AT CROSSINGS OF THREE TRAVEL LANES, WITH THE CROSSING ISLAND LOCATED IN THE TWO-WAY LEFT-TURN LANE	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
CURB EXTENSIONS (BULB OUTS)	TYPICALLY APPLIED AT CROSSING LOCATIONS WITH ON-STREET PARKING	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
RAISED CROSSING	REFER TO TABLE ON FOLLOWING PAGE	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
RECTANGULAR RAPID FLASHING BEACON (RRFB)	REFER TO TABLE ON FOLLOWING PAGE	N/A	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
PEDESTRIAN HYBRID BEACON (PHB)	REFER TO TABLE ON FOLLOWING PAGE	N/A	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
LEADING PEDESTRIAN INTERVAL (LPI)	MANDATORY AT SIGNALIZED INTERSECTIONS WITH PEDESTRIAN SIGNAL HEADS, PER PROWAG	ALWAYS RECOMMENDED	N/A	N/A	N/A

Figure 5.33: FHWA Step Guide

Pedestrian Crossing Treatments at Uncontrolled Crossings (Application of pedestrian crash countermeasures by roadway feature, FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations)

ROADWAY CONFIGURATION	POSTED SPEED LIMIT AND AADT																									
	VEHICLE AADT <9,000									VEHICLE AADT 9,000–15,000									VEHICLE AADT >15,000							
	≤30 MPH			35-40 MPH			45 MPH			≤30 MPH			35-40 MPH			45 MPH			≤30 MPH			35-40 MPH			45 MPH	
2 LANES (1 LANE IN EACH DIRECTION)	1	2		1			1			1			1			1			1			1			1		
	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6		5	6
				7		9	7		9				7		9	7		9	7		9	7		9			9
3 LANES WITH RAISED MEDIAN (1 LANE IN EACH DIRECTION)	1	2	3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
	4	5			5			5		4	5			5			5		4	5			5			5	
				7		9	7		9	7		9	7		9	9		9	7		9	7		9			9
3 LANES W/O RAISED MEDIAN (1 LANE IN EACH DIRECTION WITH A TWO-WAY LEFT-TURN LANE)	1	2	3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6	5	6	
	7		9	7		9			9	7		9	7		9			9	7		9			9			9
4+ LANES WITH RAISED MEDIAN (2 OR MORE LANES IN EACH DIRECTION)	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
		5			5			5			5			5			5			5			5			5	
	7	8	9	7	8	9		8	9	7	8	9	7	8	9		8	9	7	8	9		8	9		8	9
4+ LANES W/O RAISED MEDIAN (2 OR MORE LANES IN EACH DIRECTION)	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6
	7	8	9	7	8	9		8	9	7	8	9	7	8	9		8	9	7	8	9		8	9		8	9

Given the set of conditions in a cell,

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

■ *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 crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

1 High-Visibility Crosswalk Markings, Parking Restrictions on Crosswalk Approach, Adequate Nighttime Lighting Levels, and Crossing Warning Signs

2 Raised Crosswalk

3 Advance Yield Here To (Stop Here For) Pedestrians Sign and Yield (Stop) Line

4 In-Street Pedestrian Crossing Sign (Not Permanent)

5 Curb Extension

6 Pedestrian Refuge Island

7 Rectangular Rapid-Flashing Beacon (RRFB)*

8 Road Diet

9 Pedestrian Hybrid Beacon (PHB)*

* PHB and RRFB are not both installed at the same crossing location.

Recommended Policies and Programs

Policies and programs, in tandem with state-of-the-practice infrastructure, will help Napa County achieve its vision of being an active transportation-friendly community with a connected and comfortable network for all ages and abilities. Inspired by the "Six E's" framework developed by the Safe Routes Partnership[8], the recommended policies and programs in this Plan are categorized into the following distinct implementation channels—engineering, education and engagement, encouragement, and evaluation. Since equity (one of the "Six E's") is one of the goals of this plan and not an "implementation channel," the policies and programs that support the Equity and Accessibility goal are distributed among the other "E's" categories.

Policies are typically set by local jurisdictions, while programs may be led by those agencies directly or in partnership with external stakeholders such as nonprofit organizations or school districts. The policies in this Plan build upon and complement policies developed in previous planning efforts (both countywide and local), and supersede any conflicting policies in previous plans, unless noted. The policies and programs in this section are intended to be applied countywide and adopted by each jurisdiction.

The lead implementing agency for each policy and program is the local jurisdiction, unless otherwise noted.

Engineering

Recommended policies and programs that support the build-out of a connected and comfortable active transportation network for all ages and abilities are listed in Table 5.4.

Table 5.4: Engineering Policies and Programs

Topic	Policy or Program	Goal Themes
Active Transportation Network Implementation (Development Regulations)	Update development code to condition discretionary projects to provide bicycle and pedestrian facilities recommended in this Plan, assuming a nexus is established. With prior approval from the jurisdiction, construction may be deferred until a connection to an existing route can be made. Improvements include, but are not limited to, easements, land dedication, route design and construction, maintenance, safety enhancements, and support facilities.	Connectivity
Automated Enforcement Technology	Evaluate automated technology innovations to enforce posted speed limits, traffic signal compliance, and other moving vehicle violations.	Safety
Bicycle Parking and End-of-Trip Facilities	Update municipal code to require the provision of long- and short-term bicycle parking in all new or redeveloped multifamily residential, office, public, and commercial buildings. Additionally require employers with 50 or more full-time exempt employees to provide end-of-trip facilities, such as showers and lockers. Refer to the Treatment Toolkit for best practices.	Sustainability and Mode Shift
Bikeways, Existing	Do not remove existing bikeways unless an improved bikeway is installed in its place.	Safety, Connectivity

[8] https://www.saferoutespartnership.org/safe-routes-school/101/6-Es

Topic	Policy or Program	Goal Themes
Capital Improvements Program (CIP)	Include projects from this Plan's proposed pedestrian network and near-term bicycle project list in the CIP.	Connectivity, Sustainability and Mode Shift
Coordination with Caltrans	Work with Caltrans to identify projects on Caltrans facilities that address issues related to collisions, speeding, or other barriers to active transportation.	Safety, Sustainability and Mode Shift
Complete Streets	Establish a deadline to update local engineering standards to incorporate Complete Streets consistent with Metropolitan Transportation Commissions (MTC) guidance,[9] Caltrans Director's Policy 37, and incorporating best practices as identified by AASHTO, NACTO, and PROWAG. Complete streets serve not only vehicle operations, but also pedestrians, personal mobility device users, bicyclists, and transit riders of all ages and abilities in a form that is compatible with and complementary to adjacent land uses, and that promotes connectivity between uses and areas.	Equity and Accessibility, Connectivity, Sustainability and Mode Shift
Crossings	Prioritize bicycle and pedestrian crossing enhancement projects located along the Vision Zero High Injury Network (HIN).	Safety, Connectivity
Curb Design	Discourage rolled curbs adjacent to sidewalks; they may increase frequency of vehicles parking on or blocking pedestrian path of travel.	Safety, Equity and Accessibility, Connectivity
Daylighting	Prioritize curb extensions and other daylighting improvements at key locations, such as near schools, or on higher volume roads.	Safety
Design Standards	Design all active transportation infrastructure to serve all ages and abilities. In the absence of local jurisdictional design guidelines, please refer to the Treatment Toolkit in this Plan. The Toolkit should be regularly updated by NVTA to reflect best practices.	Safety, Equity and Accessibility
Leading Pedestrian Interval	Install Leading Pedestrian Intervals (LPIs) at signals near key destinations such as schools, parks, hospitals, multi-family housing, retail hubs, transit, and at intersections along the HIN	Safety, Equity and Accessibility
Lighting	Prioritize pedestrian-scale lighting along primary active transportation corridors and near intersections along the HIN, primary active transportation corridors including Class I and Class IV facilities in urbanized areas, and arterials with bicycle facilities and/or sidewalks.	Safety, Sustainability and Mode Shift
Maintenance	Recognizing that small jurisdictions may not have the resources to acquire equipment, jurisdictions should share maintenance equipment (e.g., for sweeping, moving, bollard replacement) where feasible.	Equity and Accessibility, Sustainability and Mode Shift
Maintenance	Maintain bicycle facilities at the same or better condition as on-road facilities. Examples include pavement condition, signing and striping, street sweeping and debris removal, and trimming of vegetation. Consult the Treatment Toolkit section for guidance.	Equity and Accessibility, Sustainability and Mode Shift
Maintenance Reporting	Enable residents and visitors to easily report hazards in the public right-of-way using digital/mobile tools that automatically and consistently track maintenance needs. This could include reporting maintenance needs for pedestrian-related pavement markings and traffic control devices.	Equity and Accessibility, Sustainability and Mode Shift

[9] MTC Complete Streets Checklist. https://mtc.ca.gov/sites/default/files/documents/2024-10/MTC_Administrative_Guidance_for_Complete_Streets_Checklist_2024.pdf

Topic	Policy or Program	Goal Themes
Mode Hierarchy	Establish a mode hierarchy for land use, design and engineering decisions on key corridors or specific street typologies that identify where to prioritize pedestrians, bicyclists, and transit.	Safety, Connectivity, sustainability, and Mode Shift
Project Implementation	Review the projects identified in this plan for inclusion in street resurfacing, construction projects, and development application review, to promote consistency and buildout of the active transportation network.	Connectivity, Sustainability and Mode Shift
Quick Build[10]	Develop a countywide Quick-Build Program to quickly and consistently select and implement active transportation projects.	Safety, Connectivity
Regional Active Transportation Network	Enhance safety by prioritizing bike and pedestrian connectivity to regional bicycle trail facilities such as the Vine Trail and Bay Trail.	Connectivity, Sustainability and Mode Shift
Right on Red	Evaluate existing signalized intersections for locations where Right on Red may be prohibited to improve safety.	Safety
Safe Routes to School – Bicycle Parking	Partner with local school districts to provide safe, secure bicycle parking. Short-term bicycle parking should be provided at a rate of at least 1 space per every 20 students.[11] In the absence of local jurisdictional design guidelines, refer to the Treatment Toolkit for bicycle parking design guidance.	Sustainability and Mode Shift
Safe Routes to School – Crosswalks	Enhance all school zone crosswalks at collector or arterial intersections within 0.25 miles of a school with yellow, higher-visibility continental or ladder-style markings.	Safety
Safe Routes to School - Sidewalks	Strive to provide sidewalks of at least 6' wide within 250' of the school entrance. If a school has only one entrance, strive to provide sidewalks of at least 8' wide within 250' of that entrance.	Equity and Accessibility
Sidewalk Gaps	Support safe and convenient access for pedestrians of all ages and abilities by filling all sidewalk network gaps. Prioritize filling gaps (1) along arterials and collectors, (2) proximate to key destinations such as schools, parks, hospitals, multi-family housing, or transit, and (3) in areas that are identified as a neighborhood/community priority.[12]	Equity and Accessibility, Connectivity
Sidewalks as Shared-Use Paths	Install signage and pavement markings (such as thermoplastic decals) along all existing wide or "jumbo" sidewalks to satisfy the facility requirements of shared-use paths.	Connectivity, Sustainability and Mode Shift
Speed Limits (General)	Using the CA Manual for Setting Speed Limits, further Vision Zero objectives to lessen the severity and frequency of crashes by reducing roadway design speed and associated posted speed limits on arterial and collector roadways.	Safety
Speed Limits (School Zone)	Per California Vehicle Code Section 22358.8, evaluate the reduction of speed limits in School Zones, which may be lowered to 15 mph on all two-way residential streets under the City's jurisdiction within 500 feet of schools and 25 mph up to 1,000 feet from schools.	Safety
Transit First	Prioritize active transportation to/from transit stops, transit hubs, and park and rides, particularly within Equity Priority Communities.	Equity and Accessibility, Connectivity

[10] NVTA would implement this policy or program.

[11] Association of Pedestrian and Bicycle Professionals, Bicycle Parking Guidelines, 2nd Ed, 2010.

[12] There are some exceptions to this policy, including rural residential zones and the Town of Yountville Old Town Historic District. See Town of Yountville General Plan, Mobility Element MO-3.2 – Old Town Historic District, which states "Maintain the Old Town Historic residential neighborhood with minimal traffic improvements and without curb, gutter, and sidewalks."

Education and Engagement

The policies and programs recommended below are intended to educate and increase awareness of active transportation-related best practices among the public.

Table 5.5: Education and Engagement Policies and Programs

Topic	Policy or Program	Goal Themes
Bike Rental Education	Promote bicycle safety and reduce conflicts by coordinating with businesses that provide bike rentals, tours, and/or loaner bikes (including local retailers, hotels, and tour companies) to promote user education/etiquette and to provide preferred route guides to those who borrow or rent equipment.	Safety
Construction Detours	Provide designated detour routes with an LTS equivalent to the existing bicycle/pedestrian facility so that construction projects (whether public or private) do not unnecessarily impact active transportation facilities.	Safety
Micromobility	If necessary, update local ordinances to specify where e-bikes and other motorized micromobility devices are allowed to operate, consistent with state legislation.	Equity and Accessibility, Sustainability and Mode Shift
Obstructions	Develop an awareness program and/or educational materials that discourage blocking bike lanes and sidewalks (including residential driveways), especially within 0.25 miles of schools. This information could be communicated through local jurisdictions' websites and directly to businesses (re: commercial deliveries).	Safety, Equity and Accessibility, Connectivity
Road Safety Education	Organize countywide efforts to partner with local stakeholders to expand roadway safety events, programs, and leverage regional/state/federal campaigns such as those developed by the Office of Traffic Safety. Partner with local nonprofit organizations and other community partners to provide and support free bicycle and pedestrian education to the community that includes topics such as safety and maintenance.	Safety, Sustainability and Mode Shift
Safe Routes to School Education	Support and expand Safe Routes to School program, including classroom-based curriculum and on-bike education for all Napa County K-12 students by identifying consistent long-term funding for Safe Routes to School programs.	Safety, Connectivity, Sustainability and Mode Shift
Safe Routes to School Engagement	Partner with local schools to provide Safe Routes to Schools materials and communications in commonly spoken languages to reach diverse populations.	Equity and Accessibility
Waste Hauling	Expand Napa County Bicycle Coalition's awareness program that discourages placing waste bins in bike lanes and within the pedestrian clear space of the sidewalk. Develop local policies to support ongoing education and compliance.	Safety, Equity and Accessibility
Wayfinding[13]	Partner with local and regional jurisdictions and stakeholders to develop countywide bikeway signage, striping, wayfinding, and lighting standards. Whether on regional multi-use paths or in local downtowns, signage, striping, wayfinding, and lighting should be consistent.	Connectivity

Encouragement

The policies and programs described below are intended to encourage residents and visitors alike to choose active transportation as a means of traveling throughout Napa County.

Table 5.6: Encouragement Policies and Programs

Topic	Policy or Program	Goal Themes
Bicycle Events	Encourage events that familiarize the public with bicycling and walking such as Bike to Work Day, Bike to School Day, Bike Fest, and commute challenges.	Sustainability and Mode Shift
Bike Parking at Large Events	Enforce the California Green Building Standards Code (CALGreen) which requires large events (those with 5,000+ projected attendees) and recurring community events (such as farmers markets) to provide safe/secure bike parking on-site.	Sustainability and Mode Shift
Bicycle Friendly Community Status	Partner with Napa County Bicycle Coalition to apply for, and maintain, Bicycle Friendly Community status from the League of American Bicyclists. The City of Calistoga became a Silver Bicycle Friendly Community in 2013, and the City of Napa became a Bronze Bicycle Friendly Community in 2012.	Sustainability and Mode Shift
Bikes for Low-Income Residents	Provide free or low-cost bicycles and helmets to those who qualify for CalFresh by collaborating with local bike shops, nonprofits, and advocacy groups to source bikes and helmets at discounted rates or through donations.	Equity and Accessibility, Sustainability and Mode Shift
Class I Facilities in Parks	Evaluate existing policies and revise where necessary to support 24-hour access to low-stress (Class I) active transportation facilities in parks.	Safety, Equity and Accessibility, Connectivity, Sustainability and Mode Shift
Micromobility	Encourage e-bike mode shift among low-income California residents with a targeted outreach program to promote any state-administered e-bike rebates or subsides.	Equity and Accessibility, Sustainability and Mode Shift
Safe Routes to School	Support local schools and other Safe Routes to School program partners, such as non-profits, in offering age-appropriate Safe Routes to School programming. This may include walking school buses and bike rodeos for elementary students, bike safety and "walk and roll to school" events for all ages, bike repair workshops for middle and high schoolers, and student-led encouragement (through events or affinity groups) for high schoolers.	Safety, Sustainability and Mode Shift
Social Walks/Rides & Family Biking Workshops	Support development and expansion of recurring social walking/biking events, family biking workshops, Walk-with-a-Doc programs, and other activities to introduce/encourage active transportation.	Sustainability and Mode Shift
Transportation Demand Management (TDM)[13]	Develop a countywide TDM program to oversee projects with conditioned TDM requirements and identify funding strategies for monitoring. The County of Napa General Plan Circulation Element provides details on potential strategies.[14]	Sustainability and Mode Shift
TDM Programs	Support/expand TDM programs that encourage or incentivize active transportation as an alternative to solo vehicle commutes.	Sustainability and Mode Shift

[13] NVTA would implement this policy or program

[14] County of Napa General Plan Circulation Element, 2019. https://www.countyofnapa.org/DocumentCenter/View/3332/Circulation-Element-PDF

Evaluation

The policies and programs described below track progress towards a connected and comfortable active transportation network for all ages and abilities. NVTA has set aside resources to regularly evaluate the outcomes of this AT Plan, whether that be annually or biannually; therefore, NVTA would be the implementing agency for many of the following evaluation recommendations.

Table 5.7: Evaluation Policies and Programs

Topic	Policy or Program	Goal Themes
ADA Compliance	Develop a countywide program to track ADA compliance of new and redeveloped curb ramps and sidewalks, consistent with the guidelines in the Treatment Toolkit.	Equity and Accessibility
Bicycle and Pedestrian Counts	Considering the active transportation mode share goal of 10% by 2040, establish a bicycle and pedestrian counts program and continue to install automated multimodal counters along key corridors and other locations countywide. Counts, along with MioVision data from signalized intersections, will help track active transportation mode share. Additionally, counts can help assess the impact of active transportation improvements (i.e., before and after studies to measure increase in active mode share within a certain distance of a facility improvement or development project).	Sustainability and Mode Shift
Countywide Database	Establish a one-stop comprehensive countywide GIS database that includes collision data, bicycle, and pedestrian network segment information (facility type, mileage, LTS score where applicable, planned infrastructure), counts data, curb ramps, and other relevant data. This database will support most of the other evaluation metrics described within this section. Update countywide GIS database each year to assess how many miles of bicycle and pedestrian facilities have been added to the network.	Safety, Equity and Accessibility, Connectivity, Sustainability and Mode Shift
Data Collection	Collect and analyze vehicle and active mode data, including volumes, speeds, time-of-day, and other characteristics to determine pre- and post-project measurements for major bikeway and pedestrian improvement projects, as well as for large-scale development projects (e.g., Napa Pipe, Amazon warehouse, etc.). Big data sources of transportation data should also be considered for evaluation	Sustainability and Mode Shift
Equity Priority Communities	Implement at least two projects per year in both locally identified and MTC Equity Priority Communities within the County.	Equity and Accessibility
LTS	Use the LTS tool to gauge whether each new bicycle facility added or upgraded within the county's network will achieve a comfortable score of LTS 1 or 2.	Safety
Measure U Coordination	In developing a five-year project list for Measure U, include on-street bike facilities, sidewalks, and other eligible projects from the active transportation recommendations in this Plan.	Sustainability and Mode Shift
Mode Share Goal	To support the countywide 10% active mode share goal, each jurisdiction should strive to complete as many projects as possible from the proposed pedestrian network and near-term bicycle project list by 2040.	Sustainability and Mode Shift
Safe Routes to School	Foster a partnership between Napa County Bicycle Coalition and local schools to conduct student travel tallies twice per year at all elementary, middle, and high schools to track how students are traveling to school. This may inform whether encouragement programs and active transportation network improvements are contributing to mode shift.	Sustainability and Mode Shift
Vision Zero[16]	Track active transportation fatalities and severe injuries with the goal of reaching zero by 2035.	Safety

Chapter 6 Implementation Plan

The following chapter provides a plan for implementing the recommendations proposed in Chapter 5. This chapter includes the following sections:

- Bicycle Network Prioritization
- Estimated Project Benefits
- Unit Cost Assumptions
- Funding opportunities

The implementation plan outlines an approach for prioritizing bicycle projects for implementation. Note that the pedestrian network presented in Chapter 5 represents a prioritized list of sidewalk gap projects and no further prioritization was conducted in development of this Implementation Plan. The sidewalk gap projects recommended form the prioritized list as they provide improved pedestrian access near key destinations.

In addition to the prioritization of near-term bicycle projects, the implementation plan includes estimates for induced bicycling demand and potential VMT reduction benefits of all bicycle projects identified in the AT Plan, as well as estimated greenhouse gas emissions reductions associated with implementation of proposed sidewalk projects.

Finally, unit cost assumptions used to calculate planning-level project cost estimates and a list of potential funding opportunities with project eligibility are included.

This AT Plan includes Caltrans planning efforts and proposed facilities along state routes, which will require coordination with Caltrans.

Bicycle Network Prioritization

The proposed active transportation network provides a vision through 2050 and includes 363 miles of projects. However, there is limited available funding, and the whole network cannot be implemented at once. As a result, a list of "near-term" bicycle projects was developed for implementation over the next five to seven years, totaling 83 miles of bicycle facilities.

The near-term bicycle project list is meant to be a guide for jurisdictions, but implementation priorities may change. Project implementation can be aligned with other ongoing projects, like those recommended in the 2023 Vision Zero Plan. Other factors, such as project complexity and available resources, may also impact which projects are prioritized for implementation.

Prioritization Metrics

Scoring metrics were identified based on community-identified values, common grant funding program guidelines, and local agency priorities. Bicycle projects were scored on the five metrics listed in Table 6.1: safety, equity, connectivity, plan consistency, and community support.

Table 6.1: Prioritization Metrics

Metric	Definition
Safety	Improvement is located on the HIN defined by the 2023 NVTA Vision Zero Plan
Equity	The project is within an Equity Priority Community (EPC) defined by the 2025 NVTA Vision Zero Plan
Connectivity	The project provides a connection along or across a high stress route that is a barrier to low stress bicycle connectivity
Plan Consistency	The project was identified in a prior planning effort
Community Support	The project was identified or supported by the community.

Manual Review

Once the proposed bicycle projects were scored, high scoring projects were manually refined to finalize the near-term bicycle project list for each jurisdiction.

Projects that scored high but do not provide connectivity to key destinations, or projects that provide primarily recreational benefit instead of commuter benefit were reconsidered. High scoring projects were reevaluated if they are parallel to an existing facility. If two high scoring projects are proposed on the same corridor, the project offering the least separation from vehicle traffic was removed from the near-term project list. For example, if a shared-use path (Class I) and a bike lane (Class II) were both proposed on the same street, the bike lane was removed from the near-term list.

Projects that may have not previously scored well were considered for the near-term project list if they provide key connections between existing bikeways or other near-term projects, key destinations, or would provide commuter benefit.

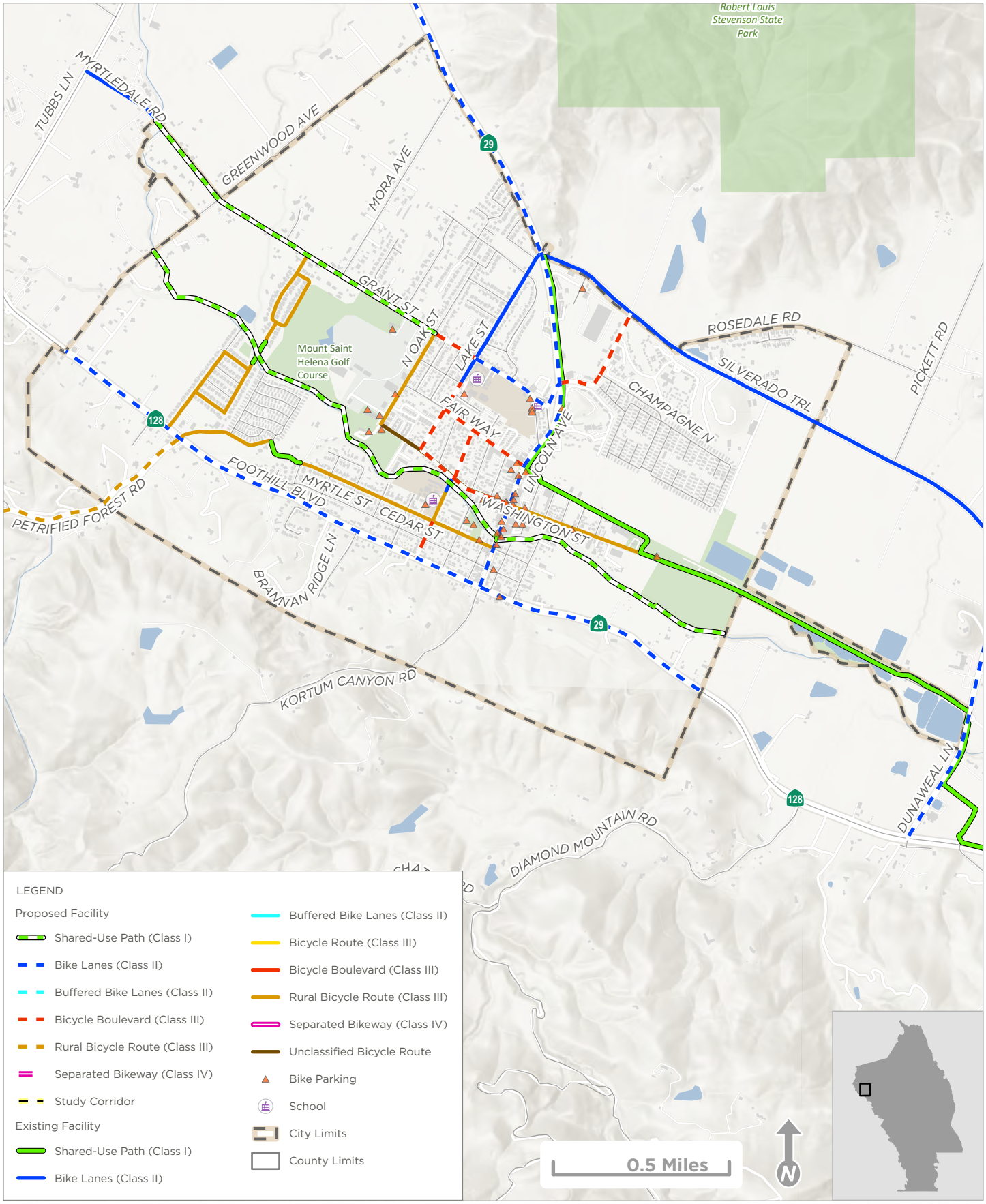
Near-term networks within each jurisdiction were also reviewed holistically, in the context of how useful or disjointed the network would be if all included projects were implemented over the next five to seven years.

Near-Term Project List

The assessment of bicycle projects resulted in a near-term list that includes 87.5 miles of bicycle facilities across 52 projects. Table 6.2 provides the mileage of near-term bicycle projects in each city by facility type. Maps of near-term bicycle projects in each jurisdiction are provided in Figure 6.1 through Figure 6.17.

Table 6.2: Near-Term Bicycle Project List

Jurisdiction	Miles
City of Calistoga	**6.6**
Shared Use Path (Class I)	1.0
Bike Lanes (Class II)	5.0
Bicycle Boulevard (Class III)	0.7
City of St Helena	**4.8**
Shared Use Path (Class I)	4.2
Rural Bicycle Route (Class III)	0.6
Town of Yountville	0.1
Shared Use Path (Class I)	**0.1**
City of Napa	12.6
Shared Use Path (Class I)	**3.4**
Bike Lanes (Class II)	4.0
Buffered Bike Lanes (Class II)	0.2
Bicycle Boulevard (Class III)	2.5
Study Corridor	2.5
City of American Canyon	4.2
Shared Use Path (Class I)	**3.3**
Separated Bikeway (Class IV)	0.7
Bicycle Boulevard (Class III)	0.2
County of Napa	59.1
Shared Use Path (Class I)	**13.1**
Bike Lanes (Class II)	9.8
Rural Bicycle Route (Class III)	36.3
Total	**87.5**



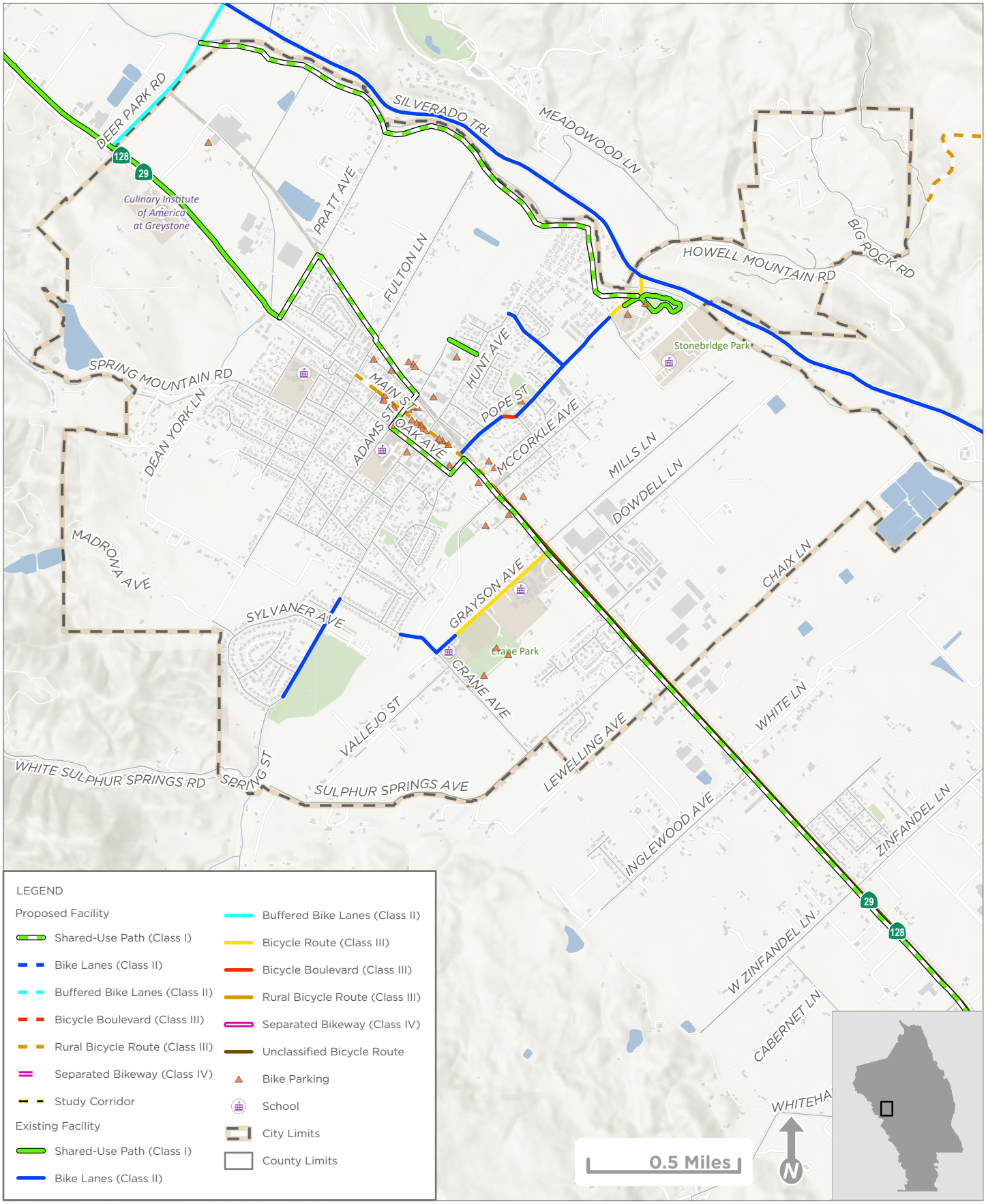
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga

Near-Term Bicycle Network

FIGURE 6.1



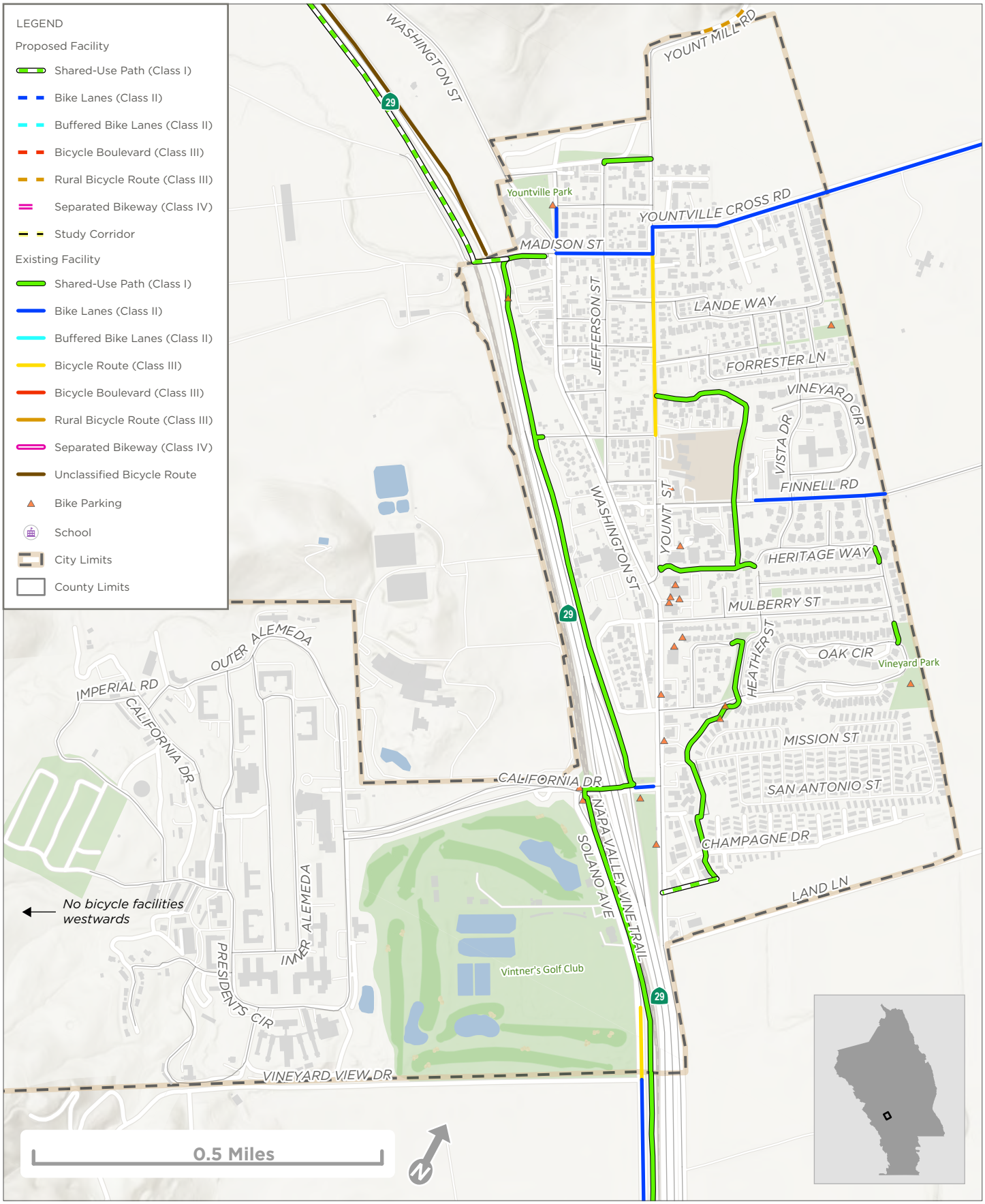
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena

Near-Term Bicycle Network

FIGURE 6.2



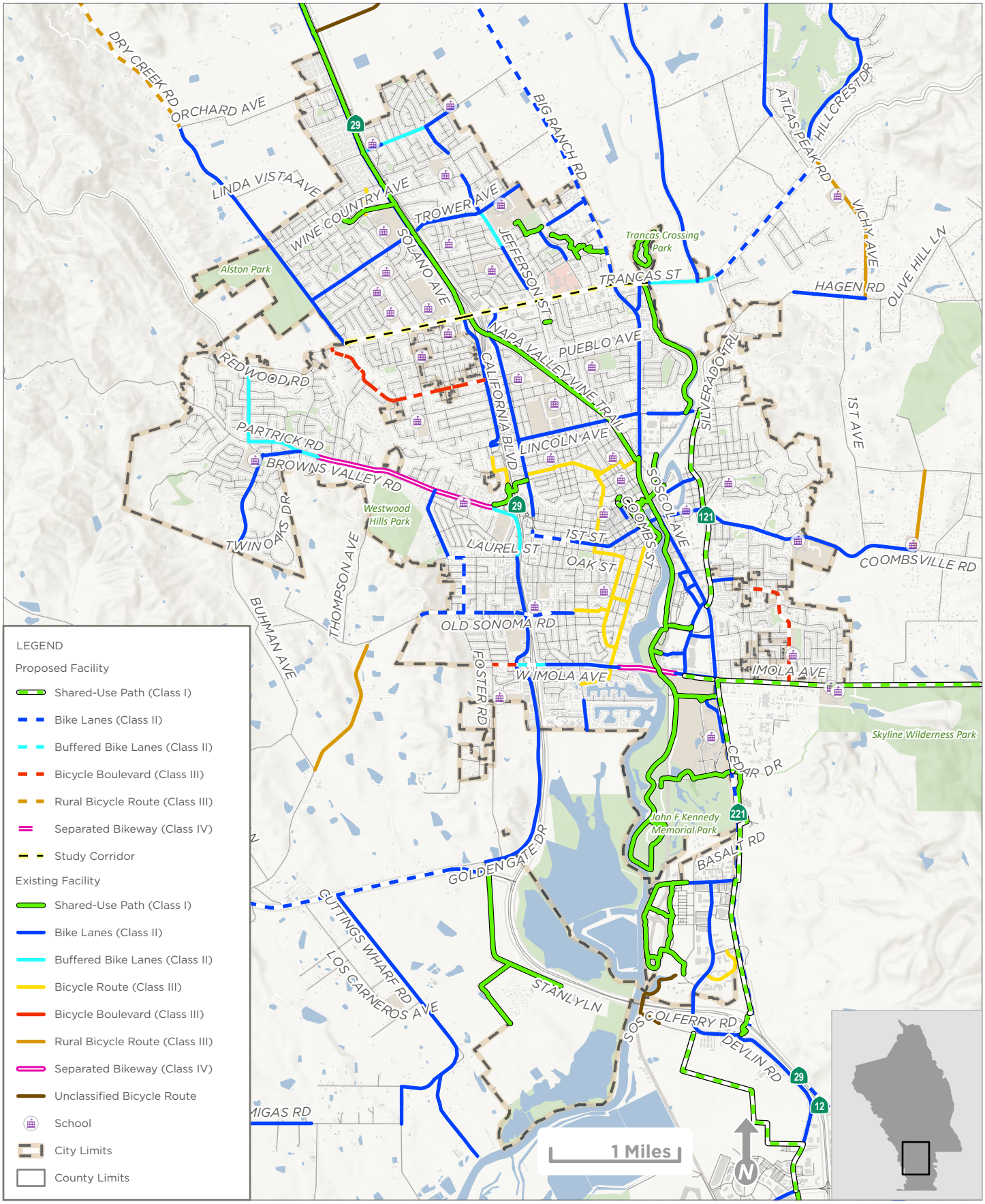
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville

Near-Term Bicycle Network

FIGURE 6.3



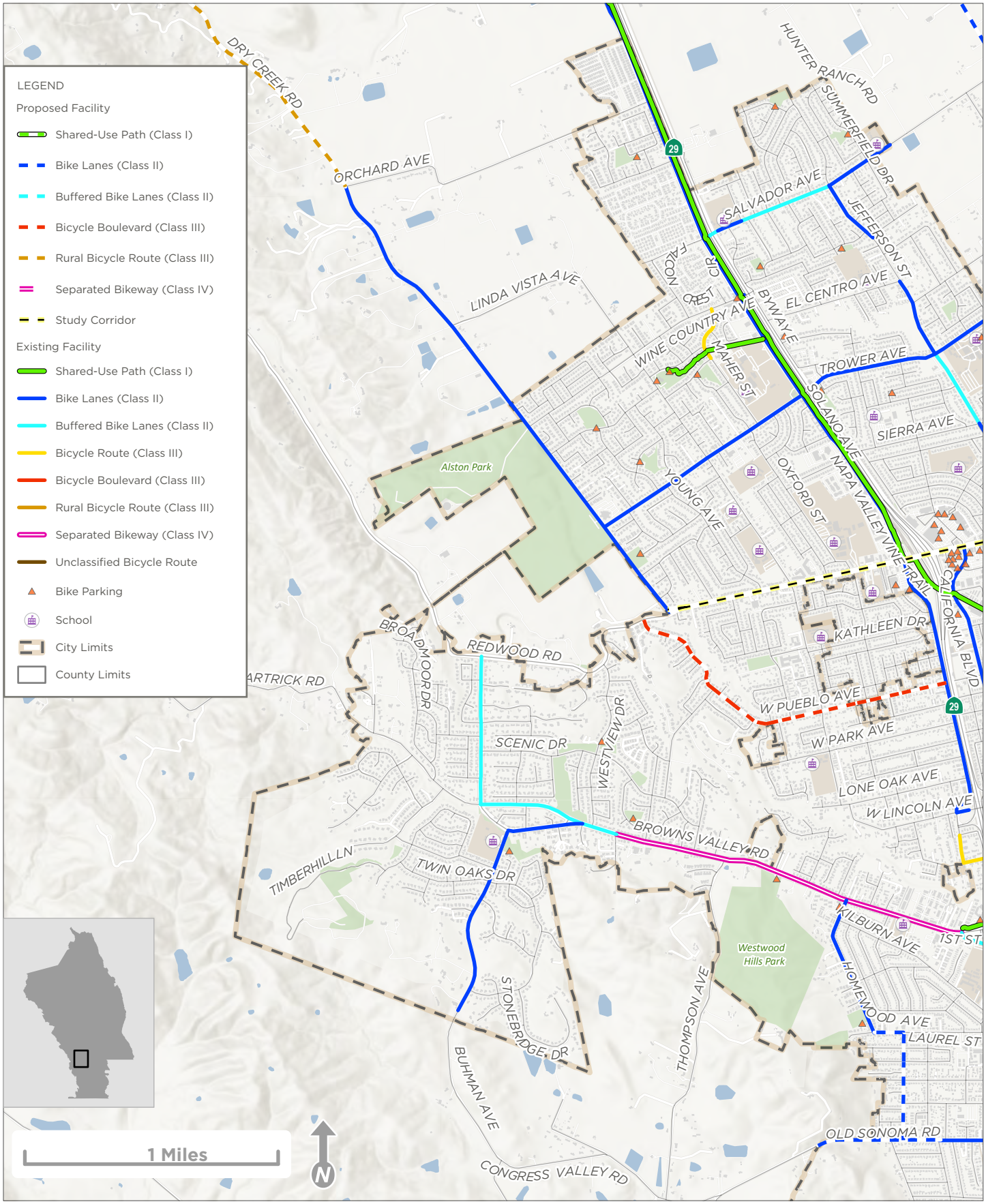
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa

Near-Term Bicycle Network

FIGURE 6.4



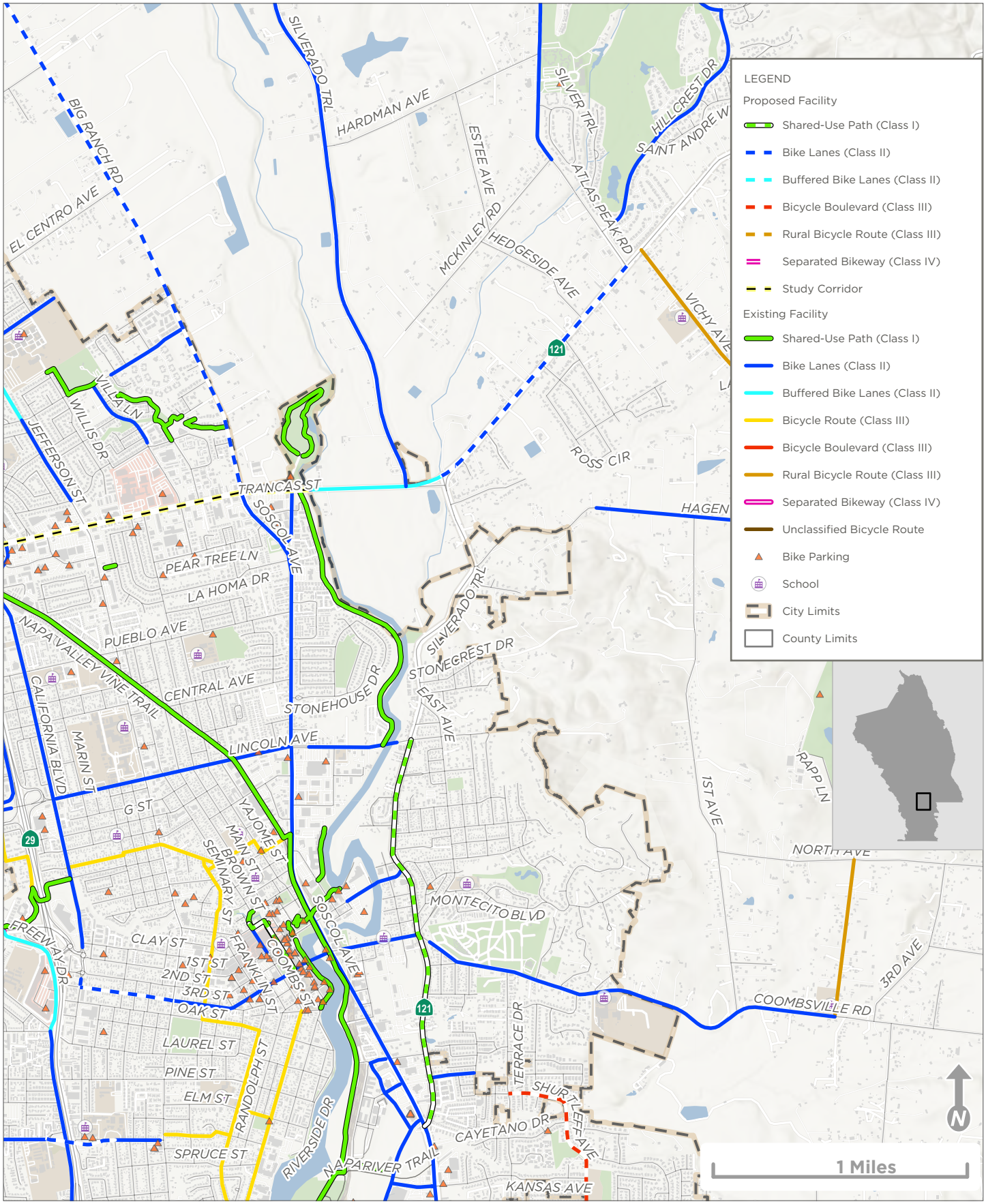
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest

Near-Term Bicycle Network

FIGURE 6.5



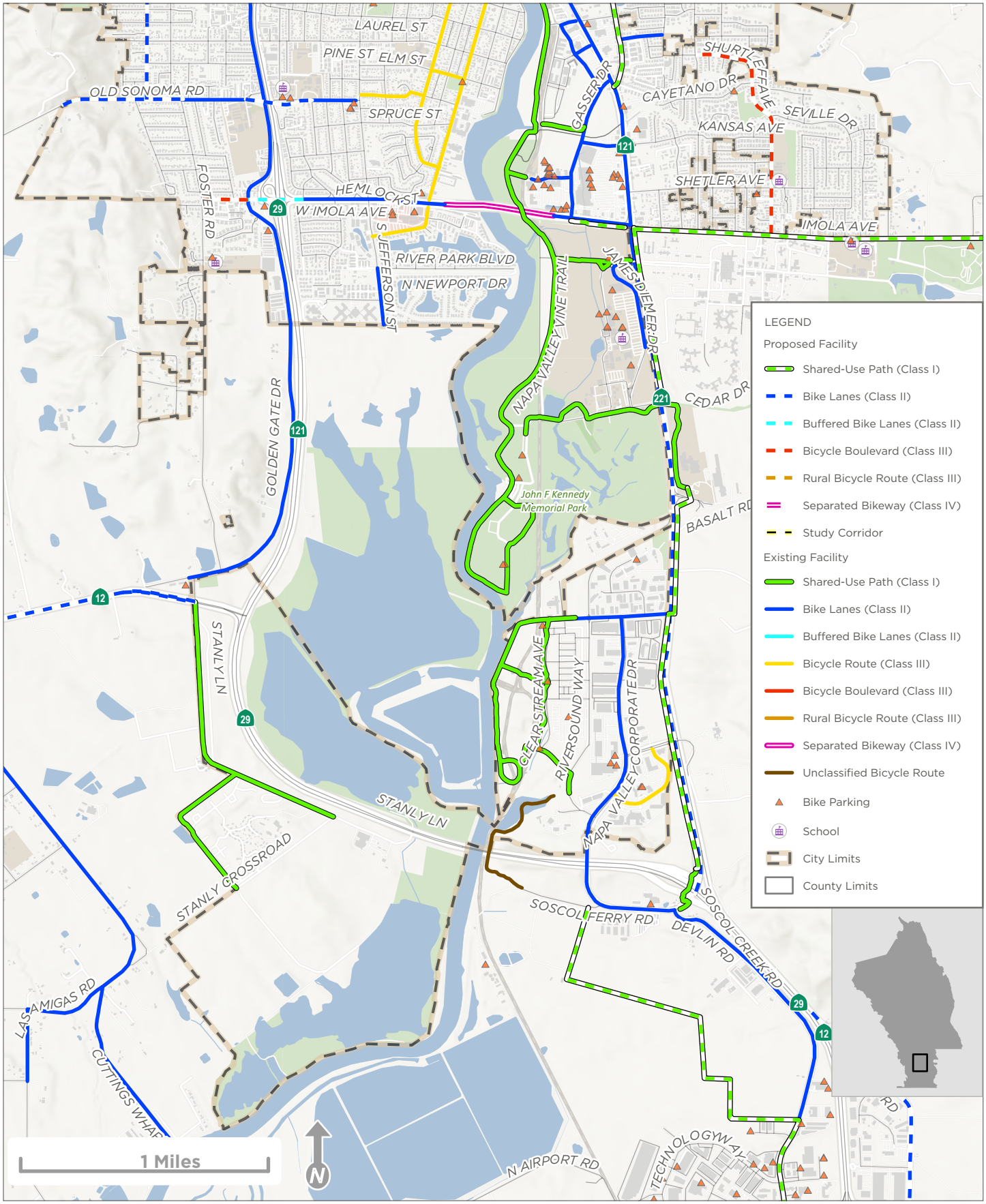
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast

Near-Term Bicycle Network

FIGURE 6.6



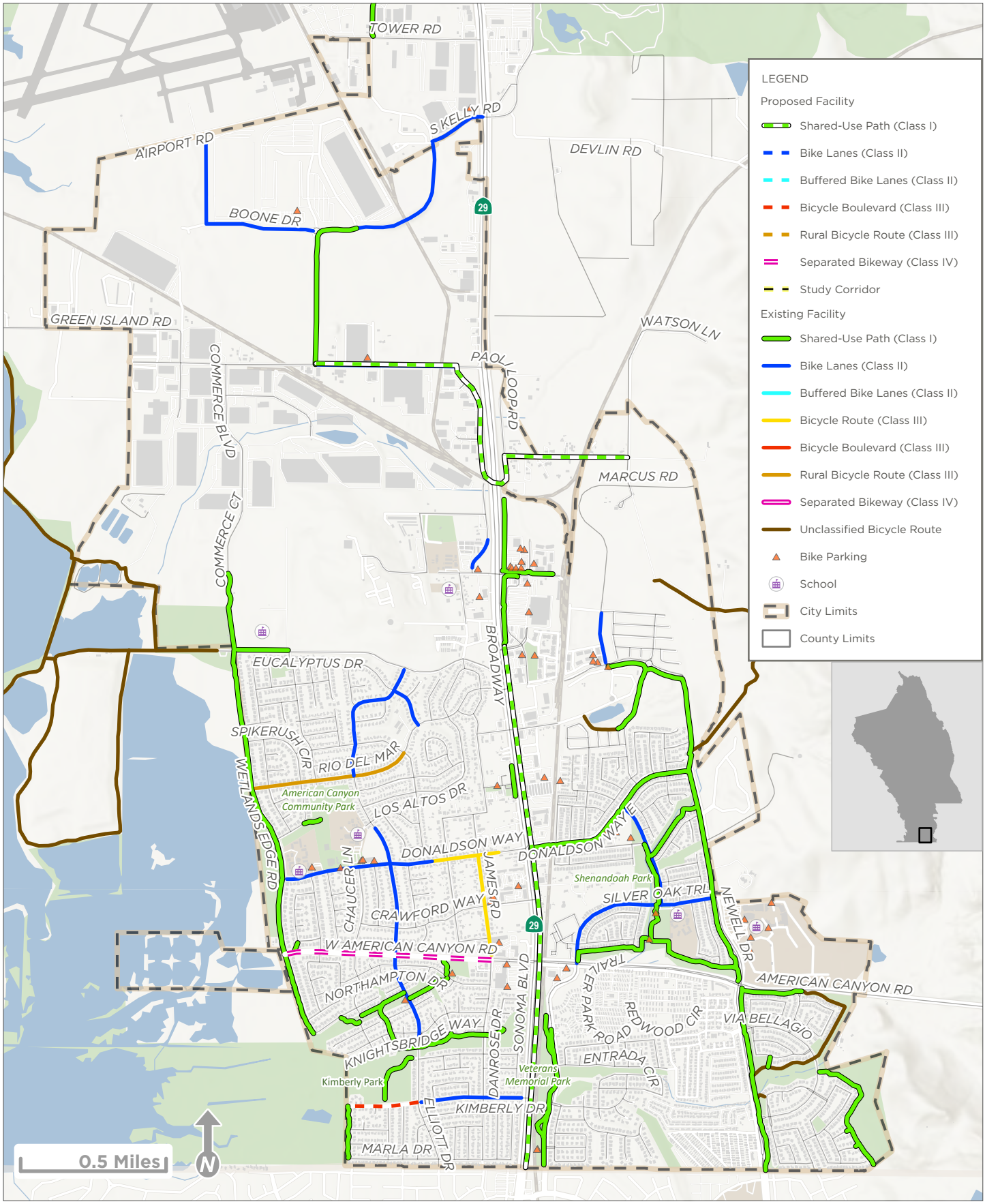
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South

Near-Term Bicycle Network

FIGURE 6.7



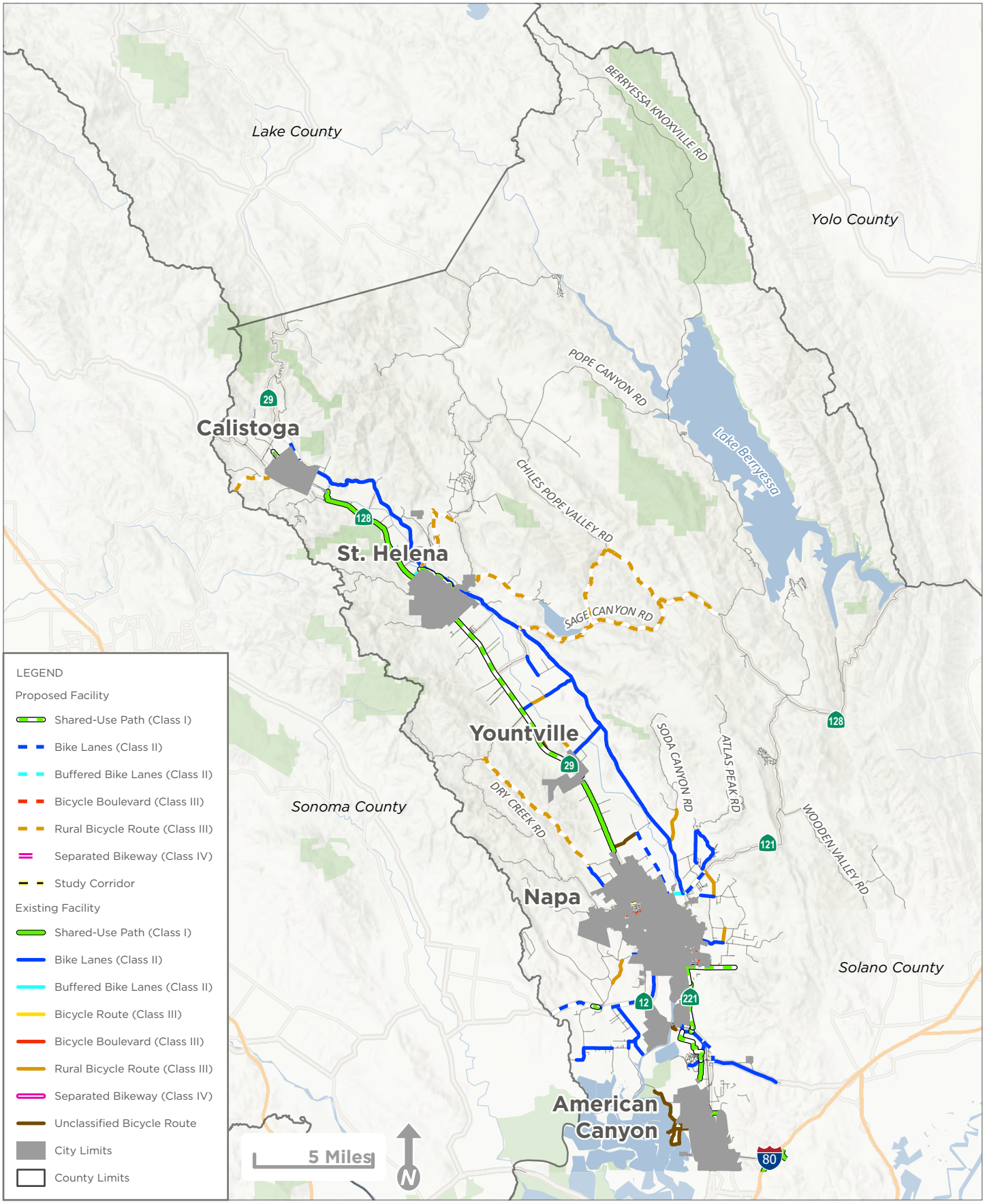
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon

Near-Term Bicycle Network

FIGURE 6.8

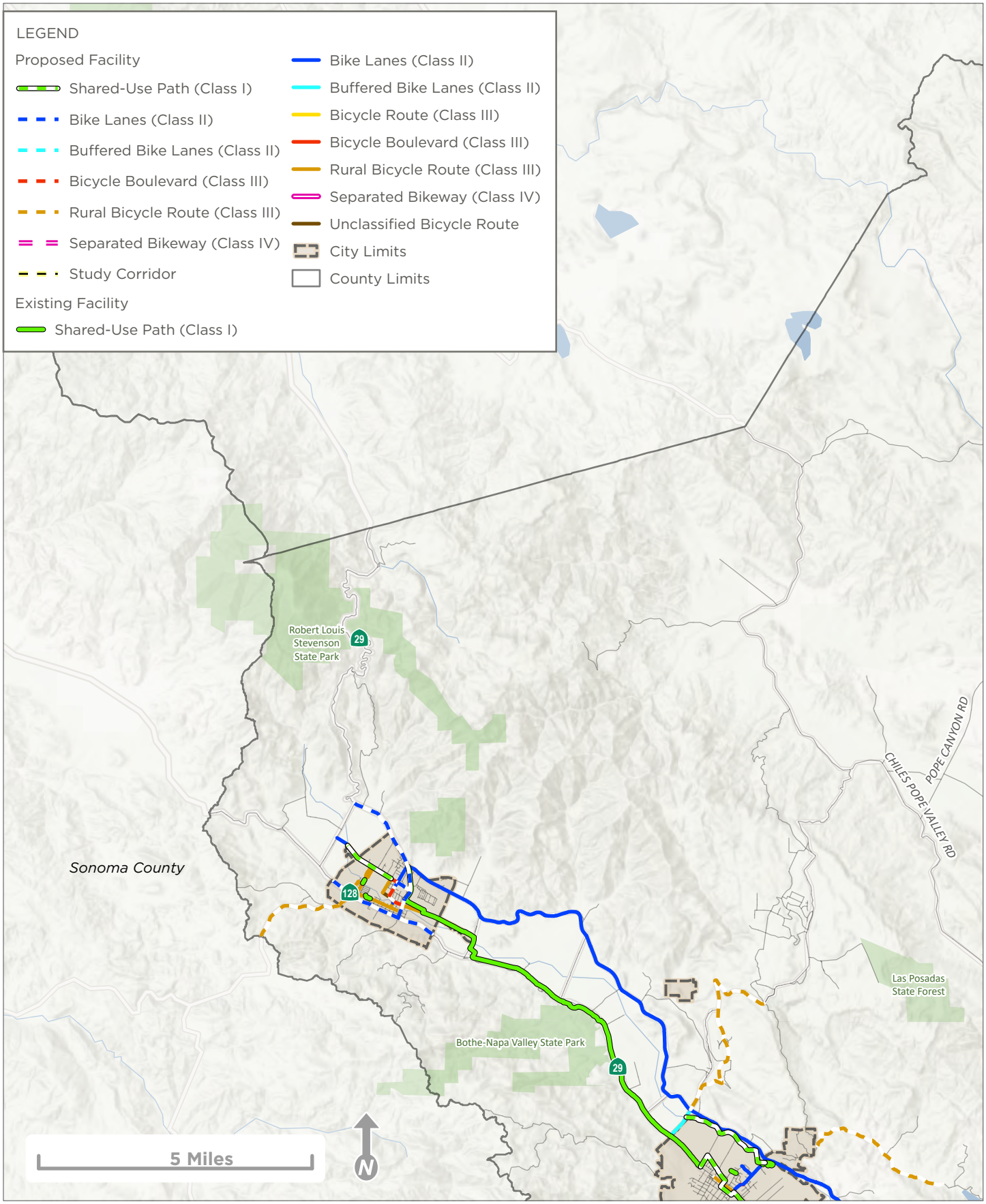


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa
Near-Term Bicycle Network

FIGURE 6.9



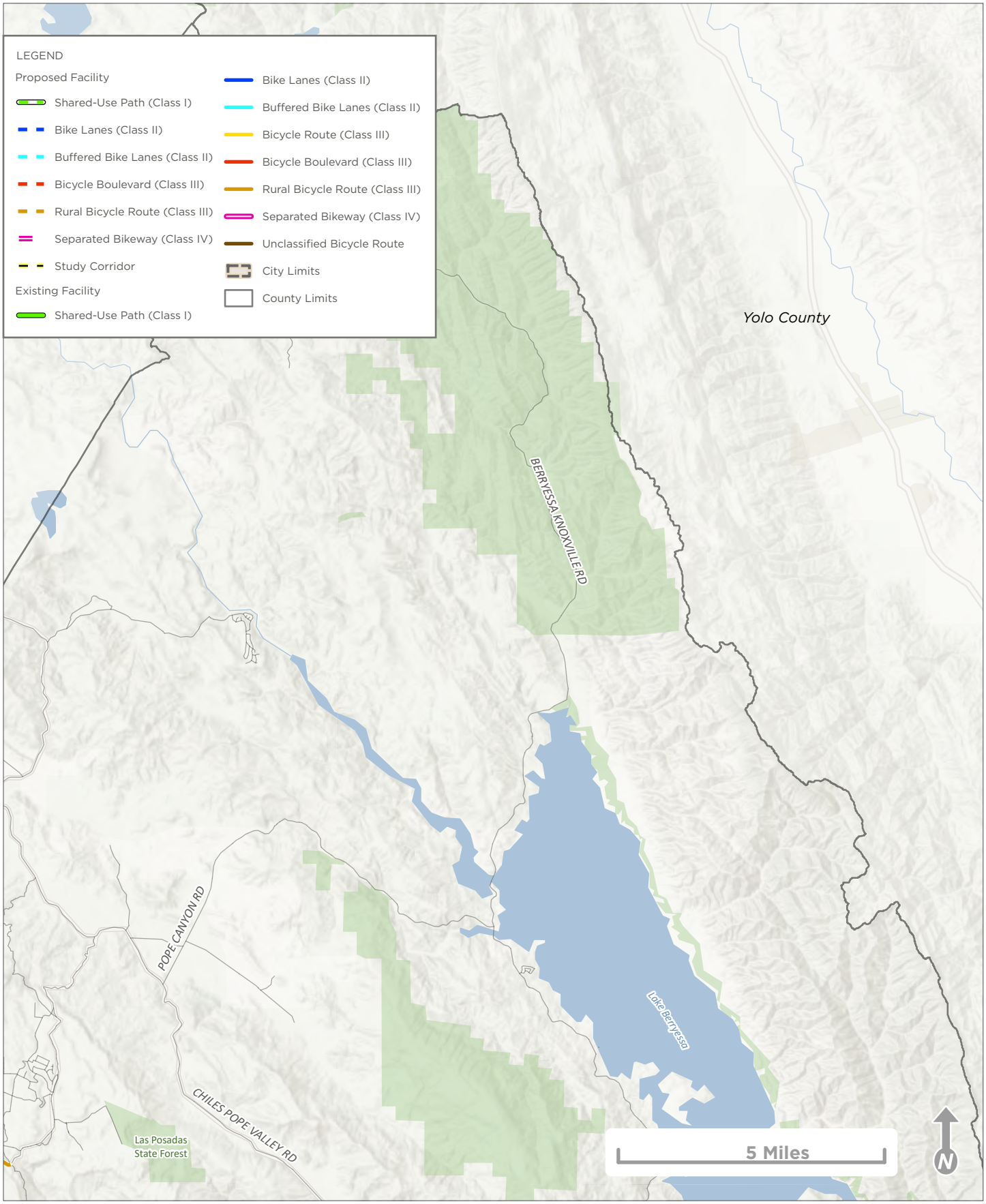
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northwest

Near-Term Bicycle Network

FIGURE 6.10



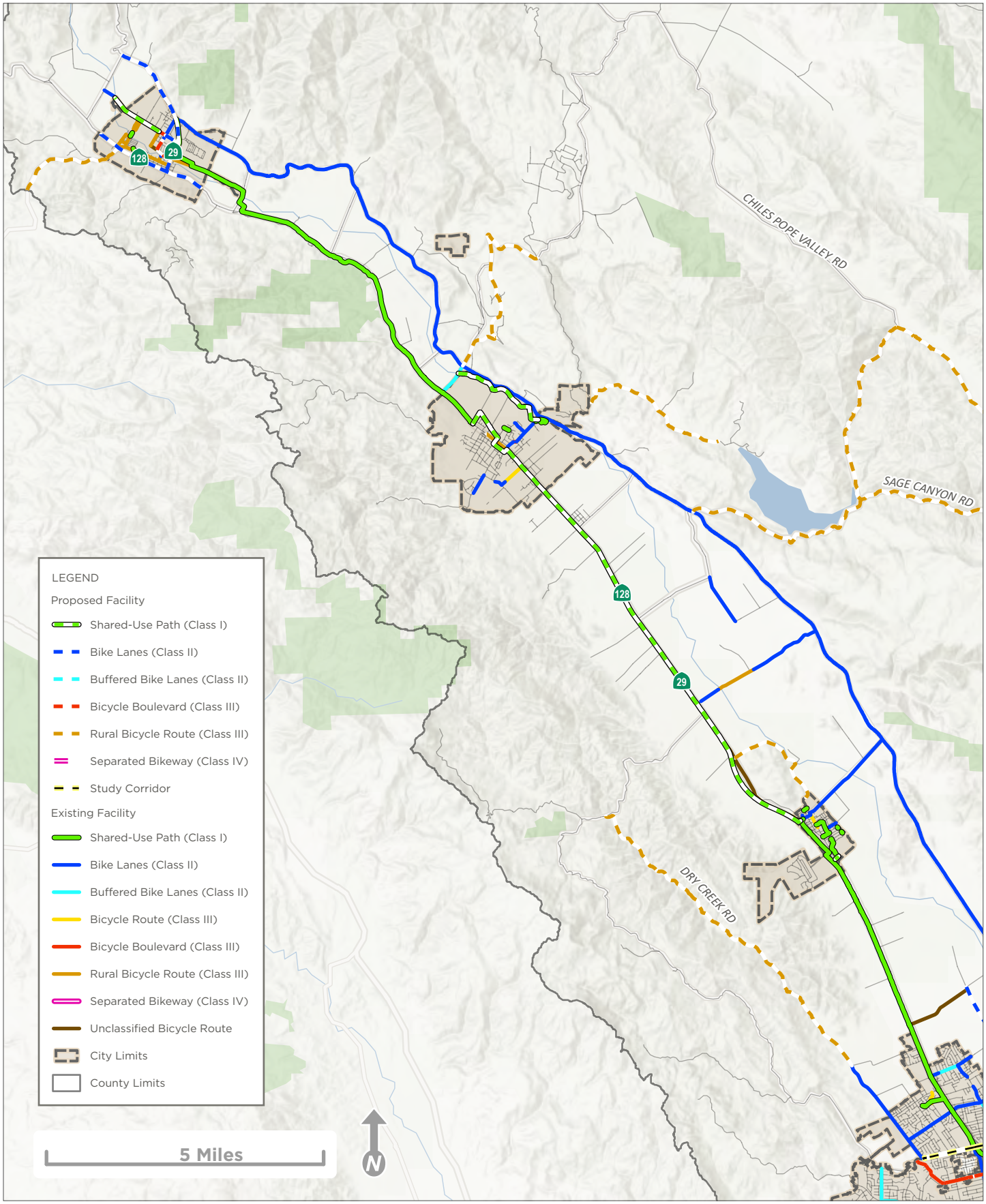
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Northeast

Near-Term Bicycle Network

FIGURE 6.11



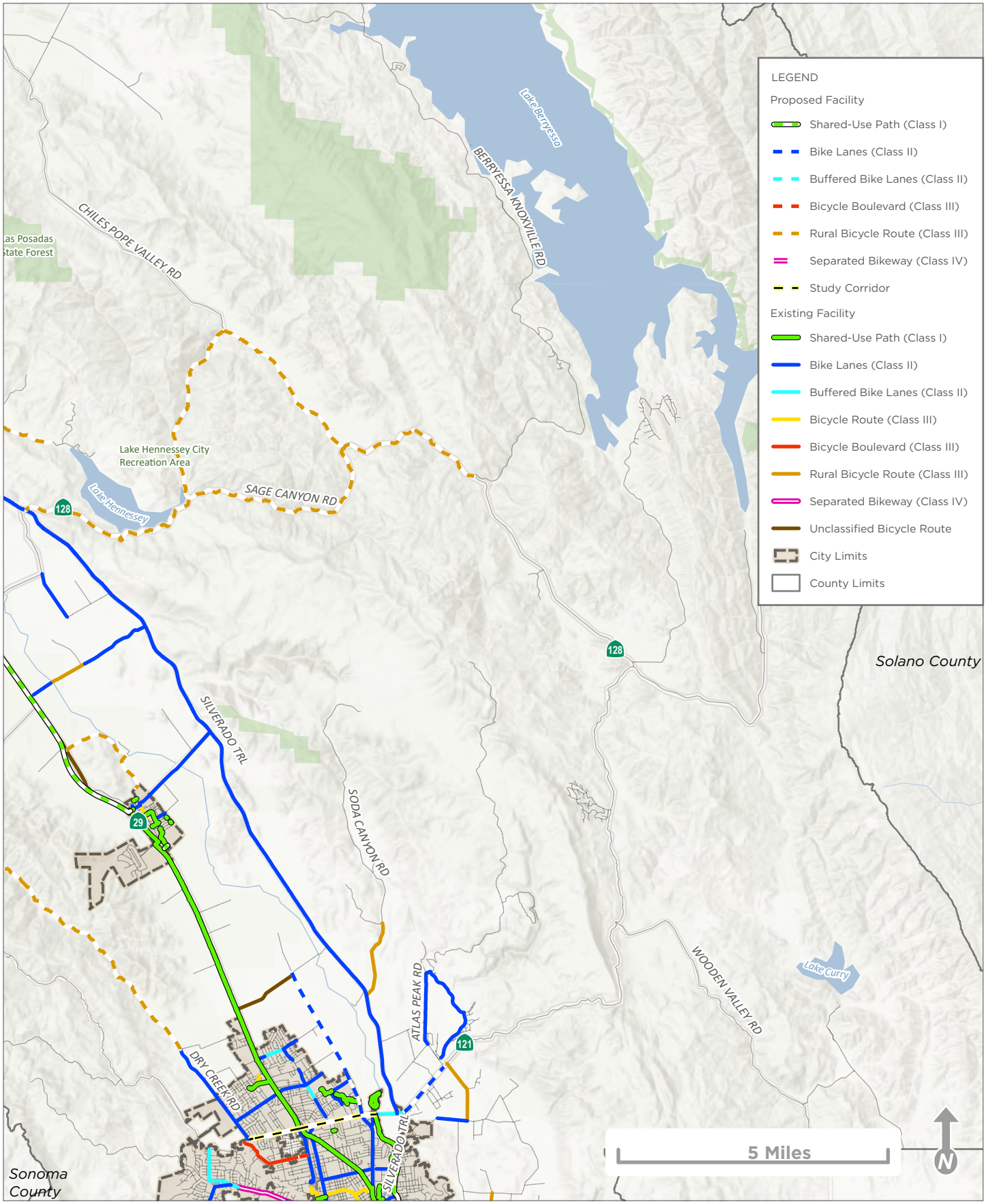
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central West

Near-Term Bicycle Network

FIGURE 6.12



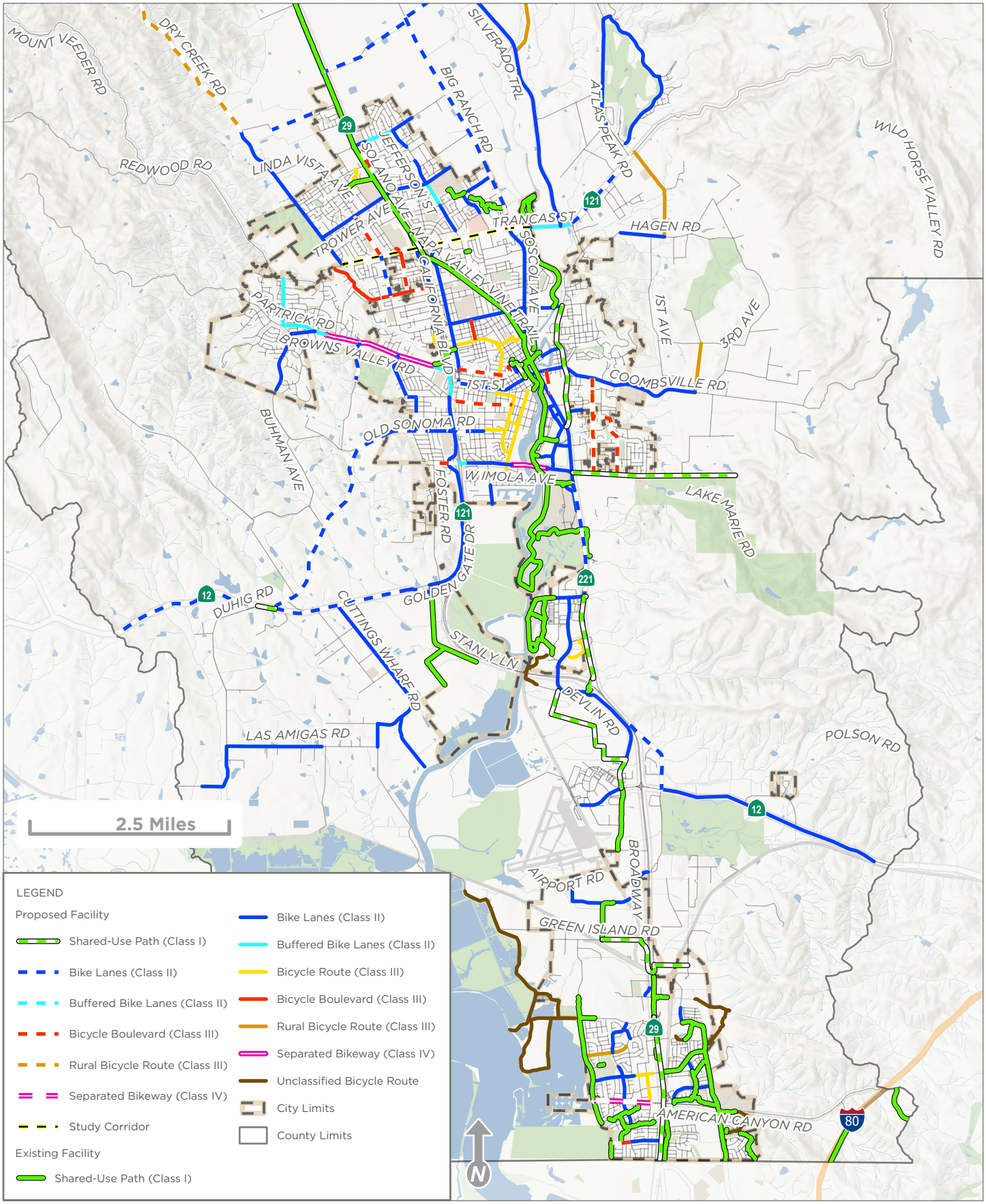
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Central East

Near-Term Bicycle Network

FIGURE 6.13



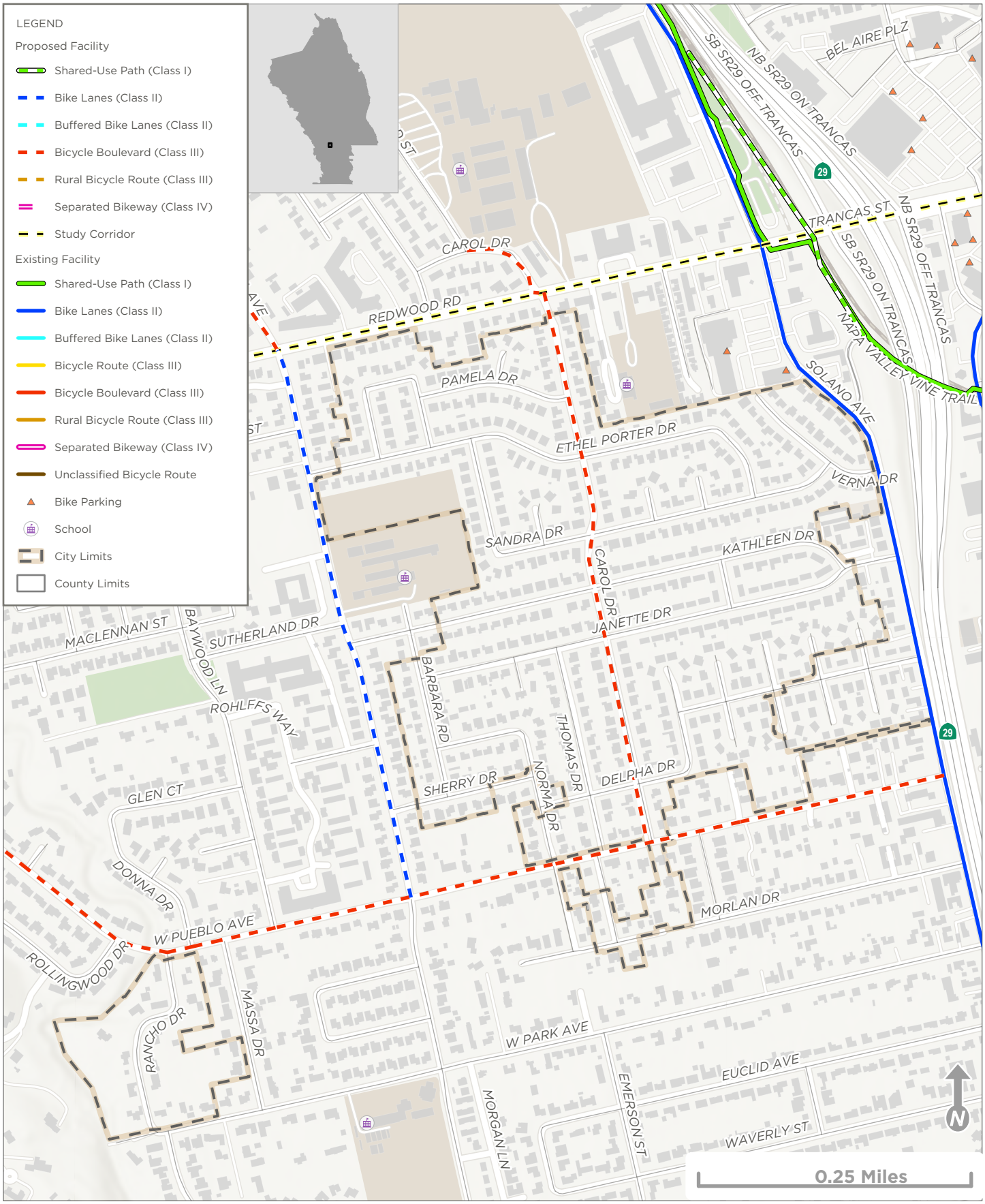
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - South

Near-Term Bicycle Network

FIGURE 6.14



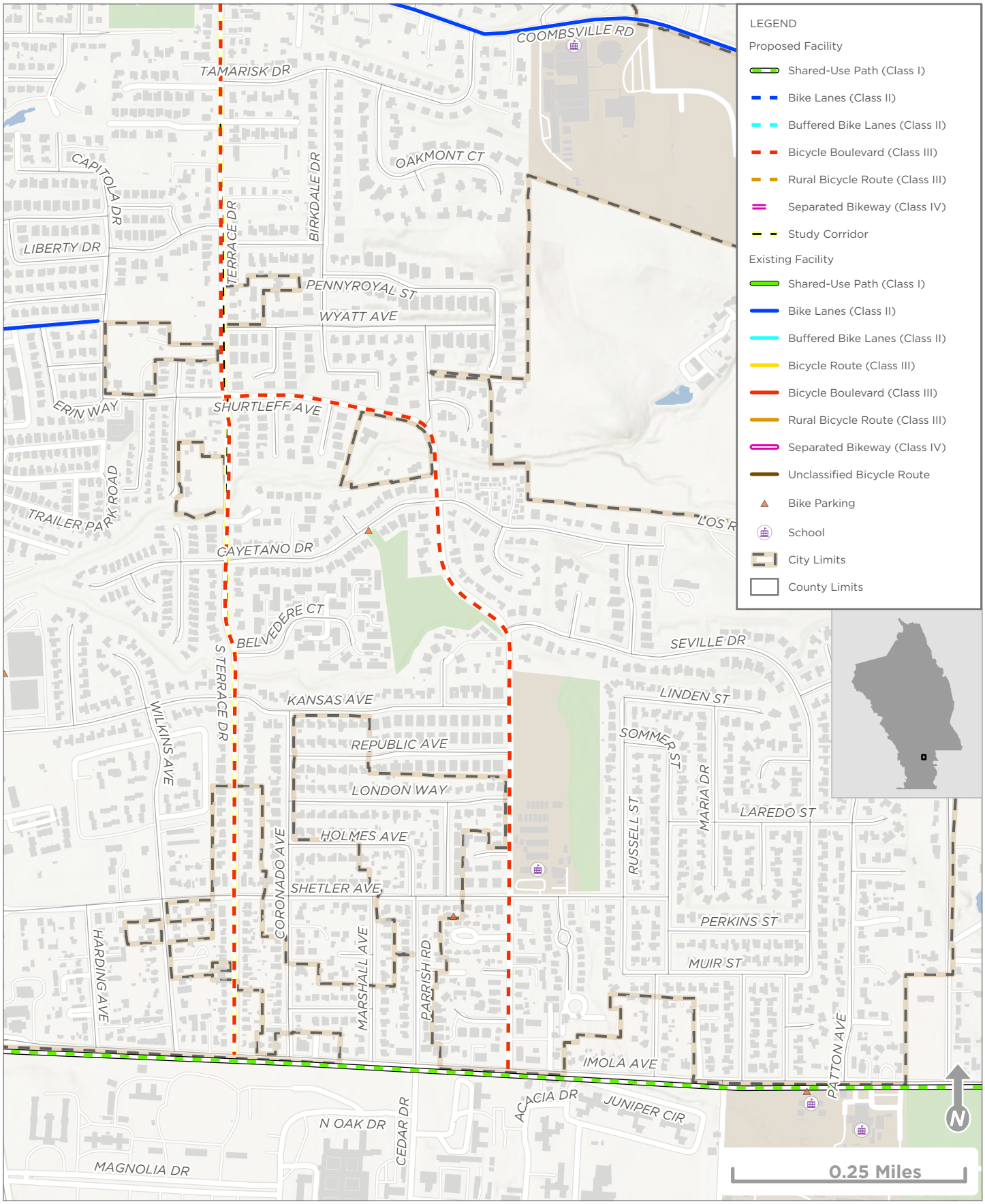
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - West Pueblo

Near-Term Bicycle Network

FIGURE 6.15



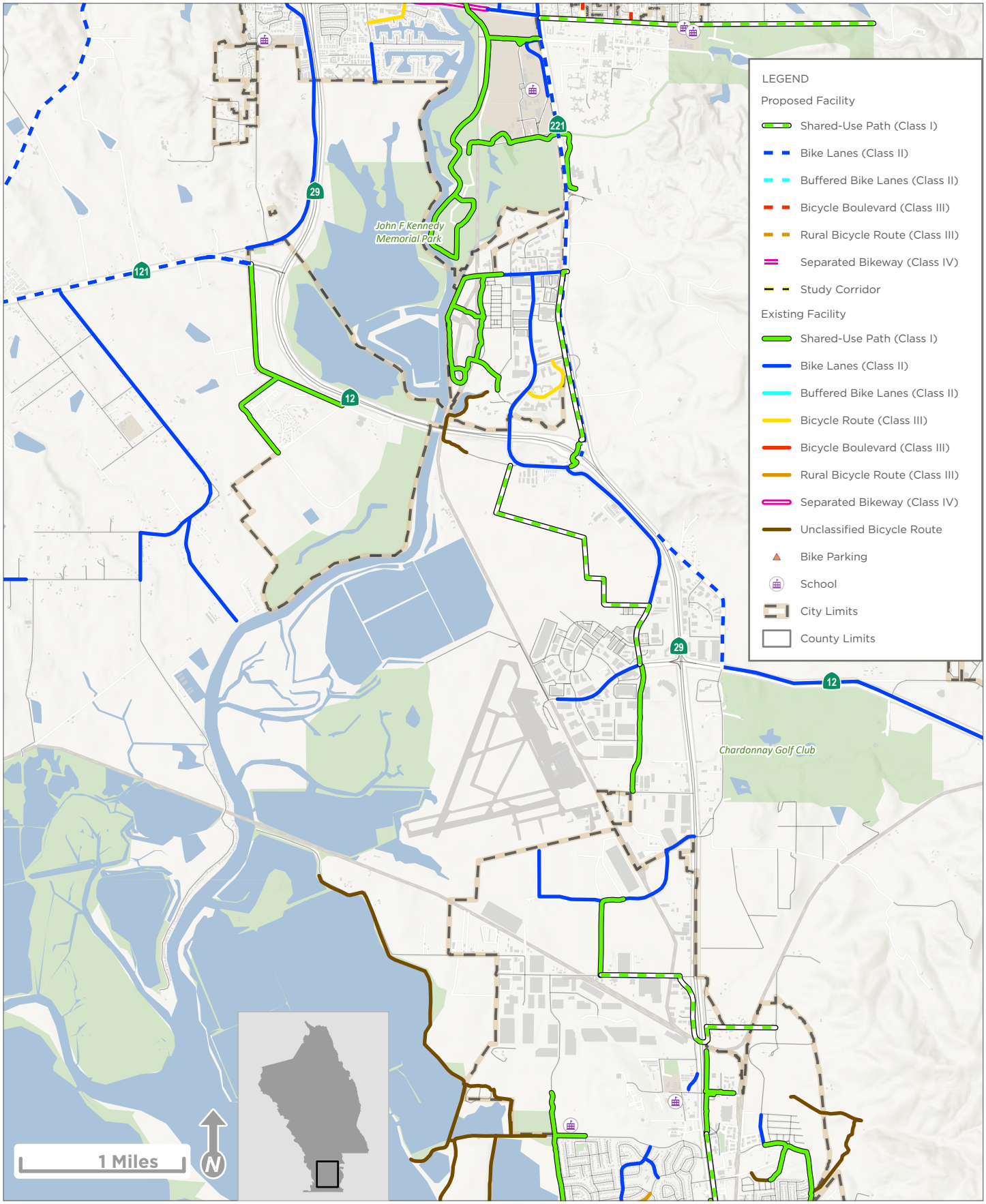
NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Southeast Napa Islands

Near-Term Bicycle Network

FIGURE 6.16



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

County of Napa - Napa / American Canyon

Near-Term Bicycle Network

FIGURE 6.17

Project Complexity

Assessing project complexity can help identify opportunities for project implementation outside the near-term project list. Bicycle projects in this AT Plan which were not included in the near-term project list are categorized as either high or low complexity. This grouping is intended as a general guide to help local jurisdictions select additional projects to pursue as opportunities arise.

Lower Complexity Projects

Lower complexity projects are generally those that require minimal improvements, such as striping and signage. These projects may include, but are not limited to, Bicycle Lanes (Class II), Buffered Bicycle Lanes (Class II) as well as Bicycle Routes (Class III) and Bicycle Boulevards (Class III). Even if these projects are not on the near-term bicycle project list, they may be lower cost and should be implemented alongside restriping and repaving projects as opportunities present themselves. For bicycle boulevards, temporary modular treatments provide a lower-complexity alternative to permanent concrete improvements.

Higher Complexity Projects

Higher complexity projects refer to projects that require right-of-way acquisition, concrete work, drainage improvements, stormwater treatment, relocation of utilities, and other factors that increase construction costs. This may include shared-use paths, separated bikeways, or projects that require road widening or reconfiguration. High-complexity projects on the near-term projects list should still be prioritized for implementation but may require more funding as compared to low-complexity projects.

Short-Term Solutions

In Appendix D, the Toolkit refers to the implementation of quick builds. Cities can employ alternative solutions such as quick builds which are improvements that address safety and connectivity at a lower cost and timeline than a full build-out with concrete or other permanent treatments. They often consist of plastic infrastructure such as bollards, signs, and paint, making them easy to install and adjust. Quick builds prioritize affordability for communities, allowing a community to find quick and sustainable solutions while allowing for future growth and possible changes to the improvements.

Estimated Project Benefits

Induced Bicycle Demand and VMT Reduction Methodology

The proposed bicycle facilities presented in the Plan may correlate with induced bicycling demand for both existing and new bicyclists. This is based on research presented in the National Cooperative Highway Research Program (NCHRP) Report 552, *Guidelines for Analysis of Investment in Bicycle Facilities,* which describes the methodology of estimating the induced demand associated with each bicycle facility and the monetized benefits of such.

The benefits associated with the proposed bicycle facilities are quantified through this induced demand analysis but are not promised as the methodology is based on several assumptions, generalizations, and are used as an estimator for potential benefits. The annualized benefits are based on the projects induced bicycling demand at high, moderate, and low estimates, using data from the US Census Bureau, commuter pattern data, and average bicycling trip length estimates from 2021 Replica data. See Appendix E for benefits associated with each project, excluding study corridors, for which benefits were not quantified.

Induced Demand

The annualized benefits are based on potential induced bicycling demand for each proposed project. The total rate of adult bicycling ranges from a low estimate, based on the Census bicycling commute mode share, to a high estimate, based on 0.6 percent plus three times the Census commute share. Thus, demand is quantified at low, medium, and high estimates for the populations at each buffer distance. The NCHRP 552 research cites that people who live closest to a bicycle facility are more likely to

bike than those who live further from the facility. Likelihood multipliers were developed to represent this probability[15] and used to estimate the total induced commuter bicyclists annually. Each buffer area—at 0.5-, 1- and 1.5-mile distances from a proposed bicycle improvement is created using a network-based analysis in a GIS environment.

This methodology results in annual monetized benefits associated with mobility, health, recreation, and decreased auto use expected to result from the proposed bicycle facilities, as detailed in Appendix F. These benefits are summed to produce the total monetized benefit for each project.

- **Mobility Benefits:** the time cost associated with shift to given bicycle facility type for the total number of commute trips over a commute year for new and existing bicyclist commuters.
- **Health Benefits**: the cost savings from physical activity benefits associated with induced demand
- **Recreation Benefits:** the cost savings related to recreational activity for new bicyclists induced
- **Decreased Auto Use Benefits:** the benefits associated with user cost savings, reduced congestion, and reduced air pollution.

In addition to the four benefits outlines above, benefits associated with greenhouse gas (GHG) reduction benefits were also calculated. The NCHRP guidelines do not discuss how to calculate GHG emissions reduction associated with a reduction VMT. Instead, the Senate Bill (SB) 1 California Life-Cycle Benefit/Cost Analysis Model (Cal-B/C) Grant Program Emissions Reduction Calculator was used.

VMT Reduction Methodology

The methodology to determine VMT reduction considers the total projected new bike commuters and the average round trip length determined by Replica's 2023 data which states the average one-way bicycling trip along a corridor is 3.1 miles.

Sidewalk Emissions Reductions

The NCHRP Guidelines for Analysis of Investment in Bicycle Facilities do not extend to pedestrian improvements, because the relationship between bicycle facilities and induced trips should not be assumed to hold true for walking. Instead, the California Emission Estimator Model (CalEEMod) Handbook for Analyzing Greenhouse Gas Emission Reductions Assessing Climate Vulnerabilities and Advancing Health and Equity was used to estimate the emissions reductions associated with improving the pedestrian network. The analysis estimates emissions reductions based on the percent increase of sidewalk coverage in a given community, and results in an estimated percentage of emissions reduction by Census block group.

Of the 101 block groups where sidewalks are proposed, 68 are expected to see reduced GHG emissions following implementation of the proposed sidewalk projects, ranging from 0.01 – 3.11% reductions. Twenty-nine block groups did not have any proposed sidewalk improvements.

Four block groups had no recorded existing sidewalks but had proposed improvements; in these cases, the calculation could not be performed. It should be noted that although sidewalks did not exist previously, it cannot be assumed that pedestrians did not use the unpaved areas. Therefore, the proposed sidewalks may have some GHG emission reductions.

The 20 block groups that are expected to result in the highest GHG emission reductions associated with sidewalk improvements are listed in Table 6.3. Block Groups that are not wholly in one jurisdiction are shown with the second jurisdiction listed. Block groups in Calistoga, the City of Napa, and portions of Unincorporated Napa County benefit most from the proposed sidewalk improvements.

[15] NCHRP 552, Appendix B; Supplemental White Paper Translating Demand and Benefits Research into Guidelines

Table 6.3: Top 20 Block Groups – Sidewalk Project Estimated GHG Emissions Reductions

Block Group	Jurisdiction	Existing Sidewalk Mileage	Existing + Proposed Sidewalk Mileage	Estimated GHG Emissions Reduction
060552017002	County of Napa (Angwin)	0.55	0.89	-3.11%
060552015002	County of Napa	0.36	0.56	-2.83%
060552020004	City of Calistoga	4.63	5.84	-1.31%
060552020002	City of Calistoga	3.35	4.19	-1.24%
060552020003	City of Calistoga	6.32	7.63	-1.04%
060552007043	County of Napa / City of Napa	1.35	1.63	-1.02%
060552007042	City of Napa / County of Napa	2.23	2.61	-0.85%
060552008044	City of Napa	3.35	3.82	-0.71%
060552007051	City of Napa / County of Napa	6.74	7.61	-0.65%
060552006012	City of Napa	4.66	5.24	-0.62%
060552016021	City of St. Helena	5.97	6.70	-0.62%
060552017005	County of Napa (Deer Park)	0.07	0.08	-0.60%
060552003012	City of Napa / County of Napa	4.85	5.42	-0.59%
060552011012	City of Napa / County of Napa	1.74	1.93	-0.54%
060552010062	City of Napa	7.97	8.84	-0.54%
060552003013	City of Napa / County of Napa	5.04	5.58	-0.54%
060552020001	City of Calistoga	3.01	3.32	-0.52%
060552013001	Town of Yountville	5.23	5.78	-0.52%
060552004002	City of Napa	2.27	2.50	-0.49%
060552008031	County of Napa / City of Napa	3.36	3.68	-0.48%

Unit Cost Assumptions

The table below presents planning level unit cost assumptions that will be used to develop project construction cost estimates. The unit cost method uses a single functional unit (linear mile or linear foot) that serves as a multiplier. The appropriate unit cost is multiplied by the length of the improvement to develop a planning-level project cost estimate. Notes and assumptions that informed the unit cost estimate are listed below. These assumptions are intended to provide a reasonable basis for costs; if specific improvements selected during detailed design of projects vary from these assumptions, actual project costs may differ.

Cost estimates were developed based on recent local project costs. Estimates include assumed costs for mobilization, traffic control, minor drainage, and utility work. In addition, estimates include 30 percent soft costs including engineering design, administration, and construction management, as well as a 20 percent contingency. Cost estimates for projects in this plan are in 2025 dollars which do not include cost escalation and have been rounded to the nearest $100.

At the planning level, cost assumptions do not consider project-specific or location-specific factors that may affect actual costs, including acquisition of right-of-way, road widening, major grading, or drainage system upgrades. For some projects, actual costs may differ significantly from the planning-level estimates.

Table 6.4: Unit Cost Assumptions

Improvement	Unit	Estimated Unit Cost	Notes
Shared-use Path (Class I)	MI	$3,800,000	Assumes 10’ wide asphalt path with 2’ shoulders and minor grading; no right of way acquisition or major grading/drainage/railings/retaining systems; in some contexts, concrete pathways may be preferred which would increase the unit cost estimate by approximately $1M per mile
Bicycle Lane (Class II)	MI	$145,000	Striping, bike lane symbol, and signs on both sides of street
Buffered Bicycle Lane (Class II)	MI	$220,000	Striping, bike lane symbol, and signs on both sides of street; includes 2’ striped buffer
Separated Bicycle Lane (Class IV)	MI	$650,000	Striping and separation on both sides of street; assume 3’ striped buffer with flexible K-71 bollards spaced every 15’
Bike Route (Class III)	MI	$30,000	Assumes sharrows every 250’ and signs every 500’ on both sides of street
Bike Boulevard (Class III)	MI	$1,960,000	Assumes sharrows every 400’, signs every 400’ on both sides of street; assumes speed table every 500’ and curb extension every 500’
Bike Boulevard with Modular Curb Extensions (Class III)	MI	$615,000	Assumes sharrows every 400’, signs every 400’ on both sides of street; assumes speed cushion every 500’ and modular curb extensions every 500’
Rural/Unclassified Bike Route	MI	$75,000	Assumes edge stripe and Bicycles May Use Full Lane signs on both sides of street approximately every 0.75 mile
Sidewalk	LF	$600	Assumes 6’ wide sidewalk with curb and gutter on one side of street

Note: MI = linear mile; LF = linear foot

Funding Opportunities

A variety of funding sources are available for funding projects recommended in Chapter 5. The sources below include county, regional, and statewide funding opportunities for capital improvements, planning efforts, and non-infrastructure programs.

Countywide Funding Opportunities

Measure U

Measure U is a 1/2-cent countywide sales tax prioritized for roadway improvements and active transportation projects. Funds are allocated to jurisdictions annually by NVTA as the administering agency. Eligible improvement types include sidewalks, on-street bikeways (including separated bikeways (Class IV)), and complete streets improvements such as curb extensions, curb ramps, sidewalks, or new curb and gutter. More information at https://nvta.ca.gov/programs/measureu/

One Bay Area Grant (OBAG) Program

The One Bay Area Grant (OBAG) Program includes both a regional funding program administered by the Metropolitan Transportation Commission (MTC) and county programs administered by the nine Congestion Management Agencies (CMAs). Funds are typically allocated for a four-year funding cycle, with the most recent OBAG Program 3 allocating funds for FY2023-2026. Eligible improvement types include bicycle and pedestrian improvements and programs including complete streets, SRTS, and crossing improvements, as well as pavement rehabilitation projects. More information at https://mtc.ca.gov/funding/federal-funding/federal-highway-administration-grants/one-bay-area-grant-obag-3

Transportation Development Act – Article 3

The Transportation Development Act – Article 3 (TDA-3) program is funded by approximately 2% of the statewide quarter-cent sales tax. NVTA administers the revenues generated in Napa County through a competitive process. Funds are allocated annually, with any unused funds rolled over for programming in future cycles. Eligible projects include construction and/or engineering of bicycle and/or pedestrian capital projects, capital purchases for maintenance of a Class I or Class IV facility, enhancement of Class II bicycle lanes, bicycle safety education programs (no more than 5% of county total), development of comprehensive bicycle and/or pedestrian facility plan (once every 5 years), and quick build projects. More information at https://mtc.ca.gov/funding/regional-funding/tda-sta/bicycle-pedestrian-funds-tda-3

Transportation Fund for Clean Air (TFCA) 40% Fund

The Transportation Funds for Clean Air (TFCA) program is funded by a $4 surcharge on vehicle registration in the nine Bay Area counties. The majority of the funding is programmed annually by the Bay Area Air Quality Management District (BAAQMD); priority is given to projects that reduce vehicle emissions or vehicle miles traveled (VMT). The remaining 40% of funds are allocated to and administered by the appropriate transportation agency in each Bay Area county, including NVTA for Napa County. Eligible improvement types include capital bicycle projects and infrastructure improvements for trip reduction, which includes traffic calming and measures that expand access to transit. More information at https://www.baaqmd.gov/en/funding-and-incentives/funding-sources/tfca-40-percent-fund

Regional Funding Opportunities

Community Action Resource & Empowerment (CARE) Program

The Community Action Resource & Empowerment (CARE) Program is funded by a combination of federal, state, and local sources. Funds are administered by MTC to support community-based transportation initiatives that have been identified locally as high priority. Eligible projects include capital projects identified in a locally adopted Community Based Transportation Plan (CBTP), as well as planning and technical support. More information at https://mtc.ca.gov/funding/funding-opportunities/community-action-resource-empowerment-care-program

Regional Active Transportation Program (ATP)

Projects not funded in the statewide competition for Active Transportation Program (ATP) funds may be funded at the regional level. A portion of statewide ATP funding is allocated to MTC and other regional agencies to fund additional projects. Funds are awarded through competitive application cycles that typically occur every other year between March and June. More information at https://mtc.ca.gov/funding/investment-strategies-commitments/climate-protection/active-transportation-program

Transportation Fund for Clean Air (TFCA) Regional Fund

The Transportation Funds for Clean Air (TFCA) program is funded by a $4 surcharge on vehicle registration in the nine Bay Area counties. The majority of the funding is programmed annually by the Bay Area Air Quality Management District (BAAQMD; priority is given to projects that reduce vehicle emissions or vehicle miles traveled (VMT). The remaining 40% of funds are allocated to and administered by the appropriate transportation agency in each Bay Area county, including NVTA for Napa County. Eligible improvement types include capital bicycle projects and infrastructure improvements for trip reduction, which includes traffic calming and measures that expand access to transit. More information at https://www.baaqmd.gov/funding-and-incentives/funding-sources/regional-fund

Statewide Funding Opportunities

State Active Transportation Program (ATP)

California's Active Transportation Program (ATP) is funded by a variety of state and federal sources with a goal of increasing walking and bicycling, improving public health, and addressing air quality concerns. At the state level, the program is administered by the California Transportation Commission (CTC). Funds are awarded through a competitive process that typically occurs every two years, with the call for projects issued in March. Eligible project types include bicycle and pedestrian infrastructure projects, non-infrastructure program activities, and planning. More information at https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/active-transportation-program

California Office of Traffic Safety (OTS) Grants

The California Office of Traffic Safety (OTS) provides grants to fund programs and projects that aim to reduce roadway fatalities and serious injuries. Funding is awarded through an annual competitive process, with the call for projects typically issued in December. Eligible programs include safety, education, and enforcement efforts. More information at https://www.ots.ca.gov/grants/

California State Parks Recreational Trails Program (RTP)

Recreational Trails Program (RTP) funding is administered at the state level by the CTC as part of the California ATP as well as by the California Department of Parks and Recreation (CDPR) as a standalone grant program. Non-motorized CDPR projects are administered by the Office of Grants and Local Services (OGALS). Funds are typically allocated on an annual basis. Eligible project types include acquisition of easements or property for recreational trails or trail corridors; development and rehabilitation of trails; trailside and trailhead facilities; and construction of new trails. More information at https://www.parks.ca.gov/?page_id=24324

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is administered by Caltrans to fund projects that reduce roadway fatalities and serious injuries. Funding is awarded through a competitive grant program every two years. Eligible improvement types include work on public roads, bicycle pedestrian pathways, or tribal lands that improves safety for transportation network users. Eligible projects must be listed in an adopted Local Road Safety Plan (LRSP) or Vision Zero Plan, and right of way acquisition must be no more than ten percent of construction costs. More information at https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program

Affordable Housing and Sustainable Communities (AHSC) Program

The Affordable Housing and Sustainable Communities (AHSC) Program is administered by the California Department of Housing and Community Development (HCD) to support projects that integrate low-carbon transportation options and affordable housing. Funds are awarded annually through a competitive program. Eligible improvement types include bikeways, traffic calming, sidewalks, and other roadway reconfiguration projects that have been adopted in a specific plan. More information at https://www.hcd.ca.gov/funding/ahsc#nofa

Sustainable Transportation Planning Grants (STPG)

The Sustainable Transportation Planning Grants (STPG) program is administered by Caltrans to fund planning efforts that aim to reduce greenhouse gas emissions in support of statewide targets. Funds are awarded through an annual competitive process. Eligible project types include planning projects, community engagement, and preliminary design (up to a 30 percent level of detail). More information at https://dot.ca.gov/programs/transportation-planning/division-of-transportation-planning/regional-and-community-planning/sustainable-transportation-planning-grants

Chapter 11
City of American Canyon

The City of American Canyon is approximately 6.5 square miles and has a population of 21,698 residents. The city is located in southern Napa County along SR 29 in the world-famous Napa Valley wine growing region and in close proximity to the San Francisco Bay.

American Canyon serves as a wine processing hub; and is a vibrant and diverse community. Because of its strategic location at the southern end of Napa County and with easy access to state and interstate highways, American Canyon's industrial district is home to millions of square feet of wine processing, bottling storage, and shipping space.

The northern portions of the city are composed of industrial land uses with limited roadway connectivity. The southern half of the city is primarily residential with a disconnected suburban roadway network.

Demographics

The following demographic information is from the American Community Survey (ACS) 2023 five-year estimates.

Age

Communities whose population skews younger may have improved opportunities for increasing active transportation mode shift. People who are introduced to walking, bicycling and transit at a younger age are more likely to use active modes of travel in adulthood. The median age for the City of American Canyon is 36.2 years, which is younger than the county median age of 42.8. Additionally, 37% of American Canyon's population is under 25 years old, which is a larger portion of the population compared to other jurisdictions. Figure 11.1 shows the age distribution for the City of American Canyon.

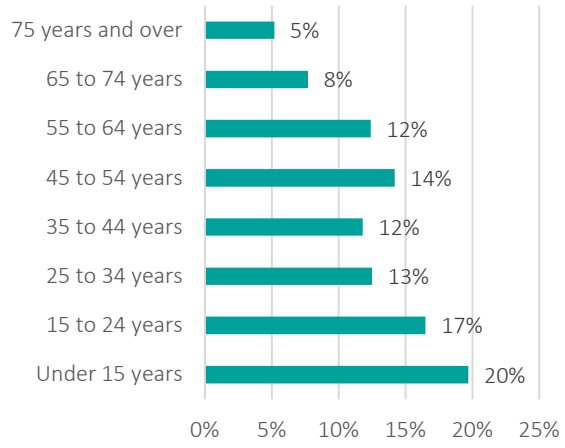


Figure 11.1: City of American Canyon Age Distribution

Income

As shown in Figure 11.2, the City of American Canyon has a median household income (MHI) of $123,935, which is higher than Napa County's MHI of $108,970. Those below the county median make up over 40% of the total population for American Canyon. Lower-income community members are more likely to rely on active transportation and transit as opposed to car travel. Providing adequate active transportation will support connectivity for these residents.

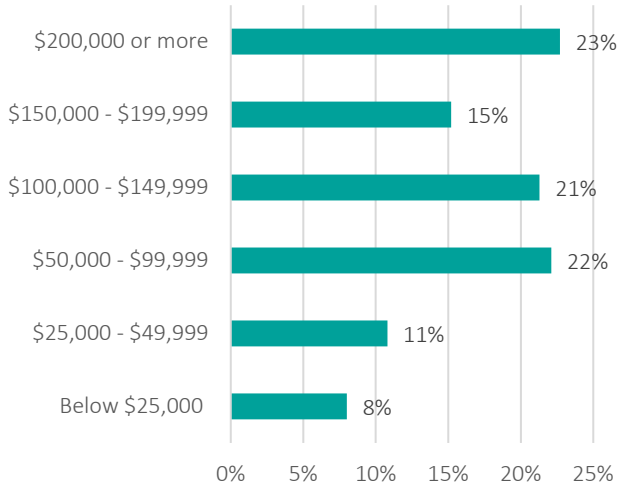


Figure 11.2: City of American Canyon Household Income

Travel Behavior

Mode Share

Figure 11.3 provides an overview of commute mode share for workers living in American Can aged 16 years and older. Mode share data was sourced from the American Community Survey (ACS) five-year estimates and represents data for 2016 and 2023. The data does not include non-work trips.

Most American Canyon residents drive to work, either alone or by carpooling. There is a small portion of the population that walks or takes public transportation.

Since 2016, more people have started working from home, likely due to the COVID-19 pandemic. The percentage of people who drive alone or carpool has declined.

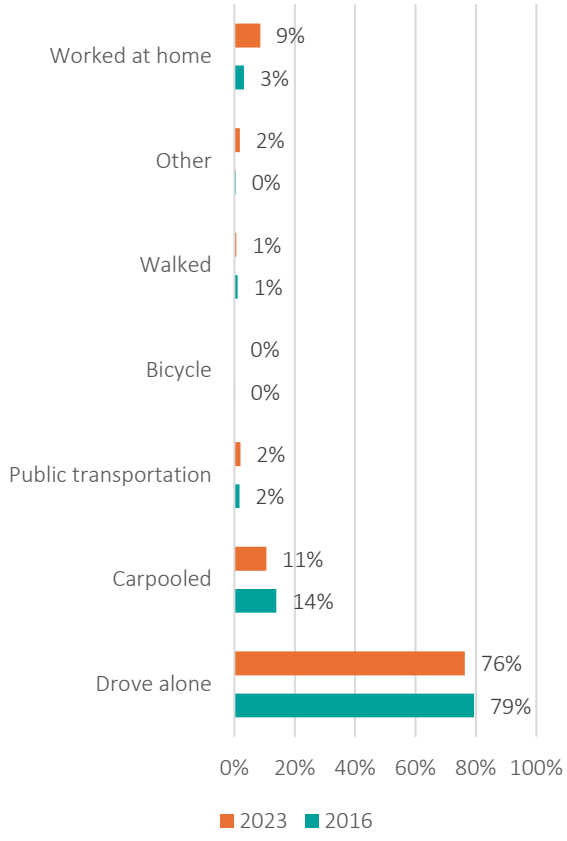


Figure 11.3: City of American Canyon Means of Transportation to Work

Trip Length

Figure 11.4 shows trip length information for American Canyon from the 2025 Travel Behavior Study. Of all trips originating in American Canyon, 29% were two miles or less in length. These "short-trips" represent opportunities for potential mode shift, encouraging people to switch from driving to active modes of transportation.

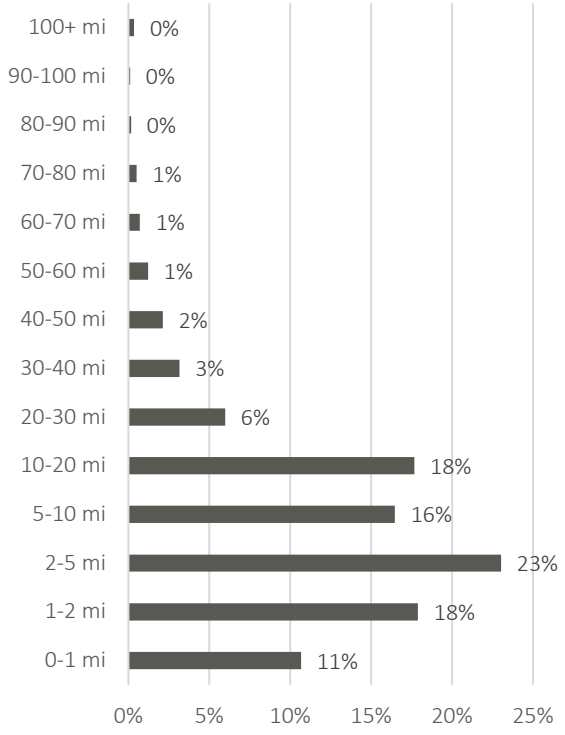


Figure 11.4: City of American Canyon Trip Length

Key Community Destinations

Some key destinations in American Canyon are located along and around James Street such as the Library. Some schools in American Canyon include American Canyon High, Canyon Oaks Elementary, and Donaldson Way Elementary. Improving pedestrian and bicycle connections to these destinations is key for developing a more connected active transportation network in American Canyon. Focusing improvements to schools mentioned will improve connectivity and safety, for more vulnerable road users (children and families) traveling to school.

Transit System and Stops

The Napa Vallejo is a bus system that goes from Vallejo through American Canyon with a direct line or indirect line up to City of Napa. There is also an on-demand transit system where users can call, use the online website or the app to request a ride on weekdays from 8:30 am to 5:30pm. American Canyon also has a fixed-route system that operates on 3 route loops, two in the morning and one in the afternoon. Improvements along these routes should be considered to improve first- and last-mile connectivity and increase access for those who rely on walking and bicycling.

Existing Bicycling and Walking Environment

Bicycle Facilities

Existing bicycle facilities in American Canyon are mapped in Figure 11.5. The map also includes bicycle parking locations.

Bicycle Network

Mileage of existing bicycle facilities is listed in Table 11.1. The American Canyon Bikeway network is composed of primarily off-street paths, supported by on-street bicycle lanes and bicycle routes. Most of the city's bicycle facilities are throughout the residential neighborhoods on either side of SR 29. However, east/west connectivity is limited as there are no bicycle facilities that connect across the highway.

Table 11.1: City of American Canyon Existing Bicycle Network Mileage

Facility Type	Miles
Shared-Use Paths (Class I)	11.0
Bicycle Lanes (Class II)	6.0
Bicycle Routes (Class III)	0.6
Rural Bicycle Routes (Class III)	0.6
Separated Bikeways (Class IV)	-
Unclassified Bicycle Routes	1.9
Total	**20.0**

West of SR 29, off-street paths along Wetlands Edge Road designated as part of the San Francisco Bay Trail provide local connections to Donaldson Way Elementary School and American Canyon Middle School, and provide regional connectivity to much of the bay area. There are also pathways through Elliot Park and the American Canyon Recreation Area. In the industrial areas of the City north of Eucalyptus Drive, there is a shared use path along Devlin Road (Vine Trail) that transitions to a bike lane at Middleton Way.

East of the highway, there are shared-use pathways along Donaldson Way, Newell Drive/Flodsen Road, Shenandoah Drive and parallel to American Canyon Road (off-street pathways). These paths connect residents to American Canyon High School, Canyon Oaks Elementary School, Newell Open Space, North Vallejo Community Center, and other key destinations. There is also a shared-use pathway along SR 29 between the Tractor Supply and Eucalyptus Drive. This pathway connects to a key commercial area but is not connected to the greater bicycle network.

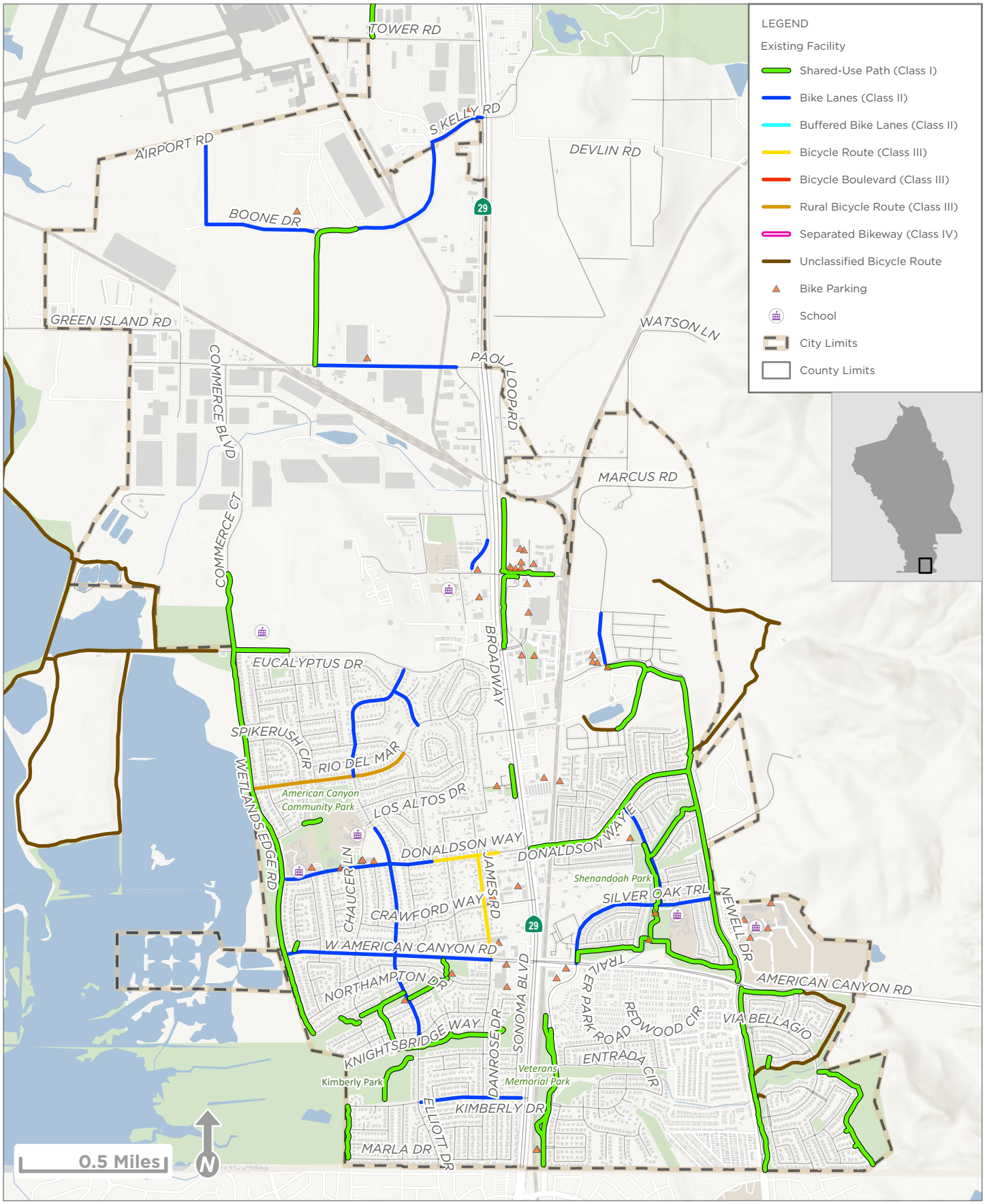
On-street bicycle lanes and bicycle routes support the off-street path network. West of SR 29, Benton Way has a bicycle lane/bicycle route that connects west to the San Francisco Bay Trail to Andrew Road.

There is a bicycle lane on Elliott Drive that connects to the Benton Way bike lane and the American Canyon Recreation area and path. Further south, there is a bicycle lane on Kimberly Drive between Kimberly Park and SR 29. East of the highway, there is a bike lane on the Silver Oak Trail that connects to American Canyon High and the various existing shared-use paths.

There are several unclassified bicycle routes along the edge of the city boundary or just beyond it, including a dirt pathway south of American Canyon Road and along the San Franciso Bay Trail alignment. These routes provide recreational bikeway access and connect to existing pathways throughout the city.

Bicycle Parking

Bicycle parking is available at key destinations, including American Canyon Middle School, Donaldson Way Elementary School, Elliott Park, and Canyon Plaza on the west side of SR 29, and at Shenandoah Park, American Canyon High School, and the Walmart Supercenter on the east side. Bicycle lockers for longer-term bike parking are available at the American Canyon Library at Crawford Way and James Road.



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing Bicycle Facilities

FIGURE 11.5

Pedestrian Facilities

Existing sidewalks and shared-use paths in American Canyon are mapped in Figure 11.6. Mileage of existing pedestrian facilities is listed in Table 11.2.

Table 11.2: City of American Canyon Existing Pedestrian Facility Mileage

Facility Type	Miles
Shared-Use Paths (Class I)	11.0
Sidewalks	108.1
Total	**119.1**

The pedestrian network inventory provides information about streets with existing or missing sidewalks or paths, which will be used to develop near-term sidewalk gap closure recommendations. However, not all locations without sidewalks are considered gaps in the network – some residential, rural, and/or recently annexed communities may not require sidewalk implementation per local guidelines. Sidewalk gap closures may also not be appropriate where right-of-way is limited, where community character is to be preserved, or in areas where traffic volumes and speeds are low enough for pedestrians to share the roadway.

Sidewalks

American Canyon has a well-connected sidewalk network south of Eucalyptus Drive. The north end of the city is primarily industrial, and pedestrian connectivity is limited. In the southern residential portion of the city, most neighborhood streets have sidewalks on both sides of the street. There is also a robust shared-use pathway network on either side of SR 29 that supports the sidewalk network for commuting and recreation.

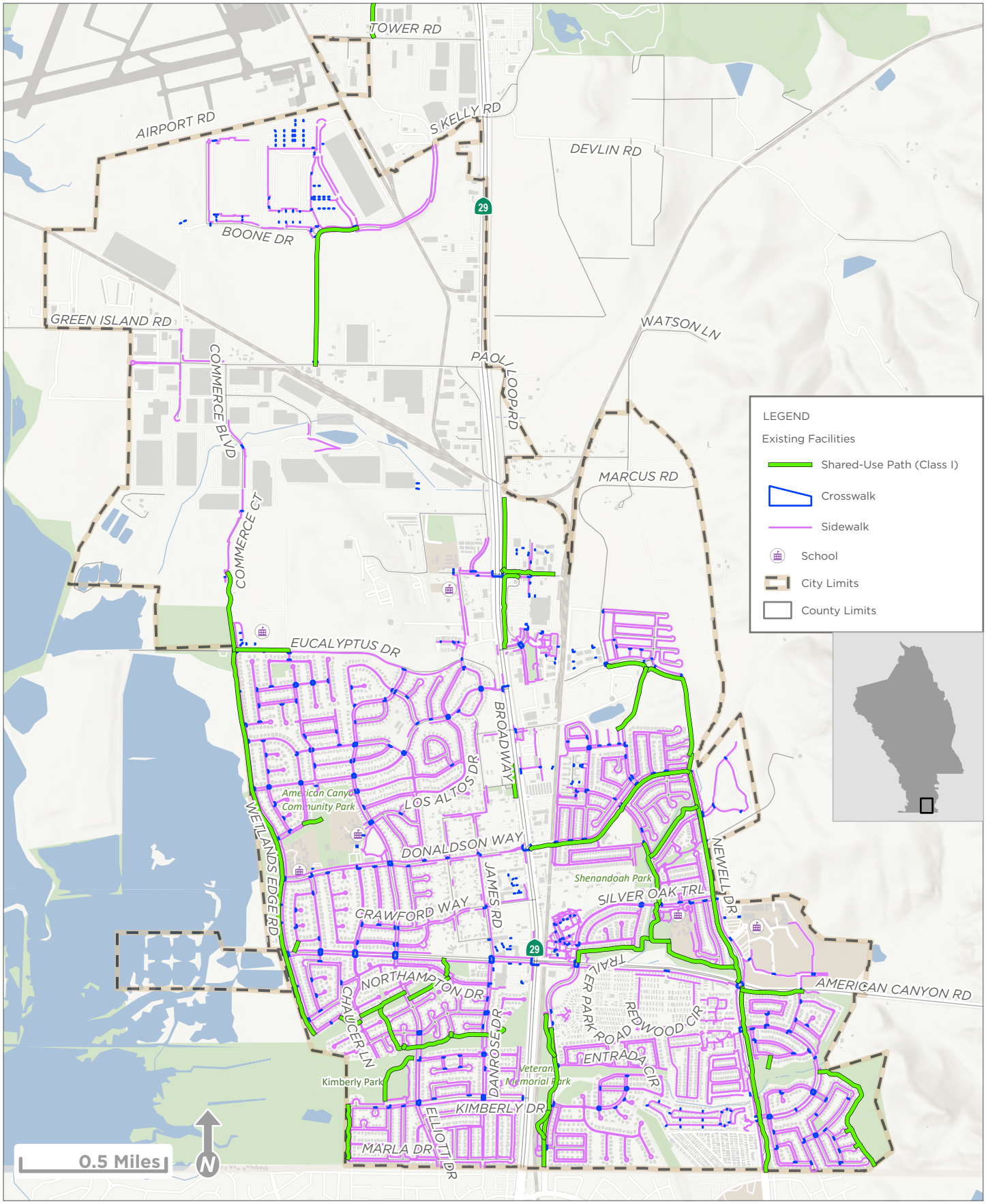
The 2016 Napa County Pedestrian Master Plan identifies James Road and Andrew Road as north/south pedestrian corridors without consistent sidewalks on both sides of the street. The AT Plan also highlights east/west corridors Donaldson Way and Crawford Way west of SR 29.

Pedestrian connectivity is limited across SR 29. At Donaldson Way and American Canyon Road, the two SR 29 crossings locations in the south end of the city, sidewalks leading up to the intersection are missing or limited. These locations are planned for future improvements as part of the SR 29 Corridor project.

Crossings

Marked crosswalks are present throughout the residential portions of the city, including major signalized intersections, minor stop-controlled intersections, and midblock crossings throughout residential neighborhoods and connected to the shared-use path network.

Crossing opportunities across SR 29 are limited. There are four signalized intersections between Napa Junction Road and American Canyon Road where drivers, pedestrians, and bicyclists can cross between the east and west sides of the community. Here, pedestrians must cross up to six lanes of traffic, and crosswalks are not present at all intersection legs.



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing Pedestrian Facilities

FIGURE 11.6

Needs Assessment

Once existing transportation conditions were documented, a needs assessment was conducted to highlight needs in the active transportation network. The needs assessment for American Canyon includes an analysis of bicycle level of traffic stress (LTS) and connectivity.

Level of Bicycle Stress

LTS produces a score for roadways from 1 to 4. Streets that scored 1 or 2 are less stressful and comfortable for bicyclists of most ages and abilities, while streets that scored 3 or 4 are more stressful and appropriate for only more experienced riders. For more information about LTS methodology, see Chapter 4.

As shown in Figure 11.7, the road network in American Canyon is composed of low-stress residential streets and higher stress arterials and collectors. Of the 85.1 miles of roadway in American Canyon, 15 percent scored LTS 3 or 4 and are considered high stress.

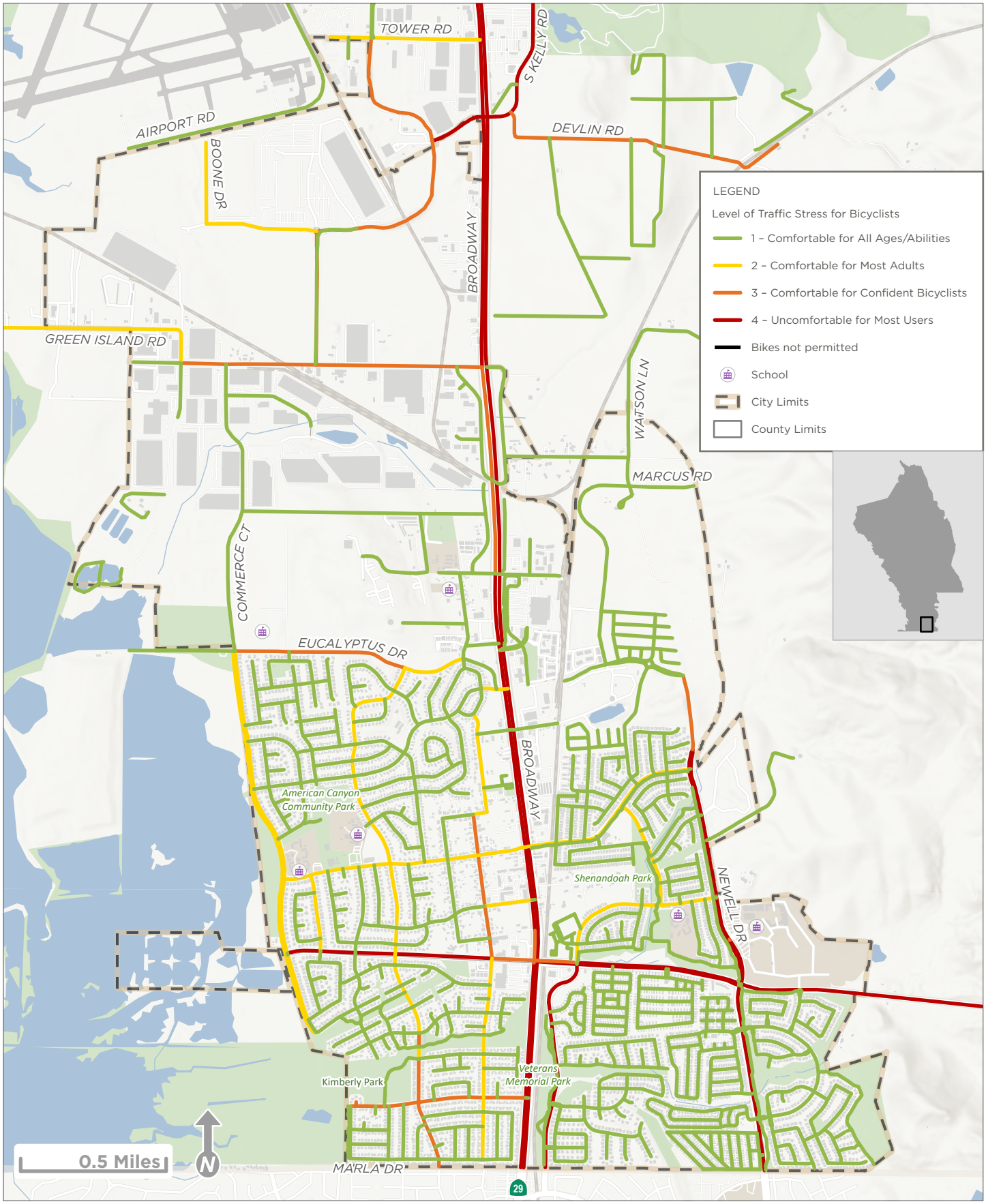
SR 29 scored LTS 4 and divides the city. There are two east/west routes that provide connectivity across SR 29: Donaldson Way and American Canyon Road. Donaldson Way is LTS 2 and provides access to schools on the west side of SR 29. It has bike lanes (Class II) for most of the corridor, moderate prevailing speeds (32 mph) and is classified as a collector with lower assumed traffic volumes, making it an appropriate bicycle route for many riders. Conversely, American Canyon Road scored an LTS 4 for its high speeds, vehicle capacity, and lack of bicycle facilities. American Canyon Road connects to American Canyon High School, but the existing conditions create a stressful environment for most bicyclists. Areas of low stress connectivity are separated by high stress streets that are barriers to low stress bicycling.

Key north/south routes include Donaldson and Melvin Road/James Rd, which score LTS 2 and 3 in different segments. These routes provide north/south connectivity and are opportunities for improved bicycle connectivity.

Low Stress Connectivity

Bicycle connectivity throughout the City of American Canyon was analyzed using LTS scores and origin and destination points. In this assessment, bicycle connectivity is defined as either high-stress or low-stress connectivity. Destinations with low-stress connectivity are connected to residential units (origins) along the low-stress bicycle network, or roads that score LTS 2 or lower. Providing low-stress connectivity improves bicycle access for a wider range of ages and abilities and induces bicycle demand.

Table 11.3 describes low stress bicycle connectivity to 14 key destinations within the city. The table describes the percentage of origins (residential units) that are connected to each destination along the low stress network. Origins in this analysis are within 1.5 miles of one or more destinations, which is the average distance a person is willing to bike. Origins outside of this 1.5-mile range are excluded.



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Bicycle Level of Traffic Stress

FIGURE 11.7

Table 11.3: City of American Canyon Low Stress Connectivity

Key Destinations	Total Connections to each destination (high- and low-stress)	Total Low Stress Connections	Percent Low-Stress Connectivity to Origins
American Canyon City Hall	1,532	697	25.5%
American Canyon High	1,865	488	17.8%
American Canyon Library	2,343	2	0.1%
American Canyon Middle	2,579	891	32.5%
Canyon Oaks Elementary	2,113	489	17.9%
Canyon Plaza	2,202	2	0.1%
Donaldson Way Elementary	2,855	893	32.6%
Elliot Park	2,261	327	11.9%
Safeway Shopping Center	2,606	327	11.9%
Walmart Supercenter	963	3	0.1%
Kimberly Park	1,499	1	0.0%
Montecarlo Park	1,071	250	9.1%
Silver Oak Park	1,235	420	15.3%
Via Bellagio Park	764	250	9.1%

Note: Total Connections refers to potential origins within 1.5 miles of the listed destination

American Canyon Middle and Donaldson Way Elementary have the best bicycle connectivity. Both schools are surrounded by low stress streets with no high stress barriers. However, fewer than 50% of residential units are connected to these destinations, due to high stress barriers like Broadway Street (SR 29) and American Canyon Road.

The four destinations with the poorest low-stress bicycle connectivity are the American Canyon Library, Canyon Plaza, The Walmart Supercenter and Kimberly Park. The library is located between James Road and Broadway Street, limiting connectivity for residents on both sides of town. Kimberly Park, which only has one low stress connection, is cornered on two high stress streets, Kimberly Dr. and Elliot Dr. The other two locations are located along SR 29, a high stress barrier, preventing low stress bicycle connectivity.

Community Priorities

Throughout the community engagement process, American Canyon residents identified priorities for potential improvements. Broadway Street/SR 29, Donaldson Way, American Canyon Road, Kimberly Drive and Eucalyptus Driver were highlighted as priority improvement locations. Community members discussed safe routes to school, improving existing bicycle facilities, and traffic calming. They also provided comments about future vine trail connections to American Canyon, and the need to improve intersections across SR 29.

Developing the Active Transportation Network in American Canyon

Using the findings from the past planning efforts, existing transportation conditions, LTS and bicycle connectivity analysis and community engagement priorities, the active proposed active transportation network was developed. The draft network was created in July 2025 and went through extensive review by NVTA and City staff. Once this review occurred, the network was revised and shared with the community during a virtual workshop in October 2025. Community members also had the opportunity to comment on the network using an interactive map hosted on the project website. Feedback gathered during the workshop and from

the interactive map was used to update the active transportation network. Changes were vetted by NVTA and city staff before the network was finalized early 2026.

Developing the Bicycle Network

American Canyon adopted the Countywide Bicycle Plan (2019), and additional efforts the Local Road Safety Plan (2022) and Broadway District Specific Plan were also reviewed.

The development of the network specifically focused on improving north/south connectivity along SR 29, connections across the highway and to local schools. The network builds off the existing shared-use paths in American Canyon, providing both on- and off-street bicycle connections. There was also a focus on improving connectivity across east/west arterials that are currently barriers to bicycling.

Developing the Pedestrian Network

Sidewalk gap closure projects were proposed if they met the following criteria:

- The gap is located within 500 feet of a point of interest, including parks, schools, transit stops, etc.
- The gap is located along a corridor with an existing or proposed bicycle improvement. The goal of this criterion is to create multimodal corridors that prioritize both pedestrians and bicyclists.

In addition to the methodology described above, a manual review was conducted to add or exclude projects where necessary.

Most of the proposed pedestrian gap projects are located west of SR 29 and north of American Canyon Road along West Donaldson Way, Andrew Road, and James Road. There are also two gap projects on American Canyon Road.

Shared-use path projects were identified during the development of the bicycle network but are also included as part of the pedestrian network. American Canyon. There are several existing shared-use paths in American Canyon, and the AT Plan proposes to expand the network along SR 29, Eucalyptus Drive, and American Canyon Road. These recommendations increase access to parks, schools, and residential neighborhoods, as well as recreational facilities outside city limits.

Recommendations

Recommendations for the American Canyon active transportation network includes the proposed network of bikeways and sidewalk gap closure projects. The AT Plan does not identify specific crossing improvements. Instead, a crosswalk strategy is detailed in Chapter 5. Additionally, a treatment toolkit detailing bicycle and pedestrian improvement design guide was developed to accommodate the proposed AT network. See Appendix D for more information.

Proposed Bicycle Network

The proposed American Canyon bicycle network builds off the 2019 Countywide Bicycle Plan, and was developed from the findings in the needs assessment. The proposed network follows best practices established in the Treatment Toolkit (Appendix D) and upgrades previous recommendations where necessary. For a map of the American Canyon bicycle network, see Figure 11.8.

The SF Bay Trail alignment runs along the western edge of the city, with two small gaps on the southern portion of the city and a larger gap west and north of the airport. The Napa Valley Vine Trail and the SF Bay Trail overlap in some portions of the city, but are recognized as two separate trails. While not called out as individual projects in this AT Plan, they are integral to the regional active transportation network and are regionally prioritized.

Table 11.4 provides the mileage of the existing network, compares mileage proposed in the AT Plan and the previous Countywide Bicycle Plan (2019), and the total mileage of entire bicycle network. The AT Plan adds 19.1 miles to the bicycle network, for a total of 39.1 miles once implemented.

Table 11.4: City of American Canyon Proposed Bicycle Network Mileage

Facility Type	2019 Existing Mileage	2025 Existing Mileage*	Change 2019 to 2025*	2025 Proposed Mileage	Total Mileage
Shared-Use Path (Class I)	9.7	11.0	+1.3	10.3	**21.4**
Bike Lanes (Class II)	1.6	6.0	+4.4	2.9	**8.9**
Buffered Bike Lanes (Class II)	-	-	-	0.3	**0.3**
Bicycle Route (Class III)	1.8	0.6	-1.2	-	**0.6**
Bicycle Boulevard (Class III)	-	-	-	3.7	**3.7**
Rural Bicycle Route (Class III)	-	0.6	+0.6	1.1	**1.6**
Separated Bikeway (Class IV)	-	-	-	0.7	**0.7**
Unclassified Bike Route	-	1.9	+1.9	-	**1.9**
Total	**13.1**	**20.0**	**+6.9**	**19.1**	**39.1**

**2025 Existing mileage totals are derived from a comprehensive review of existing bicycle facilities, which in some cases resulted in removal or re-categorization of facilities.*

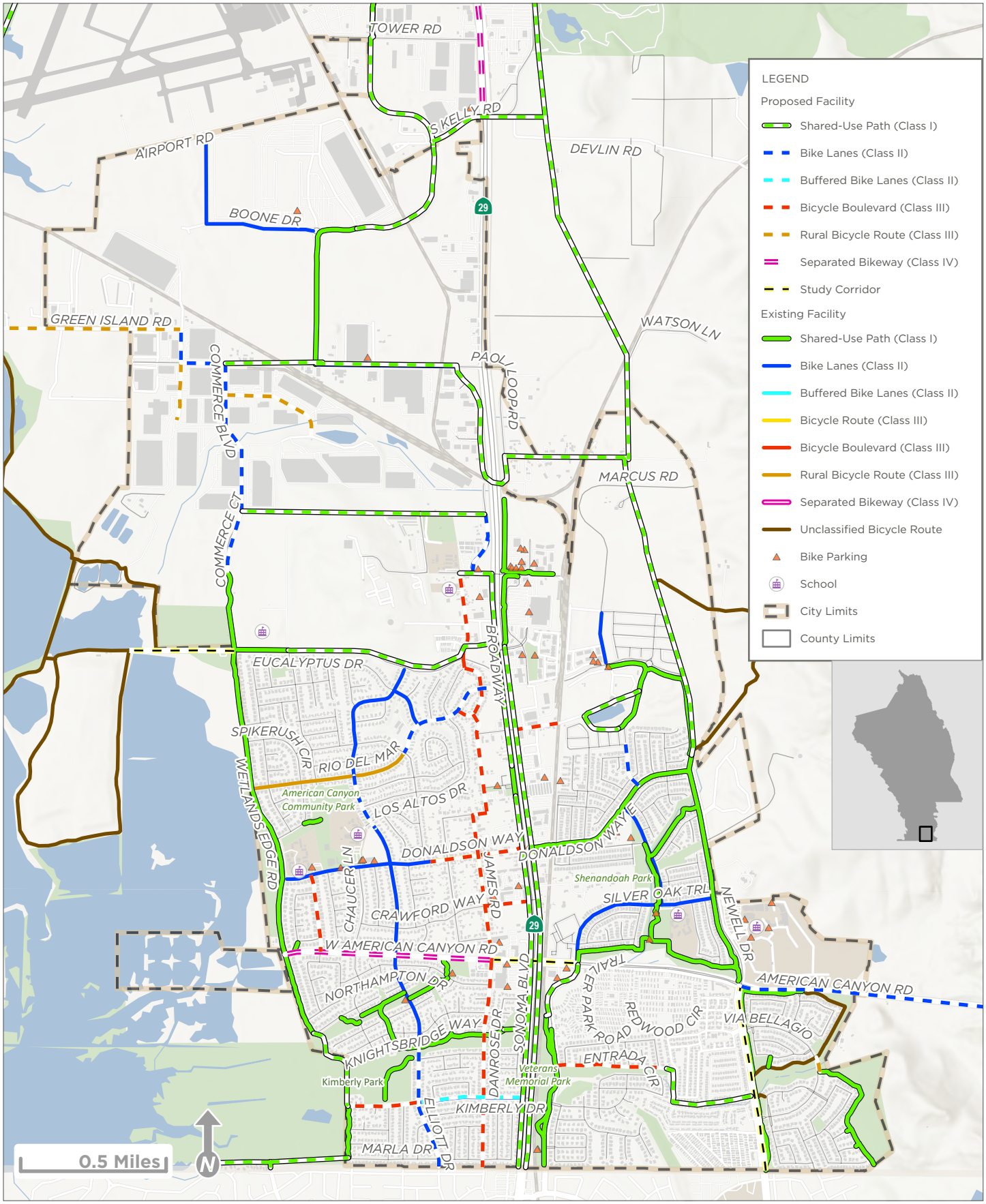
Proposed Pedestrian Network

The proposed American pedestrian network includes sidewalk gap closure projects and shared-use paths, as was developed based on existing gaps in the network. For a map of the pedestrian network, see Figure 11.9.

Table 11.5 presents the existing pedestrian network mileage, and mileage proposed in this AT Plan, as well as the total existing and proposed mileage. The AT Plan adds 12 miles to the pedestrian network, for a total future mileage of 109.8 miles of sidewalks and 21.4 miles of shared-use paths. Shared-use path mileage in Table 11.5 is not additional mileage but rather reflects the same mileage in the bicycle mileage table (Table 11.4), as these facilities are suitable for both pedestrians and bicyclists.

Table 11.5: City of American Canyon Proposed Pedestrian Network Mileage

Facility Type	Existing Mileage	Proposed Mileage	Total Future Mileage
Class I Shared-use Path	11.0	10.3	**21.4**
Sidewalk	108.1	1.7	**109.8**
Total	**119.1**	**12.0**	**131.1**

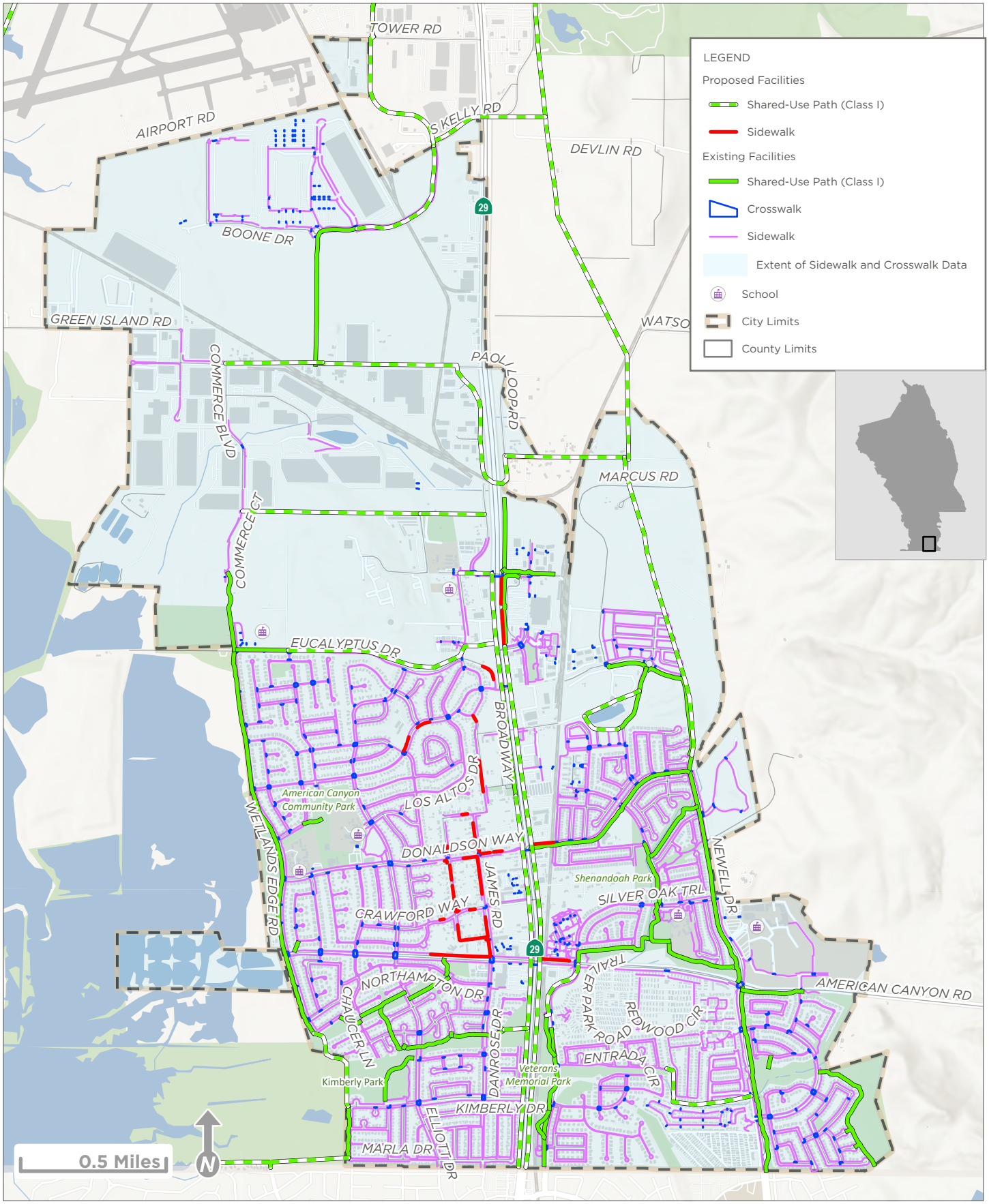


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing and Proposed Bicycle Facilities

FIGURE 11.8



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Existing and Proposed Pedestrian Facilities

FIGURE 11.9

Programs and Policies

This section will be completed by the individual jurisdiction should locally identified programs or policies be added prior to local adoption.

Implementation Plan

The previous Recommendations section provides the complete active transportation network for Calistoga to be implemented over the next 25 years. The implementation plan outlines an approach for prioritizing certain bicycle projects for near-term implementation. Note that the pedestrian network presented in the previous section represents the prioritized list of sidewalk gap projects and no further prioritization is conducted in this AT Plan. The sidewalk gap projects recommended form the prioritized list as they provide improved pedestrian access near key destinations.

In addition to the near-term bicycle projects, the implementation plan includes potential induced demand and VMT reductions from the full proposed bicycle network in Calistoga.

For the complete implementation plan, see Chapter 6 which includes unit cost assumptions for pedestrian and bicycle projects, as well as funding opportunities. The proposed network includes some facilities along state routes, which will require coordination with Caltrans.

Bicycle Network Prioritization

The proposed active transportation network provides a vision for Calistoga through 2050. However, there is limited available funding, and the whole network cannot be implemented at once. A near-term list of bicycle projects was developed for implementation over the next five to seven years. For prioritization methodology, see Chapter 6.

Five projects from American Canyon were identified for near-term implementation, listed in Table 11.6 and shown in Figure 11.10. The separated bikeway proposed on American Canyon Road will greatly improve connectivity west of SR 29 and reduce stress bicycle stress significantly. The Vine Trail segment in American Canyon and the path along SR 29 are key to connecting American Canyon north to the City of Napa. The bicycle boulevard on Kimberly Drive provides connectivity between the path along Meadow Bay Drive and the proposed bike lane on Elliot Drive.

Project Complexity

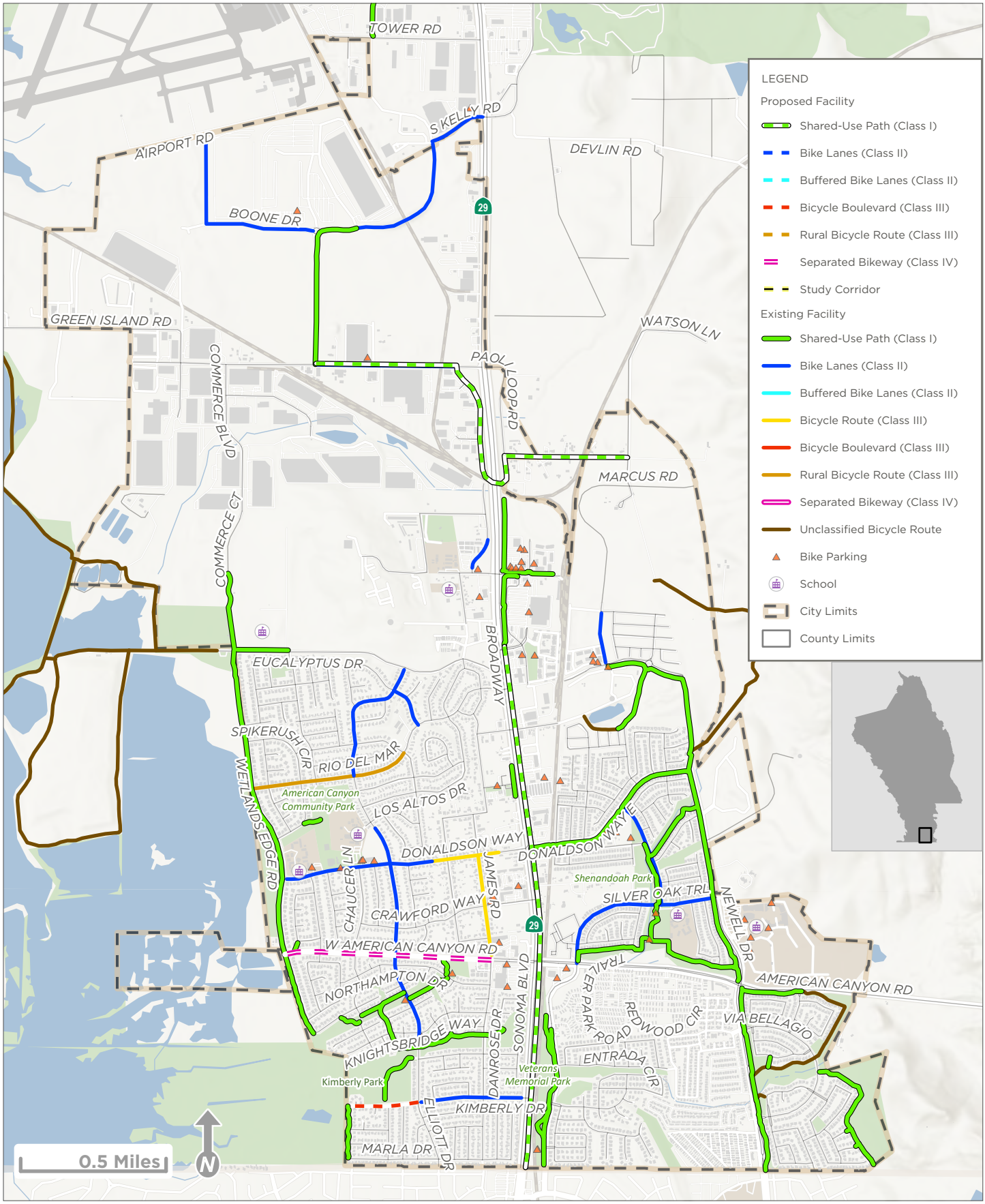
In addition to the prioritization, project complexity Is an essential consideration. Lower-complexity projects are projects that generally require only striping and signage, or which can be incorporated into routine paving or road resurfacing activities Higher complexity projects refer to projects that require right-of-way acquisition, concrete work, drainage, relocation of utilities, and other factors that increase construction costs. Projects in this AT Plan are categorized as either high or low complexity. For more information about project complexity, see Chapter 6.

Short-Term Solutions

For quick or short-term implementation, quick builds can be a viable option. Quick builds are improvements that address safety and connectivity at a lower cost and timeline than a full build-out with concrete or other permanent treatments. They often consist of plastic infrastructure such as bollards, signs, and paint, making them easy to install and adjust.

Table 11.6: City of American Canyon Near-Term Bicycle Project List

ID	Segment	Begins	Ends	Length (miles)	Type
796	Kimberley Drive	Elliot Drive	Meadow Bay Drive	0.2	Bicycle Boulevard (Class III)
839	American Canyon Rd	Wetlands Edge Rd	SR 29	0.7	Separated Bikeway (Class IV)
855	Vine Trail (along Devlin Rd)	Middleton Way	Watson Ln	1.1	Shared Use Path (Class I)
862	Vine Trail (along Watson Ln)	Paoli Loop Rd	Newell Rd Extension	0.4	Shared Use Path (Class I)
917	Kelly Rd	SR 12	Devlin Rd	1.0	Bike Lanes (Class II)
1147	SR 29 NB	American Canyon Rd	Napa Junction Rd	1.8	Shared Use Path (Class I)



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon

Near-Term Bicycle Network

FIGURE 11.10

Induced Bicycle Demand and VMT Reductions

For the five near-term projects proposed in American Canyon, benefits were quantified using the NCHRP Report 552 Guidelines for Analysis of Investment in Bicycle Facilities. The benefits presented are estimates and may not predict the exact benefits produced by each project.

Methodology

The annualized benefits are based on potential induced bicycling demand for each proposed project The total rate of adult bicycling ranges from a low estimate, based on the Census bicycling commute mode share, to a high estimate, based on 0.6 percent plus three times the Census commute share. Thus, demand is quantified at low, medium, and high estimates for the populations at each buffer distance. The results presented in Table 11.7 utilize the highest estimate. The NCHRP 552 research cites that people who live closest to a bicycle facility are more likely to bike than those who live further from the facility. Likelihood multipliers were developed to represent this probability[20] and used to estimate the total induced commuter bicyclists annually.

This methodology results in annual monetized benefits associated with mobility, health, recreation, and decreased auto use expected to result from the proposed bicycle facilities, as detailed in Appendix F. These benefits are summed to produce the total monetized benefit for each project.

- **Mobility Benefits:** the time cost associated with shift to given bicycle facility type for the total number of commute trips over a commute year for new and existing bicyclist commuters.
- **Health Benefits**: the cost savings from physical activity benefits associated with induced demand
- **Recreation Benefits:** the cost savings related to recreational activity for new bicyclists induced
- **Decreased Auto Use Benefits:** the benefits associated with user cost savings, reduced congestion, and reduced air pollution.

In addition to the four benefits outlines above, benefits associated with greenhouse gas (GHG) reduction benefits were also calculated. The NCHRP guidelines do not discuss how to calculate GHG emissions reduction associated with a reduction VMT. Instead, the Senate Bill (SB) 1 California Life-Cycle Benefit/Cost Analysis Model (Cal-B/C) Grant Program Emissions Reduction Calculator was used.

Results

Table 11.7 provides the new bicycle commuters induced annually, annual emissions reduction in tons, and the total annual monetized benefit provided by each project. All near-term proposed projects are estimated to induce between four and 44 new annual commuters a year. The proposed shared-use path on northbound SR 29, is anticipated to provide the highest total benefit, followed by the separated bikeway on American Canyon Road.

[20] NCHRP 552, Appendix B; Supplemental White Paper Translating Demand and Benefits Research into Guidelines

Table 11.7: City of American Canyon Near-Term Bicycle Project Benefits

ID	Segment	Begins	Ends	Length (miles)	Type	New Annual Commuter Bicyclists	Annual Emissions Reduction (Tons)	Total Annual Benefits
796	Kimberley Drive	Elliot Drive	Meadow Bay Drive	0.2	Bicycle Boulevard (Class III)	19	27,846	$463,800
839	American Canyon Rd	Wetlands Edge Rd	SR 29	0.7	Separated Bikeway (Class IV)	36	53,620	$1,280,900
855	Vine Trail (along Devlin Rd)	Middleton Way	Watson Ln	1.1	Shared Use Path (Class I)	4	6,435	$170,900
862	Vine Trail (along Watson Ln - American Canyon)	Paoli Loop Rd	Newell Rd Extension	0.4	Shared Use Path (Class I)	3	3,861	$98,700
1147	SR 29 NB	American Canyon Rd	Napa Junction Rd	1.8	Shared Use Path (Class I)	45	67,618	$1,608,800

Appendix A

Project, Policy, and Program Consistency Screen

NAPA VALLEY TRANSPORTATION AUTHORITY

MEMORANDUM

November 4, 2024

To: Patrick Band
Organization: Napa Valley Transportation Authority
From: Toole Design and GHD, Inc.
Project: Napa Countywide ATP

Re: Existing Planning Efforts – Project, Policy, and Program Consistency Screen

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Introduction and Purpose

This memo includes a review of adopted (or draft as of October 2024) state, regional, and local plans relevant to the Napa Countywide ATP, and includes:

- A brief summary of each plan and its goals, objectives, and/or purpose;
- A summary of each plan's recommended infrastructure projects, screen for consistency with other regional and local recommendations, where applicable; and
- An inventory and summary table of each plan's programs and policies, including a consistency screen with other regional and local plans.

This document will inform the Napa Countywide ATP by highlighting priority and recommended projects from past plans, noting where project recommendations may be inconsistent between plans, and summarizing relevant programs and policies and highlighting inconsistencies:

- Between a jurisdiction's plans; and
- Across different jurisdictions within regional plans.

A standalone Appendix includes a comprehensive summary and crosswalk table of policies and plans.

Reviewed Plans

All plans reviewed are grouped by state, regional, or local jurisdiction, starting with the most recent.

State Plans

Caltrans District 4 Bicycle (2018) and Pedestrian Plan (2021)

The Caltrans District 4 Bicycle Plan aims to remove barriers to bicycling throughout the San Francisco Bay Area via a variety of infrastructure improvements that enhance bicycle safety and mobility. The Plan establishes a vision that by 2040, people in California of all ages, abilities, and incomes can safely, conveniently, and comfortably walk and bicycle for their everyday transportation needs. The plan is focused on infrastructure and does not include policies and programs.

The Caltrans District 4 Pedestrian Plan identifies locations in need of pedestrian improvements along the State Highway System (SHS) throughout the Bay Area. While the District 4 Pedestrian Plan does not identify specific improvement projects, it prioritizes areas of need for future funding and implementation based on mobility/access, safety, and equity, including both existing and new infrastructure. The plan does not include policies and programs.

Four goals guide these plans, and are listed below:

- Safety: Facilitate safe travel for all users (modes) and abilities, as expressed through Toward Zero Deaths (Caltrans) and Vision Zero (local agencies) initiatives
- Mobility: Reduce dependency on motor vehicle travel through mode shift to bicycling, walking, and transit
- Preservation: Ensure district active transportation strategies and actions adequately discuss the long-term maintenance needs and resources required to maintain a state of good repair for state highways
- Equity: Promote active transportation solutions that serve the communities within the district by improving accessibility and healthy transportation options for disadvantaged communities

Regional Plans

NVTA Accessible Transportation Needs Assessment (2024 Draft)

NVTA is developing the Accessible Transportation Needs Assessment (ATNA) scheduled to be completed in January 2025. The assessment will study barriers to mobility for seniors and individuals with disabilities throughout

Napa County and will propose recommendations to provide equitable and improved transportation options for these populations.

As of October 2024, a comparative analysis report of transportation programs and services in peer counties was published as part of the ATNA. The analysis reviews transportation services offered to older adults by public, private, and non-profit entities in other similar counties and considers their potential in Napa County. Currently, the report does not include project recommendations, programs, or policies, and therefore is not included in the consistency screen sections of this document.

NVTA Vision Zero Plan (2023)

The NVTA Vision Zero Plan aims to increase roadway safety and eliminate traffic related death and serious injuries in Napa Valley. Informed by the Safe System approach, the Plan outlines six guiding principles:

- Safety is the highest priority
- People make mistakes
- A data-driven approach
- Safety is a shared responsibility
- Transportation networks must be equitable
- Vision Zero will be accountable and transparent

The Vision Zero Plan places an emphasis on equity, focusing efforts on low-income communities, the needs of seasonal workers and unhoused individuals, and reimagines the role of enforcement in the Safe System Approach.

Advancing Mobility 2045 (2021)

Advancing Mobility 2045 is the NVTA Countywide Transportation Plan (CTP) that provides long-range, countywide transportation priorities for Napa County. The plan outlines priorities for NVTA and Napa County's transportation system to relieve congestion, improve traffic safety, create more active transportation infrastructure, provide more reliable and frequent bus service, and maintain and repair the existing transportation system. The Plan establishes a framework for investments in the transportation network over the next five years, while establishing longer range priorities for estimated land-use, environmental, population and financial projects over the next 25 years. The plan's six goals include:

- Serve the transportation needs of the entire community regardless of age, income, or ability
- Improve system safety in order to support all modes and serve all users
- Use taxpayer dollars efficiently
- Promote Napa County's economic sustainability
- Minimize energy and other resources required to move people and goods
- Prioritize the maintenance and rehabilitation of the existing system

The CTP not only establishes a long-term vision for the county, but also identifies countywide projects, policies and programs to be submitted to the Metropolitan Transportation Commission (MTC) for inclusion in the Bay Area Regional Transportation Plan (RTP). The CTP will be updated and adopted by early 2026.

SR 29 Comprehensive Multimodal Corridor Plan (2020)

The State Route (SR) 29 Comprehensive Multimodal Corridor Plan (CMCP) is a multiagency plan that evaluates the most constrained portion of SR 29 between the cities of Napa and Vallejo. The plan's objective is to develop a comprehensive multimodal package of prioritized improvements, resulting in a Preferred Corridor Plan, over the next 20 years to address the following issues:

- Traffic congestion and delay
- Increased crash risks for all users
- Lack of low-stress multimodal connectivity
- Reduced travel time and transit reliability

Napa Valley Community-Based Transportation Plan (2020; plan update in progress)

The Napa Valley Community-Based Transportation Plan (CBTP) addresses community of concern (COC) transportation needs and network gaps. The Plan was published in 2020, and NVTA is currently in the process of a plan update. The CBTP outlines two goals:

- Improve access and mobility for low-income communities, for commute and non-commute trips; and
- Engage residents and community organizations in conducting the analysis and shaping recommendations

NVTA Travel Behavior Study (2020; plan update in progress)

The Travel Behavior Study investigates travel demand and travel patterns in the Napa Valley. While the study does not include project, program, or policy recommendations, the study will be used to refine the Napa Travel Model and inform regional transportation planning efforts. The initial Travel Behavior Study was created in 2014, with the most recent update published in 2020. NVTA is working on an additional update, which started in summer of 2024.

Napa Countywide Bicycle Master Plan (2019)

The Napa Countywide Bicycle Master Plan envisions a comprehensive, connected bicycle network for people of all ages and abilities that provides safe, convenient and enjoyable bicycle access throughout the County. The Plan aims to increase bicycle mode share to 10 percent by 2035, and includes four guiding goals:

- Develop a well-designed low Level of Traffic Stress (LTS) connected bicycle network
- Improve bicycle access for disadvantaged and/or underserved communities
- Improve safety for all ages and abilities
- Increase mode share of bicycling

This plan includes jurisdiction-specific bicycle plans within it.

Napa County Safe Routes to School Program Published Reports (2018-2022)

The Napa County Safe Routes to Schools (SRTS) program, led by the Napa County Office of Education (NCOE) and the Napa County Bicycle Coalition (NCBC), aims to ensure that every child can walk or bicycle to school safely. Currently, the SRTS program includes educational and encouragement elements such as bicycle safety education, bike rodeo, walking school buses, community rides, helmet distributions, and annual countywide events like Walk and Roll to School Day.

Between 2018 and 2022, NCBC conducted 31 walk audits of public schools throughout the county to identify barriers to safe walking and bicycling and developed action plans with specific improvement recommendations for schools in Calistoga, St. Helena, Napa, and American Canyon. The plans include feedback from Safe Routes evaluations conducted in 2018, walk audits from 2019-2020, and a 2021 parent survey.

Reports include both infrastructure and programmatic recommendations, which can be used to support and complement countywide and jurisdictional plans.

Napa Countywide Pedestrian Master Plan (2016)

The Napa Countywide Pedestrian Master Plan aims to increase pedestrian trips countywide by providing a connected, safe, and enjoyable pedestrian network for all. The plan outlines four goals:

- Provide a connected network of pedestrian sidewalks, trails and pathways in the County and its jurisdictions that are safe and accessible to a variety of users and that foster community interactions
- Encourage a multimodal transportation system
- Obtain funding for pedestrian projects
- Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists

The Plan includes individual local plans with priority project lists and supporting program and policies for the cities of Calistoga, St. Helena, Napa, and American Canyon, the Town of Yountville, and Unincorporated Napa County.

Local Plans

City of Calistoga

Calistoga General Plan (2014)

The Calistoga General Plan is the City's fundamental land use and development policy document, and is used to guide development, growth, and conserve resources into the future. The plan aims to maintain Calistoga's small-town character and walkability.

Calistoga Active Transportation Plan (ATP) (2014)

The Calistoga Active Transportation Plan (ATP) updates the 2012 ATP and provides a framework for pedestrian and bicycle improvement implementation. The ATP's vision is to develop a comprehensive, connected bicycle and pedestrian system. The plan's programs provide people with safe, convenient and enjoyable access throughout and beyond Calistoga. The Plan assesses pedestrian and bicyclist needs throughout the city and identifies infrastructure and programmatic improvements to support active transportation.

City of St. Helena

St. Helena 2040 General Plan (2019)

The City of St. Helena 2040 General Plan provides a vision for the City to build a community of effective community institution, safe neighborhoods and streets, and superior schools, parks and public facilities. The Plan will guide thoughtful, well-managed development while maintaining the City's small-town, rural character. The Plan includes an assessment of active transportation needs and identifies infrastructure and programmatic improvements to support active transportation.

Town of Yountville

Envision Yountville General Plan (2019)

The Envision Yountville General Plan outlines a community vision for transportation, housing, open space, conservation, safety and more. The Plan aims to limit growth and encourage infill, preserve quality of life, maintain community character, and provide a transportation network that encourages walking, biking, and public transportation ridership.

The Mobility Element of the General Plan provides the framework for decisions concerning Yountville's multi-modal transportation system, which includes roadway, transit, bike, pedestrian, and parking facilities. The Mobility Element includes an assessment of pedestrian and bicyclist needs throughout the city and identifies infrastructure and programmatic improvements to support active transportation.

City of Napa

City of Napa Local Road Safety Plan (2022)

The City of Napa Local Roadway Safety Plan (LRSP), adopted in September 2022, aims to reduce fatal and severe collisions on Napa's roadways. The plan systematically identifies traffic and safety related issues and recommends a list of projects and countermeasures to improve safety. The plan recommends a prioritized list of improvements that qualify for Highway Safety Improvement Program (HSIP) funding.

Napa 2040 General Plan (2022)

The City of Napa's General Plan is a comprehensive, long-range planning document that is used to guide the City's decision making in terms of future growth and physical development. The Transportation Element of the plan establishes goals and policies to enhance transportation options for the community and improve mobility through increased connectivity and efficient infrastructure management. The element addresses various modes of transportation and aims to improve transportation options and connectivity within the City and to the surrounding region, and identifies infrastructure and programmatic improvements to support active transportation.

City of Napa Bicycle Plan (2021) and Pedestrian Plan (2021)

The City of Napa Bicycle Plan is intended to guide development of infrastructure, programs, and policies that improve the bicycling environment for all residents and visitors in this Napa Valley community. The City of Napa Bicycle and Pedestrian Plans were developed as part of the NVTA Countywide Plans.

City of American Canyon

General Plan 2040 (2024 Draft)

The American Canyon General Plan, currently undergoing updates and pending adoption, provides a planning framework for the City and expresses the shared community vision of a Healthy, Equitable, Resilient, and Economically Vibrant community to the year 2040 and beyond. The plan presents a long-term framework for future growth and development in the city.

The Mobility Element of the General Plan aims to guide a safe and efficient transportation system. The core value of the Mobility Element is to provide safe and easy travel for pedestrians, bicyclists, transit riders and motor vehicles. The Plan assesses pedestrian and bicyclist needs throughout the city and identifies infrastructure and programmatic improvements to support active transportation.

City of American Canyon Local Road Safety Plan (2022)

The American Canyon Local Roadway Safety Plan (LRSP) aims to reduce fatal and severe injury collisions and increase safe, healthy, and equitable mobility for all through proposed roadway improvements and safety countermeasures.

Project Inventory and Consistency Screen

For all plans listed above, recommended projects were inventoried and reviewed for consistency across plans.

Key Findings

- The NVTA Vision Zero Plan (2023) recommends installing a roundabout at SR 29 and Madison Street, which is an additional improvement not included among intersection improvements recommended in the SR 29 CMCP (2020).
- The SR 29 CMCP (2020) maintains SR 29 as a four-lane arterial through the City of American Canyon, but the City's General Plan Update (2024) envision SR 29 ultimately widened to six lanes.
- The Napa Valley 2020 CBTP includes two projects in the City of Napa that are not included in any other regional or local plans.
- The City of Calistoga ATP (2014) includes 10 projects that are inconsistent with projects included in the Napa Countywide Bicycle Plan (2019). These projects mainly differ in where they begin and end, and the facility type proposed.
- St. Helena's General Plan (2019) lists 21 bikeway projects that differ from projects listed in the Napa Countywide Bicycle Master Plan (2019). These projects mainly differ in where they begin and end, and the facility type proposed.

Multi-Jurisdictional Project Inventory

The tables in this section summarize non-conflicting projects sourced from multi-jurisdictional plans that aim to achieve different goals.

NVTA Vision Zero Plan (2023)

This plan includes 46 roadway safety projects throughout the corridor. The 10 priority projects are included in the table below.

Table 1: NVTA 2023 Vision Zero Plan - Top 10 Projects

Location	Recommended Projects
American Canyon Rd E	▪ Install protected intersections or roundabouts, high-visibility crosswalks and daylighting
Lincoln Ave	▪ Install signal with LPI and audible push buttons, and square intersection ▪ Install Class II bike lane, narrow travel lanes ▪ Install high-visibility crosswalks and daylighting at all intersections ▪ Install RRFBs
SR 128	▪ Install centerline delineators ▪ Install asphalt berms ▪ Build permanent sidewalks ▪ Install RRFBs and high-visibility crosswalks
Deer Park Rd/ Sanitarium Rd	▪ Install roundabout
Howell Mountain Rd	▪ Upgrade signage ▪ Upgrade pavement markings/raised markings ▪ Install advance curve warning signage, rumble strips, delineators and markers

	▪ Install Class IIB buffered bike lanes and conflict striping
Main St	▪ Install curb extensions ▪ Upgrade signal synchronization ▪ Install high-visibility crosswalks ▪ Upgrade sidewalks with ADA-compliant ramps
Trancas St/ Redwood Rd	▪ Road diet ▪ Install Class II bike lanes, Class IIB buffered bike lanes ▪ Implement LPI, install pedestrian countdown timers, audible push buttons, retroflective tape, edge lines, and advance stop bars ▪ Install wayfinding signage ▪ Improve sightlines ▪ Straighten crosswalks, upgrade to high-visibility markings, ADA-compliant curb ramps ▪ Install bike conflict striping, delineators, object markers, speed feedback signs ▪ Upgrade to fluorescent signage ▪ Close/reconfigure slip lane and implement all-way stop control ▪ Install RRFB and pedestrian median refuge ▪ Close sidewalk gaps ▪ Install protected intersection
Soscol Ave	▪ Upgrade signage ▪ Install speed feedback signs, delineators and object markers ▪ Upgrade bike lanes to Class IIB buffered bike lanes or Class IV separated bike lanes ▪ Narrow travel lanes ▪ Install trail crossing ▪ Install high-visibility crosswalks ▪ Square intersections ▪ Re-configure slip lanes ▪ Install bike conflict striping and transit islands ▪ Install Pedestrian Hybrid Beacons (PHBs)
Finell Rd	▪ Install curb extensions, daylight, and high-visibility crosswalks ▪ Close sidewalks gaps
SR 29/ Madison St	▪ Install roundabout

SR 29 Comprehensive Multimodal Corridor Plan (2020)

The projects proposed in the SR 29 Comprehensive Multimodal Corridor Plan (CMCP) were compared to the Caltrans SR 29 Route Concept Report, NVTA Regional Transportation Plan, and the Circulation Elements of the Napa County, City of American Canyon, and City of Napa General Plans. The proposed SR 29 CMCP was consistent with other agency plans, aside from one recommendation: while the SR 29 CMCP (2020) maintains SR 29 as a four-lane arterial through the City of American Canyon, the City of American Canyon's General Plan (2024 draft; in-progress) envisions SR 29 ultimately widened to six lanes.

Table 2: State Route 29 Comprehensive Multimodal Corridor Plan Projects

Improvement Type	Project	Description
SR 29 Multimodal Improvements	SR 37 to Napa Junction Road	▪ Separated pathways on either side of SR 29 ▪ Pedestrian refuge islands at intersections ▪ 8' shoulders and landscaping
	Napa Junction Road to Paoli Loop Road	▪ Separated pathway on the west side of SR 29 ▪ Connect to Vine Trail and Paoli Loop Road
	South Kelly Road to Soscol Junction	▪ Buffered bike lanes ▪ Improved intersections
Intersection Improvements	Airport Boulevard/SR12/SR29	▪ Interchange improvements ▪ Pedestrian and bicycle crossings
	Soscol Junction	▪ Two roundabouts and grade separated crossing for SR 29 ▪ Pedestrian and bicycle crossing improvements
Grade-Separated Pedestrian Crossings	Donaldson Drive American Canyon Road Napa Junction Road	▪ Eliminate at-grade pedestrian traffic signal cycles ▪ Provide raised crossings over SR 29
Shared-Use Paths	Napa Valley Vine Trail	▪ Separated path along SR 29 ▪ Gap closures from the City of Napa (Kennedy Park) to the City of American Canyon (Newell Drive) to the existing Vine Trail along Broadway
	San Franscisco Bay Trail	▪ Separated paths along Napa River ▪ Connect through Napa, American Canyon, Vallejo and to SR 37

Jurisdiction-Specific Project Inventory

City of Napa Local Road Safety Plan (LRSP; 2022)

The LRSP identifies safety projects, based on countermeasures in the plan, that qualify for Highway Safety Improvement Program (HSIP) funding. Active-transportation related recommendations include:

- Install advance warning flashing beacons at:
  - » Soscol Ave at W. Imola Ave
  - » SR 29 at SR 12
  - » SR 29 at Trower Ave
  - » Lincoln Ave at Soscol Ave
  - » SR 29 at Wine Country Ave
  - » Silverado Trail at Lincoln Ave/Clark St
  - » Redwood Rd at Solano Ave
  - » SR 29 at Salvador Ave

    - » Soscol Ave at Shetler Ave
    - » W. Imola Ave at SR 29 NB Ramps
    - » Jefferson St at Sheridan Dr
- Modify traffic signal to include Leading Pedestrian Interval, and install advance stop bars and pedestrian countdown signal heads at:
    - » Soscol Ave at W. Imola Ave
    - » SR 29 at Trower Ave
    - » Lincoln Ave at Soscol Ave
    - » SR 29 at Wine Country Ave
    - » Silverado Trail at Lincoln Ave/Clark St
    - » Redwood Rd at Solano Ave
    - » SR 29 at Salvador Ave
    - » Soscol Ave at Shetler Ave
    - » W. Imola Ave at SR 29 NB Ramps
    - » Jefferson St at Sheridan Dr
- Install high-visibility crosswalks, additional stop signs (or other regulatory signs), and improve intersection pavement at:
    - » California Blvd at Pueblo Ave
    - » Soscol Ave: W. Imola Ave to Trancas St
    - » Silverado Trail: Soscol Ave to City Limit
    - » Solano Ave: Lincoln Ave to Trower Ave
    - » Lincoln Ave: Yajome St to Silverado Trail
    - » S. Freeway Dr/Golden Gate Dr: 900’ N of Imola Ave to 1,600’ S of Imola Ave
    - » SR 29: 1,400’ N of Trancas St to City Limit (North)
    - » W. Imola Ave: Foster Rd to Soscol Ave
    - » Browns Valley Rd: 350' W of Austin Rd to 400’ W of Freeway Dr
    - » Main St: 750’ N of Lincoln Ave to 5th St
    - » Jefferson St: Trancas St to 2nd St
    - » Trancas St/Redwood Rd: 450' E of Dry Creek Rd to City Limit (East)
- Along the following roadway segments, install high-visibility crosswalks, Rectangular Rapid Flashing Beacons, and dynamic speed warning signs:
    - » Soscol Ave: W. Imola Ave to Trancas St
    - » Silverado Trail: Soscol Ave to City Limit
    - » Solano Ave: Lincoln Ave to Trower Ave
    - » Lincoln Ave: Yajome St to Silverado Trail
    - » W. Imola Ave: Foster Rd to Soscol Ave
    - » Browns Valley Rd: 350' W of Austin Rd to 400’ W of Freeway Dr
    - » Main St: 750’ N of Lincoln Ave to 5th St
    - » S. Freeway Dr/Golden Gate Dr: 900’ N of Imola Ave to 1,600’ S of Imola Ave

City of American Canyon Local Road Safety Plan (LRSP; 2022)

The LRSP identifies safety projects, based on countermeasures in the plan, that qualify for Highway Safety Improvement Program funding. Active-transportation related recommendations include:

- Install pedestrian crossing (new signs and markings) at uncontrolled locations:
    - » Flosden Rd and Daniel Dr

    - » Rio Del Mar and Rio Grande
    - » Silver Oak Trail (American Canyon Rd to Newell Dr)
    - » Benton Way (Wetlands Edge Rd to Donaldson Way/Elliott Dr)
- Modify signal phasing to implement a Leading Pedestrian Interval at:
    - » American Canyon Rd and Broadway Silver Oak Trail
    - » American Canyon Rd and Newell Dr/Flosden Rd
    - » Flosden Rd and Canyon Creek Dr
    - » Flosden Rd and Via Bellagio
    - » American Canyon Rd and Via Firenze
- Evaluate installing a mini roundabout at Rio Del Mar and Los Altos Pl
- Install high-visibility yellow school crosswalk striping at American Canyon Rd and Via Firenze
- Relocate existing school crossing at Rio Del Mar and Rio Grande

Advancing Mobility 2045 (2021)

The projects listed in Table 3 below are included in the Advancing Mobility 2045 countywide plan, which was developed with the input of all jurisdictional and countywide plans that preceded it (including General Plan Circulation Elements).

Table 3: Advancing Mobility 2045 Projects

Jurisdiction	Project Description
American Canyon	American Canyon Multimodal Transit Center: Construct transit center
American Canyon	Highway 29 Pedestrian Safety Overcrossings: Construct three pedestrian crossings over Highway 29
Calistoga	Lake Street reconstruction and complete street enhancements
Calistoga	Pedestrian safety improvements at SR 29 and Cedar Street: Stop signs and crosswalks
Calistoga	Pedestrian safety improvements at SR 29 and Brannan Street: Curb extension and flashing beacon
Calistoga	Safe Routes to School: Construct foot bridge over the Napa River at Pioneer Park
Calistoga	Lincoln Corridor Safety Enhancements: Signal modification, bicycle, and pedestrian enhancements
Calistoga	South Oak Bicycle/Pedestrian Bridge: Construct fast bridge over Napa River at Logvy Park
Calistoga	Grant Street – City Limit to Centennial Court: Complete Street enhancements and multiuse pathway on Grant
City of Napa	Trower Avenue Extension: Extend Trower Avenue east to connect with Big Ranch Road

City of Napa	Linda Vista Avenue Bridge and Extension: New bridge at Redwood Creek and extension of Terrace Drive from the southern terminus of Terrace Drive to the northerly terminus of South Terrace Drive
City of Napa	Terrace Drive Bridge and Extension: New bridge at Cayetano Creek and extension of Terrace Drive from the southern terminus of Terrace Drive to the northerly terminus of South Terrace Drive
City of Napa	Solano Avenue Bridge and Extension: New bridge at Napa Creek and extension of Solano Avenue south to connect with First Street
City of Napa	Lincoln Avenue at California Boulevard and SR 29 Off-Ramp: Reconfigure northbound SR 29 off-ramp at Lincoln Avenue and modify Lincoln Avenue/California Boulevard intersection
City of Napa	Salvador Avenue Complete Streets: Complete streets infrastructure improvements including roadway widening to accommodate bicycle and pedestrian facilities
City of Napa	SR 29 over Trower Avenue: Trower Avenue underpass at SR 29
City of Napa	Jefferson Street/Laurel Street Signal: New signal at intersection
City of Napa	Jefferson Street/Old Sonoma Road Signal: New signal at intersection
City of Napa	Jefferson Street/Imola Avenue Intersection Modifications: modifications including additional right-turn lanes
City of Napa	Solano Avenue/Redwood Road Intersection Modifications: modifications including widening and restriping
City of Napa	Jefferson Street/Lincoln Avenue Intersection Modifications: modifications including additional right-turn lanes
City of Napa	Lincoln Avenue/Soscol Avenue Intersection Modifications: modifications including additional right-turn lanes
City of Napa	First Street and Browns Valley Road – Corridor Complete Streets: Complete Streets infrastructure improvements including roundabouts at the intersections of First Street/Freeway Drive and First Street/SR 29 southbound ramps
City of Napa	Jefferson Street/Sierra Avenue Signal: New signal at intersection
City of Napa	Browns Valley Road Complete Streets: Completes Streets infrastructure improvements including roadway widening between Westview Drive and McCormick Lane to accommodate bicycle and pedestrian facilities
City of Napa	Salvador Creek Bicycle Trail: Construct a Class I multiuse path along Salvador Creek
City of Napa	Intersection modification: Construct intersection improvements at Silverado Trail/Third Street/Coombsville Road/East Avenue
City of Napa	Oxbow Preserve/Bicycle Pedestrian Bridge: Construct a bicycle/pedestrian bridge from the Oxbow Preserve over the Napa River to the River Trail
City of Napa	Oxbow District Bicycle/Pedestrian Bridge: Construct a bicycle/pedestrian bridge from the River Trail over the Napa River to Third Street

City of Napa	Laurel Street Sidewalks: Construct sidewalks along Laurel Street where gaps are present
City of Napa	Sierra Avenue Sidewalks: Construct sidewalks along Sierra Avenue from Jefferson Street to SR 29
City of Napa	Terrace Drive Sidewalks: Construct sidewalks along Terrace Drive where gaps are present
City of Napa	Railroad Crossing Upgrades: Upgrade all railroad crossings citywide to Concreate® panels with flangeway fillers
City of Napa	Vine Trail (Redwood Road Crossing): Construct a grade-separated crossing across Redwood Road connecting the adjacent sections of the Vine Trail
Napa County	Vine Trail: Class I bicycle trails, including portions of American Canyon, St. Helena, and unincorporated Napa County
Napa County	Soscol Gateway Transit Center Improvements: Pedestrian connector, safety, and infrastructure upgrades
Napa County	Oxbow Bicycle and Pedestrian Crossing: Construct a bicycle/pedestrian bridge over the Napa River between 3rd Street and 1st Street adjacent to the existing railroad bridge
Napa County	Imola Complete Streets Corridor: Complete Streets enhancements and safety improvements along the Imola Avenue corridor
St. Helena	Main Street Corridor Improvements Phase I: Upgrade sidewalk, pedestrian lighting, pedestrian furniture, landscaping/trees, and bicycle infrastructure
St. Helena	Main Street Corridor Improvements Phase II: Install traffic calming devices (e.g. curb extensions), pedestrian lighting, pedestrian furniture, landscaping, bicycle infrastructure, and traffic signal synchronization modifications
St. Helena	Downtown Corridor Improvements: Install traffic calming devices (e.g. curb extensions), pedestrian lighting, pedestrian furniture, landscaping, bicycle infrastructure, and traffic signal synchronization
St. Helena	Sulphur Creek Class I Bikeway: Construct Class I bikeway
St. Helena	Spring Mountain Road Class I Bikeway: Construct Class I bikeway
St. Helena	Napa River Class I Bikeway: Construct Class I bikeway (River Trail)
St. Helena	Highway 29/Main Street and Deer Park Road Intersection Improvements: Construct intersection improvements to safety and circulation on Highway 29
St. Helena	Highway 29/Main Street and Pratt Avenue Intersection Improvements: Construct intersection improvements to safety and circulation on Highway 29
Yountville	Washington Park – Parks and Path ADA Improvements: Adding sidewalks to the Washington Park Subdivision
Yountville	Yountville Crossroads Bicycle Path & Sidewalk: Add a full-lane bicycle path along Yountville Crossroads

Napa Valley Community-Based Transportation Plan (2020; update in progress)

The 2020 Napa Valley Community-Based Transportation Plan (CBTP) identifies 11 priority infrastructure projects, including crossing improvements, new or improved sidewalks and bikeways, and transit service enhancements and stop improvements. These projects differ from those listed in Table 3, above, but are not inconsistent. Bikeway and pedestrian recommendations in the CBTP do not include details, such as recommended bicycle facility class or crossing improvement type. There are two projects in the City of Napa that are not included in any other planning efforts, and one project in St. Helena that is not included in any other planning efforts. The table below outlines active transportation-related improvements and notes their inclusion and consistency with other regional or local plans.

Table 4: Community-Based Transportation Plan Priority Projects

Project	Sponsor	Included In Regional or Local Plan	Regional Plan	Local Plan	Consistent With Local Plans
Bike facility from Jefferson Street to Soscol Avenue	City of Napa	Yes	Napa Countywide Regional Bicycle Plan (2019)	City of Napa Bicycle Plan (2021)	✓
Enhanced pedestrian crossing/RRFB on Trancas Street at Valley Verde Drive	City of Napa	Yes	NVTA Vision Zero Plan	-	✓
Enhanced pedestrian crossing/RRFB on Jefferson Street and Rubicon Street	City of Napa	No	-	-	-
Enhanced pedestrian crossing at Jefferson Street and El Capitan Way	City of Napa	No	-	-	-
Bus shelter/benches at high usage stops	NVTA	Yes	NVTA Countywide Transportation Plan (2021)	-	✓
Hunt Avenue sidewalks/pedestrian improvements*	City of St. Helena	Yes	Napa Countywide Regional Pedestrian Plan (2016)	St. Helena General Plan Update (2040)	✓
Pope Avenue sidewalks/pedestrian and lighting improvements	City of St. Helena	No	-	-	-

Caltrans District 4 Bicycle Plan (2018)

While the Caltrans District 4 Bicycle Plan is a regional plan developed by a state agency, its recommendations are jurisdiction specific. The top-tier projects described in the table below were prioritized based on demand and need from a list of 40 bicycle projects within Napa County and are not duplicative of the projects from other plans.

Table 5: Caltrans District 4 Bike Plan - Napa County Top Tier Projects

Project Number	Jurisdiction	Location	Improvement
Nap-121-C03	Unincorporated	Hwy 121 (Duhig Rd to Old Sonoma Rd)	Corridor Improvement- Class IV
Nap-128-C05	St Helena	Hwy 128 (Sage Canyon Rd to Conn Creek Rd)	Corridor Improvement- Class IV
Nap-29-C07	American Canyon	Hwy 29 (American Canyon Rd to Jameson Canyon Rd/Hwy 12)	Corridor Improvement- Class I
Nap-29-X11	Napa	Hwy 29 (Imola Ave W)	Minor interchange improvements (signage and striping)- Class I

Bikeway Project Discrepancies

The tables in this section compare bikeway projects in local plans (including ATPs and General Plans) with the jurisdiction-specific plans included in the NVTA Countywide Bicycle Master Plan.

Table 6: Calistoga ATP and NVTA Countywide Bicycle Master Plan Comparison

**Denotes inconsistency*

Bikeways	Calistoga ATP			NVTA Countywide Plan		
	Class	Begins	Ends	Class	Begins	Ends
Southern Crossing	I	Foothill Boulevard*	Washington Street	I	School Street*	Washington Street
Lake Street	II	Silverado Trail	Washington Street*	II	Silverado Trail	Grant Street*
Lake Street	II*	Silverado Trail*	Washington Street*	III*	N. Oak Street*	Lake Street*
Fair Way	III* (Route)	N. Oak Street*	Lincoln Avenue	III* (Boulevard)	Lake Street*	Lincoln Avenue
Grant Street	III (Route)	N. Oak Street*	Wappo Avenue*	III (Route)	Greenwood Avenue*	Mora Street*
Grant Street	III (Boulevard)	N. Oak Street*	Wappo Avenue*	III (Boulevard)	Mora Avenue*	N. Oak Street*
Greenwood Avenue	III (Route)	Napa River	Grant Street*	III (Route)	Napa River	SR 29*
Lincoln Avenue	III (Route)*	Foothill Boulevard	Fair Way	II*	Foothill Boulevard	Fair Way
Money Lane	III (Route)*	Lake Street	Michael Way*	III (Boulevard)*	Lake Street	Mora Avenue*
Money Lane Extension	III (Route)*	Michael Way*	Greenwood Avenue*	III (Boulevard)*	Lake Street*	Mora Avenue*

Table 7: St. Helena General Plan and NVTA Countywide Bike Plan Comparison

**Denotes inconsistency*

Bikeways	St. Helena General Plan			NVTA Countywide Plan		
	Class	Begins	Ends	Class	Begins	Ends
Crane Park Path	I	Grayson Avenue	La Quinta Way*	I	Grayson Avenue	Kennedy Court*
Sulphur Springs Trail	I	Sulphur Springs Ave*	Silverado Trail*	I	Valley View St*	Main St/SR 29*
Mariposa Lane	I (Vine Trail)*	Pope St	McCorkle Ave	III (Boulevard)*	Pope St	McCorkle Ave
Starr Ave Path	I (Vine Trail)*	Adams St	Pope St*	I*	Adams St	Mills Ln*
Starr Ave Path	II*	Pope St*	Mills Ln	I*	Adams St*	Mills Ln
Railroad Ave	I (Vine Trail)*	Fulton Ln	Adams St*	III (Boulevard)*	Fulton Ln	Hunt Ave*
Railroad Ave	III (Route)*	Adams St*	Hunt Ave	III (Boulevard)*	Fulton Ln*	Hunt Ave
Pope St	II*	Starr Ave	Silverado Trail	I*	Starr Ave	Silverado Trail
Main/SR 29	II	Mitchell Dr*	Mills Ln*	II	Charter Oak Rd*	Chaix Ln*
Hunt Ave	II*	Main St/SR 29*	Starr Ave	III (Boulevard)*	Church St*	Starr Ave
College Ave	II*	Pope St	McCorkle Ave	III (Boulevard)*	Pope St	McCorkle Ave
Valley View St	II*	Spring St	Birch St	III (Boulevard)*	Spring St	Birch St
Spring St	II*	Sulphur Springs Ave	Sylvaner Ave	III (Route)*	Sulphur Springs Ave	Sylvaner Ave
Oak Ave	II*	Charter Oak Ave	Grayson Ave	I (Vine Trail)*	Charter Oak Ave	Grayson Ave
McCorkle Ave	II*	Vine Trail*	College Ave	III (Boulevard)*	Allision Ave*	College Ave

Pratt Ave	III (Route)*	Main St/SR 29	Napa River Trail	I (Vine Trail)*	Main St/SR 29	Napa River Trail
Church St	III (Route)*	Hunt Ave	Pope St	III (Boulevard)*	Hunt Ave	Pope St
Edwards St	III (Route)*	Hunt Ave	Pope St	III (Boulevard)*	Hunt Ave	Pope St
Main St	III (Route)	Pratt Ave*	Mitchell Dr*	III (Route)	Deer Park Rd*	Fulton Ln*
Main St	III (Route)	Pratt Ave*	Mitchell Dr*	III (Route)	Madrona Ave*	Charter Oak Ave*

Program and Policy Inventory and Consistency Screen

In addition to the infrastructure projects included above, programs and policies were also inventoried and reviewed for consistency. Generally, programs and policies were consistent in multiple plans within a single jurisdiction. More variation was found in programs and policies across jurisdictions (i.e., policies differed between jurisdictions within a single plan).

Key Findings

Inconsistencies Across Jurisdictions

- In the Countywide Pedestrian Master Plan (2016), most programs and policies are consistent across jurisdictions with a few exceptions:
  - Yountville does not include a school crossing guard training or construction coordination policy
  - American Canyon is the only jurisdiction that includes an ADA compliance tracking program
  - Unincorporated Napa County is the only jurisdiction that includes a pedestrian guidelines policy
- Inconsistencies across jurisdictions in the Napa Countywide Bicycle Master Plan (2019) include:
  - Napa and Unincorporated Napa County are the only two jurisdictions that do not include a Capital Improvement Project/Complete Streets Checklist program
  - Unincorporated Napa County is the only jurisdiction that does not include a policy to retain a dedicated bicycle staff member
  - Calistoga and Napa are the only two jurisdictions to not include programs for law enforcement activities
  - St. Helena is the only jurisdiction that does not include an existing bikeways policy
  - Napa is the only jurisdiction that does not include a Vision Zero policy
  - American Canyon and Unincorporated Napa County are the only jurisdictions that include bicycle parking/additional facilities policies
  - Unincorporated Napa County is the only jurisdiction to include a County Roads and Streets Standards policy
- Napa's LRSP is the only safety plan to mention emergency medical services policies
- The American Canyon General Plan includes a "universal design" policy, while other jurisdictional plans include policies related to required ADA standards
- St. Helena's General Plan is the only plan to include a policy that mentions "smart growth" and sustainable planning principles related to land use and growth management
- American Canyon's General Plan is the only plan to include a "context sensitive design" policy

Inconsistencies Within Jurisdictions

- Sidewalk policies for the Town of Yountville were inconsistent between Yountville's General Plan Mobility Chapter (2019) and the Napa Countywide Pedestrian Plan (2016).

The Appendix at the end of this document includes two comparative inventories of State versus Regional Programs and Policies, and Regional versus Local Programs and Policies.

Regional Plan Program and Policy Inventory

NVTA Vision Zero Plan (2023)

The NVTA Vision Zero Plan outlines strategies and supporting actions to reach zero traffic deaths. The table below outlines the programs and policies included in the Action Plan related to active transportation. Within this regional plan, policies and programs are consistent across the jurisdictions, however, when comparing local plans

from the Napa Countywide Bicycle Master Plan, Napa is the only local plan that does not contain a Vision Zero policy.

Table 8: NVTA Vision Zero Action Plan Programs and Policies

Number	Action	Policy
2E	Update roadway design standards and policies for implementation of safety-related projects	Create an internal training program for engineering and planning staff to stay up to date on best practices in Vision Zero, Complete Streets, and Design Standards.
5B	Prioritize disadvantaged communities and people who have fewer mobility choices	Develop a driver, bicyclist, and pedestrian safety campaign focused on those over the age of 60
7A	Educate all roadway users	Develop a Vision Zero educational campaign
8F	Educate all roadway users	Develop an educational campaign targeting specific behaviors of all roadway users identified by the emphasis areas along the HIN
10	Reduce speeds through policy and design	For member agencies that have not gone through the process in the last year, update traffic calming programs to prioritize the HIN

Advancing Mobility 2045 (2021)

The Advancing Mobility 2045 Plan has eight programmatic themes with program descriptions and project examples. The programs and themes related to active transportation are described in the table below. Overall, these themes are consistent with the programs proposed in the other local and regional plans reviewed.

Table 9: Advancing Mobility 2045 Programs

Program Theme	Description	Project Examples
Improve Pedestrian Safety	Improve pedestrian conditions to reduce traffic collisions and increase safety	▪ High visibility pedestrian crosswalks ▪ Pedestrian crossing warning signage ▪ Rectangular Rapid Flashing Beacons ▪ Leading Pedestrian Intervals
Improve Pedestrian Access to Schools and Transit	Improve, maintain, and repair pedestrian facilities around schools and transit stops to enable and encourage pedestrian mobility, walkability, and active forms of transportation	▪ Repaired and improved sidewalks around schools and transit stops ▪ Completed sidewalk paths and links bridging network gaps around schools and transit stops ▪ High-visibility pedestrian crosswalks around schools and transit stops ▪ Pedestrian crossing warning signage around schools and transit stops ▪ Rectangular Rapid Flashing Beacons around schools and transit stops ▪ New sidewalks around schools and transit stops
Increase Transit Amenities	Maintain existing and add new transit-related amenities, like benches, shelters, restrooms, and pedestrian and bicycle facilities, to enable and encourage a significant Napa County transit mode shift	▪ New bus stop benches and shelters ▪ Secure bicycle parking
Increase Transit ADA Access	Increase transit service enhancements that improve service for persons with disabilities	▪ New ADA curb ramps ▪ New ADA transit amenities ▪ High visibility pedestrian crosswalks ▪ Rectangular Rapid Flashing Beacon

SR 29 Comprehensive Multimodal Corridor Plan (2020)

Policies in the SR 29 CMCP were consistent with all policies established by the other agency plans.

Napa Valley Community-Based Transportation Plan (2020) (Plan Update in Progress)

The Community-Based Transportation Plans (CBTP) recommends programmatic themes that can be applied to different project types throughout the plan's various Communities of Concern (COCs). The table below describes the themes and actions relevant to active transportation and are consistent with other reviewed regional plans.

Table 10: CBTP Recommended Programmatic Themes

Theme	Action
Improve Pedestrian Safety	Improve pedestrian conditions to reduce traffic collisions and increase safety
Improve Pedestrian Access to Schools and Transit	Improve, maintain, and repair pedestrian facilities around schools and transit stops to enable and encourage pedestrian mobility/walkability/active forms of transportation
Expand Mobility Options for Low-income, Senior, and Disabled Residents	Introduce enhancements that improve service for residents of Communities of Concern (COCs)
Increase Transit Amenities	Maintain existing and add transit-related amenities like benches, shelters, restrooms, pedestrian and bicycle facilities to enable and encourage a significant Napa County transit mode shift
Increase transit ADA access	Enhance transit service to improve service for persons with disabilities

Napa Countywide Bicycle Master Plan (2019)

The Napa Countywide Bicycle Master Plan includes programs and policies at both the countywide level and the local jurisdictional level. The programs and policies for each local jurisdiction are summarized in the table below and have been compared for consistency with other regional and jurisdictional plans. In the Countywide plan, programs and policies are generally consistent across the jurisdictional plans.

Inconsistencies across jurisdictions include the following:

- Napa and Unincorporated Napa County are the only two jurisdictions that do not include a Capital Improvement Project/Complete Streets Checklist program.
- Unincorporated Napa County is the only jurisdiction that does not include a policy to retain a dedicated bicycle staff member.
- Calistoga and Napa are the only two jurisdictions to not include programs for law enforcement activities
- St. Helena is the only jurisdiction that does not include an existing bikeways policy.
- Napa is the only jurisdiction in this plan that does not include a Vision Zero policy (it is included in Napa's General Plan instead.)
- American Canyon and Unincorporated Napa County are the only jurisdictions that include bicycle parking/additional facilities policies.

- Unincorporated Napa County is the only jurisdiction to include a County Roads and Streets Standards policy.

The City of Napa's programs and policies follow a different, more detailed and specific format in the plan than the other five jurisdictions; Napa's programs and policies have been adapted to match the format of the other five jurisdiction's plans in the table below, but there are additional programs and policies included in the Napa plan that are not necessarily included in the table below.

Table 11: Napa Countywide Bicycle Master Plan (2019) Support Programs and Policies

Program or Policy	Recommendation	Calistoga	St. Helena	Yountville	Napa	American Canyon	Unincorporated County
Capital Improvement Projects/ Complete Streets Checklist	Create checklist for capital projects on and adjacent to streets (repaving, restriping, reconstruction) that ensures City staff review the infrastructure recommendations of this Plan at the time of project development.	✓	✓	✓		✓	
Dedicated Bicycle Staff	Identify a staff member who is responsible for bicycle planning and the implementation of bicycle facilities and dedicate a percentage of their time to these efforts.	✓	✓	✓	✓	✓	
Law Enforcement Activities	▪ Provide bicycle-specific training for law enforcement personnel and establish a community policing agreement which engages members of the community, including agency engineering and planning staff, local elected officials, non-profit community advocates, schools, and others, to ensure the coordination of enforcement goals and strategies, and to develop a balanced approach to address traffic safety issues that includes education, engineering, and enforcement. ▪ Establish a bicycle diversion program for bicycle traffic offenders. ▪ Provide focused law enforcement operations at high collision locations.		✓	✓		✓	✓
Existing Bikeways Policy	Develop a policy which specifies that existing bikeways should not be removed, unless an improved bikeway is being installed.	✓		✓	✓	✓	✓
Vision Zero Policy	Adopt a countywide Vision Zero policy and develop an action plan for implementing Vision Zero. Identify opportunities for funding for Vision Zero efforts, such as developing a Countywide database to inventory collision	✓	✓	✓		✓	✓

	data and environmental factors, undertaking a comprehensive analysis to understand collision patterns, and facilitating an outreach process to identify community safety priorities and determine where to focus safety investments and improvements.						
Wayfinding Program	Develop a regional wayfinding system that has a similar brand throughout Napa Valley and helps bicyclists navigate the transportation network with confidence and provide direction to their destinations; create a community identity; and build a sense of place. The Town of Yountville could adjust the brand to reflect local character while still maintaining signage elements for consistency including placement, frequency of signs, and content.	✓	✓	✓	✓	✓	✓
Bikeway Maintenance	Prioritize maintenance of roadways and removal of debris where bicycle facilities are present.	✓	✓	✓		✓	✓
Bicycle Parking and additional facilities	Consider amending County code to define standards for long-term bicycle parking. Encourage employers to install showers and locker facilities for bicycle commuters					✓	✓
County Road and Street Standards	Revise the current standards to reference this Plan and the 2016 Pedestrian Plan with regard to implementation of bicycle and pedestrian facilities in addition to the discretion of the County Engineer.						✓

Programs and policies to be implemented at the countywide level include those from past planning efforts. The table below describes new countywide programs and policies in the 2019 Bicycle Plan, all of which have been compared and verified for consistency with other regional planning documents.

Table 12: Napa Countywide Bicycle Master Plan (2019) Support Policies and Programs

Policy/Program	Description
Vision Zero Policy	Adopt a countywide Vision Zero policy and develop an action plan for implementing Vision Zero. Identify opportunities for funding for Vision Zero efforts, such as developing a countywide database to inventory collision data and environmental factors, undertaking a comprehensive analysis to understand collision patterns, and facilitating an outreach process to identify community safety priorities and determine where to focus safety investments and improvements.
Existing Bikeways Policy	Develop a policy which specifies that existing bikeways should not be removed, unless an improved bikeway is being installed.
Bicycle Voucher Program (Bucks for Bikes)	Provides up to $100 voucher for new bicycle purchased for commuting.

Bike Share Program	Pursue opportunities for creating a Bike Share program designed to encourage making short distance trips by bicycle and to provide a transportation alternative for zero-vehicle households.
Wayfinding	Create and install countywide wayfinding to help bicyclists navigate the roadway network and find their way past barriers, such as complex intersections or high-stress streets. Coordinate wayfinding across jurisdictions.
Bicycle Friendly Community Status	Create a coordinated countywide effort to apply for Bicycle Friendly Community status from the League of American Bicyclists. (The City of Calistoga became a Silver Bicycle Friendly Community in 2013, and the City of Napa became a Bronze Bicycle Friendly Community in 2016.)
Bicycle Count Program	Develop bicycle count strategies that are implementable in the short-term and assist NVTA as it measures progress towards achieving the goal of 10 percent mode shift by 2035. See Appendix D for bicycle count program recommendations.
Data Sharing Program	Maintain a comprehensive database of bikeways throughout Napa County and, to track progress, develop a process for jurisdictions to share updated project implementation/data with NVTA once projects are completed.
Dedicated Bicycle Staff	Identify a staff member at NVTA who is responsible for bicycle planning and the implementation of bicycle facilities and dedicate a percentage of their time to these efforts.
Dedicated Safe Routes to School Funding	Pursue coordination of sources to ensure consistent funding for Safe Routes to School programming throughout the County's school districts.
Bikeway Maintenance	Prioritize maintenance of roadways and removal of debris where bicycle facilities are present.

Napa County Safe Routes to Schools Program Published Reports (2018-2022)

For the Napa County Safe Routes to Schools (SRTS) Program, programmatic recommendations were determined using walk audit results, infrastructure assessments, existing plans, and local stakeholder and community input. Recommendations included in the reports address safety, close network gaps and reduce barriers, calm traffic, and increase local support for programs and policies that support safe routes to schools.

The published reports include programs and policies to support Safe Routes to Schools programs countywide. The following bullets provide a thematic summary of the types of programs and policies included across the 31 reports:

- Student-led encouragement events and education campaigns
- Ongoing and annual/countywide encouragement events
- Group encouragement events
- Circulation plan/policy
- Bicycle and bicycle safety education programming
- Pedestrian safety education programming

- Bike maintenance education programming
- Parent involvement programs
- Parent Champion program
- Carpool program
- Schol street pilot program
- Congestion management programs and policies

Napa Countywide Pedestrian Master Plan (2016)

The Napa Countywide Pedestrian Master Plan (CPMP) includes programs and policies at both the countywide and local jurisdictional level. Countywide programs include Safe Routes to School efforts, countywide pedestrian counts, funding Vision Zero efforts, and enacting Complete Streets policies. The pedestrian programs and policies for each local jurisdiction are summarized in the table below and compared for consistency with other regional and jurisdictional plans. Overall, programs and policies are generally consistent across the jurisdictional plans:

- Calistoga, St. Helena, and Yountville have consistent programs and policies with each other, except:
  - » Yountville does not include a school crossing guard training nor construction coordination policy
- Napa, American Canyon, and Unincorporated Napa County have consistent programs and policies with each other, except:
  - » American Canyon is the only jurisdiction that includes an ADA compliance tracking program
  - » Unincorporated Napa County is the only jurisdiction with a pedestrian guidelines policy

Table 13: Napa Countywide Pedestrian Master Plan (2016) Programs and Policies

Theme	Recommended Program or Policy	Calistoga	St. Helena	Yountville	Napa	American Canyon	Unincorporated County
Education and Encouragement	**Safe Routes to Schools Coordination:** Coordinate with the Napa County Office of Education to continue SRTS programs in the city and determine feasibility of implementing SRTS recommendations.	✓	✓	✓	✓	✓	✓
Safety and Enforcement	**Law Enforcement for Pedestrian Safety:** Coordinate with NVTA to provide resources to officers on pedestrian safety principles / best practices and education outreach efforts to align with countywide collision reduction goals. Consider designating traffic safety officers who conduct pedestrian-related enforcement activities, such as monitoring school circulation activity during pick up and drop off periods. Determine feasibility of enforcement recommendations in the *Countywide Implementation* chapter.	✓	✓	✓	✓	✓	✓

	NVTA Safety Campaign: Coordinate with NVTA on the media safety campaign that NVTA is pursuing, as an opportunity for education by distributing pedestrian safety pamphlets in-lieu of, or in addition to, citations.	✓	✓	✓	✓	✓	✓
	Elementary School Crossing Guard Training: Review crossing guard training and staffing to improve operations and reduce confusion.	✓	✓				
	Construction Coordination: Coordinate with stakeholders during traffic control plan development near key pedestrian nodes such as schools, parks and transit stops to ensure appropriate considerations for pedestrian circulation	✓	✓				
Maintenance	**Repair of Sidewalks, Crosswalks, and Curb Ramps:** Continue to regularly improve and repair uneven sidewalk, broken asphalt in crosswalks, and install new curb ramps as part of the citywide Sidewalk Maintenance Program. Consider adding a page to the city's website to allow residents and visitors to more easily report and track hazards in the public right-of-way and to ensure all necessary sidewalk repairs are included in the city's Capital Improvement Program (CIP). This could include the reporting of maintenance needs for pedestrian-related pavement markings and traffic control devices.	✓	✓	✓	✓	✓	✓
	Overgrown Vegetation on Sidewalks and Planting Strips: Continue to ensure that landscapes at maturity do not interfere with safe sight distances for bicycle, pedestrian, or vehicular traffic; do not conflict with overhead lights, traffic controls, traffic signage, utility lines or poles, or walkway lights; and do not block bicycle or pedestrian ways. Require adjacent property owners to maintain landscaped areas with live and healthy plant materials, replacing plant materials when necessary to maintain full function and aesthetics; to water, weed, prune, fertilize and keep sidewalks and planting strips litter free.	✓	✓	✓	✓	✓	✓
	Caltrans Coordination: Coordinate with Caltrans for sidewalk maintenance, crosswalk enhancements and curb ramp upgrades	✓	✓	✓			
Engineering and Design Standards	**Crosswalk Guidelines:** Implement Crosswalk Guidelines, included in Appendix D, to enable the City to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. Reference the guidelines when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.	✓	✓	✓	✓	✓	✓

	ADA Compliance Tracking Program: Determine feasibility of tracking ADA improvements and updates using practices recommended as part of the ADA Transition Plan update, to be coordinated by the ADA Coordinator. Maintain and update GIS database of ADA curb ramps and sidewalk in the public right-of way to align with priority schedule in the updated ADA Transition Plan.					✓	
	Pedestrian Guidelines: Adopt pedestrian design guidelines in this plan, Appendix UNC-F, especially those for rural contexts including distinctions for rural remote roadways and those near pedestrian generators.						✓
Placemaking and Complete Streets	**Parking Plan:** Develop parking plan to identify shared parking opportunities, consider parklets and mid-block crosswalks, and identify opportunities for bike parking to include bike corrals, which are an on-street bicycle parking facility that can accommodate up to 16 bicycles parked on racks in the same area as a single vehicle parking space.	✓	✓	✓			
	Development/Site Plan Review Checklist: Create checklist for development review to ensure site plans include considerations for pedestrian access, safety and sidewalk activation (including considerations for building frontage location, pocket parks, small plazas, or small retail/commercial kiosks and evaluation of pedestrian circulation in parking lots). Include items from MTC's Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy.	✓	✓	✓	✓	✓	✓
Funding and Implementation	Develop focus area list to identify additional projects through use of PedINDEX map in this plan and public outreach to unincorporated communities. Prioritize ADA improvements and enhancements near schools and transit.						✓

The CPMP also includes overarching Countywide Plan goals and corresponding policies which are summarized in the table below. These countywide goals and policies are consistent with the local plan policies.

Table 14: Napa Countywide Pedestrian Master Plan (2016) Plan Goals and Policies

Goal	Policies
Provide a connected network of pedestrian sidewalks, trails, and pathways that are safe and accessible to a variety of users and that foster community interactions	**1A:** Protect the character and context of the County and its jurisdictions **1B:** Prioritize safe routes to schools, safe routes to transit, and safe routes for seniors within the County **1C:** Acknowledge the central role that the Vine Trail plays in active transportation infrastructure and prioritize connections between the trail and key destinations **1D:** Work to reduce the rate of pedestrian collisions **1E:** Connect key pedestrian desire lines via accessible sidewalks and marked crosswalks, focusing on downtown areas, transit stops, schools, senior housing and destinations, and tourist destinations and lodging
Encourage a multimodal transportation system	**2A:** Adhere to the current design standards in this plan as well as local design standards and other national and state manuals when designing new or retrofitted streets and communities **2B:** Investigate the use of performance measures such as multi-modal level of service or built environment factors to facilitate complete streets implementation **2C:** Prioritize infrastructure projects that will increase the walk mode share, while also taking advantage of all available funding opportunities to construct pedestrian infrastructure, including private development with an appropriate nexus **2D:** Investigate creative parking measures such as shared parking, parking maximums, and strategic parking locations to encourage a “park once” environment in commercial districts **2E:** Review new development proposals to ensure pedestrian access and circulation is maintained or improved, including during construction phases
Obtain funding for pedestrian projects	**3A:** Continue to allocate Capital Improvement Plan (CIP) funding to pedestrian projects **3B:** Pursue grant funding related to pedestrian projects **3C:** Identify new funding sources and partnership opportunities, such as those focusing on public health and sustainability
Encourage and educate residents about walking and enforce safe interactions between pedestrians and motorists	**4A:** Increase public awareness of pedestrian facilities, amenities, and safety **4B:** Pursue recognition such as Walk-Friendly Community status **4C:** Implement ongoing pedestrian safety enforcement programs and campaigns **4D:** Partner with local health agencies to encourage more activity among youth through the built environment to target childhood obesity **4E:** Collaborate with local businesses to enhance wayfinding and streetscape amenities
Complete Streets	**Development Review Checklist:** Create checklist for development review to ensure considerations for pedestrian access and safety, especially near bus stops, schools, and through parking lots. Include items from MTC’s Routine Accommodation Checklist for projects in the public right-of-way to ensure routine application of the Complete Streets policy.
Funding and Implementation	**Implementation Plan:** Develop focus area list to identify projects beyond those recommended in this plan through use of PedINDEX map in this plan and public outreach to unincorporated communities. Prioritize ADA improvements and enhancements near schools and transit.

Local Plan Program and Policy Inventory

City of Calistoga

City of Calistoga General Plan (2014)

There is one policy from the City's General Plan Circulation Element related to active transportation, which is consistent with the City's other policies:

- Implement traffic calming measures, such as speed lumps, curb extensions, and/or chicanes to limit travel speeds between intersections and optimize safety for all roadway users.

City of Calistoga Active Transportation Plan (2014)

Calistoga's Active Transportation Plan includes a variety of collaborative programs and actions that aim to achieve the vision of increased and safe bicycling in Calistoga and throughout Napa County. The plan's programs and actions are important to help realize the plan's Vision, with an emphasis on implementing safety enhancements as soon resources become available. The bullets below describe the plan's programs and have been verified for consistency across other reviewed plans:

- Bicycle Network Maps
- Safety and Education Publications (such as the Safe Bicycling Guidelines)
- Street Skills Bicycle Safety Courses
- Bicycle Parking Program
- Focused/Targeted Enforcement
- Encouragement Activities/Events
- Bicycle Counts
- Maintenance and Monitoring
- Wayfinding and Signage
- Citywide Walking promotion
- Individual travel marketing
- Citywide Safety advertising

City of St. Helena

City of St. Helena General Plan (2019)

The table below lists policies from the General Plan's Circulation Element relevant to active transportation. These policies are consistent with other St. Helena policies. **This plan is the only plan across all Napa County jurisdictions to include a policy that mentions "smart growth" and sustainable planning principles related to land use and growth management.**

Table 15: St. Helena General Plan Policies

Policy	Description
CR1.1	Promote a connected street and bicycle and pedestrian network within the city to provide better internal automobile, bicycle, and pedestrian connections for residents.
CR1.2	Provide Complete Streets that balance the diverse needs of users of the public right-of-way, in accordance with the California Complete Streets Act of 2008.
CR1.3	Pursue appropriate funding for the development of a balanced transportation system.
CR1.4	Develop and use, in addition to intersection level-of-service standards, performance measures that consider all road users to determine transportation impacts of new development.
CR1.5	Avoid mitigation measures that negatively impact the walking and bicycling environment and encourage driving.
CR1.8	Reduce transportation-based GHG emissions from City-controlled sources by employing the following strategies: Complete the City's bicycle and pedestrian network, which will increase transportation choices in the city and reduce the demand for vehicle travel Maximize the overall efficiency of the transportation system, including managing the transportation network through a citywide transportation system management program; Encourage/provide incentives for employee carpools. Implement "smart growth" and sustainable planning principles as defined in the Land Use and Growth Management Element; Encourage jobs/housing match, as defined in the Housing Element; and Encourage/provide incentives for employee carpools.
CR1.9	Promote a walking and bicycling environment that is comfortable and convenient. Ensure that all St. Helena streets have no more than a single through-automobile lane in each direction, plus a single left-hand turning lane where appropriate, even if this requirement increases vehicle travel times. Allow exceptions if an extra lane would reduce the possibility of collisions.
CR2.1	Create a comprehensive bicycle and pedestrian network that enhances neighborhood connectivity.
CR2.2	Promote walking and bicycling as safe and convenient modes of transportation.
CR2.3	Ensure secure, accessible, and convenient bicycle parking facilities throughout St. Helena, including downtown, commercial areas, schools, and parks.
CR2.4	Preserve and enhance pedestrian connectivity and safety throughout St. Helena.
CR2.5	Improve the pedestrian experience through streetscape enhancements, focusing improvements where there is the greatest need, and by orienting development toward the street.
CR2.6	Encourage walking and bicycling trips to St. Helena schools.

CR3.1	Provide incentives and encourage existing major employers to develop and implement transportation demand management (TDM) programs to increase the number of people who bike, walk, and take transit to work and reduce peak-period trip generation. Coordinate as appropriate with NVTA to implement strategies including the following: ▪ Transit subsidies or reimbursement to residents and employees (often referred to as "commuter check" or "EcoPass"); ▪ Car-share, car-pooling, and neighborhood electric vehicle programs to reduce the need to have a car or second car; ▪ Integrated bicycle parking and support facilities, primarily to reduce trips within the city; ▪ Modified parking codes to manage the supply of parking that generates frequent turn-over and serves multiple users; and ▪ Marketing and information programs to encourage alternative transportation modes.
CR3.2	Support the implementation of NVTA goals to reduce/restrain growth of automobile vehicle miles traveled (VMT).
CR3.3	Shift travel from single-occupancy vehicles to other modes so that by 2040, 45 percent of work trips by St. Helena residents and workers are by carpool, transit, walking or bicycling (see Table 5.5 at the end of this section for 2040 commute mode split targets).
CR3.6	Support development of the bikeway and pedestrian networks to provide a convenient opportunity for at least 20 percent of commuters to get to work by walking or bicycling.
CR4.2	Ensure safety on residential neighborhood streets to promote walking and bicycling and preserve neighborhood livability.
CR4.3	Continue efforts to calm traffic and minimize traffic volumes and speeds in residential areas.
CR4.4	Strive to bring all pedestrian facilities into compliance with Americans with Disabilities Act (ADA) specifications.
CR4.5	Improve traffic safety and encourage walking and bicycling trips to St. Helena schools through a Safe Routes to School program.
CR6.1	Prioritize and implement improvements to the circulation system with an emphasis on bicycle and pedestrian improvements and expanded transit service.

Town of Yountville

Yountville General Plan (2019)

Most of the programs and policies included in the Yountville General Plan's Mobility Chapter are consistent with other regional and local plans. **However, the General Plan emphasizes maintaining the historic character of Yountville, outlining alternative sidewalk policies and restricting implementation of gutters, curbs and sidewalks in the Historic Old Town Residential Neighborhood. This is inconsistent with the Countywide Pedestrian Plan, which recommends filling in sidewalk gaps townwide.**

The table below describes policies and programs included in the Circulation Element relevant to active transportation and highlights inconsistencies.

Table 16: Town of Yountville General Plan Mobility Chapter Policies and Programs

Policy/Program	Description
MO-1.1	**Circulation Network.** Ensure that the Town's circulation network is a well-connected system of streets, roads, highways, sidewalks, and bicycle/ pedestrian paths that effectively accommodates vehicular and non-vehicular traffic in a manner that considers the context of surrounding land uses and the needs of all roadway users.
MO-1.4	**Circulation Network Impact Analysis.** When analyzing impacts to the circulation network created by new development or roadway improvements, consider the needs of all users including those with disabilities, ensuring that pedestrians, bicyclists, and transit riders are considered at an equal level to the needs of automobile drivers.
MO-1.6	**Safe Travel.** Maintain safe travel conditions for all modes of travel.
MO-2.1	**Planning for Transportation Improvements.** Consider all transportation improvements as opportunities to improve safety, access, and mobility for all roadway users.
MO-2.1b	**Roadway Improvements Provided by New Development**. Ensure that future development provides roadway improvements consistent with the recommendations for bicycle and pedestrian facility improvements included in related policies and actions.
MO-2.13	**Traffic Calming and Safety Enhancements.** Through the use of available Town funds or grants, apply techniques such as implementation of traffic calming, geometric modifications, increased enforcement, etc., to improve safety.
MO-2.1h	**Design for Complete Streets.** Consider modifications in the Town's circulation network, where appropriate and feasible, to serve all modes of transportation in a "Complete Streets" manner, including modifications such as the installation of sidewalks, signing, striping, sharrows, lane narrowing or other complete street features.
MO-2.2	**Viewpoint.** Retain the viewpoint of pedestrians and bicyclists as the primary perspective when identifying any traffic improvements.
MO-2.3	**Safe Intersections.** Any intersection to be modified should be designed to provide adequate and safe access for all users including pedestrians, bicyclists, and motorists of all ages and abilities, as well as ADA considerations.
MO-3.2	**Old Town Historic District.** Maintain the Old Town Historic residential neighborhood with minimal traffic improvements and without curb, gutter and sidewalks***.**
MO-4.3	**Street Grid**. Require streets in new developments be designed with a grid of streets with pedestrian and bicycle paths.
MO-6.1	**Pedestrian Network.** Establish and maintain a system of pedestrian facilities and crossing enhancements that are consistent with the Town's Bicycle Plan and Pedestrian Plan.

MO-6.2	**Washington Street Pedestrian Facilities.** Strive to maintain continuous pedestrian facilities along the Washington Street corridor and on the east side of Washington Street in the Old Town Historic District.
MO-6.3	**New Development.** Require development projects to construct sidewalks and walkways on and offsite in order to maintain consistency with the Town's Bicycle Plan and Pedestrian Plan, and as dictated by the location of transit stops and common pedestrian destinations.
MO-6.4	**Sidewalk Alternatives**. When it can be shown that construction of a sidewalk would be at odds with an existing neighborhood's aesthetic and the historic nature of the area, such as in the Old Town Historic district, alternatives such as an off-street path or wider paved shoulders may be considered*.
MO-6.5	**Gaps in Pedestrian Network.** With the exception of the Old Town Historic district, gaps in sidewalks and walkways should be identified and a plan to fill these gaps completed.
MO-6.8	**ADA Improvements.** Create an accessible circulation network that is consistent with guidelines established by the Americans with Disabilities Act (ADA), allowing mobility-impaired users such as the disabled and elderly to safely and effectively travel within the Town.
MO-6.10	**Pedestrian Crossings.** Enhance the safety of pedestrian crossings in the Town.
MO-6.10a	**Intersection Review***.* Review and evaluate existing policy and determine whether additional measures such as raised crosswalks, additional lighting, enhanced signage, or other measures or technology are appropriate at the more commonly crossed intersections of Town.
MO-6.10b	**Traffic Calming Review***.* Review and evaluate existing policy and determine if additional physical modifications such as raised crosswalks, curb extensions, medians, or other traffic calming devices are appropriate at streets with relatively higher traffic patterns.
MO-6.10c	**Pedestrian Route to the Veterans Home.** Review the pedestrian route between the Veterans Home property entry and downtown Yountville to determine if any enhancements such as sidewalks/walkways, higher visibility crosswalks, pedestrian warning signs at crosswalks, and traffic calming elements are needed to increase the safety for pedestrians.
MO-7.1	**Bicycle Plan.** Establish and maintain bicycle facilities that are consistent with the network depicted in the Town's Bicycle Plan.
MO-7.1a	**Funding.** Work with the NVTA to acquire funding to complete bicycle facilities.
MO-7.1b	**Bicycle Lanes and Routes.** Consider installing complete street features such as signing and striping to accommodate travel by bicycle.
MO-7.2	**Road Construction Projects.** Public road construction projects shall incorporate facilities identified in the Bicycle Plan to the greatest extent feasible.

MO-7.3	**Bicycle Parking.** Bicycle parking facilities such as bike racks, bike lockers, and secure bike corrals shall be provided at locations where there is a concentration of residents, visitors, students, or employees.
MO-7.4	**Connections with Residential Areas.** Provide pedestrian and bike connections which link residential areas with businesses and recreational facilities, including parks, schools, the US Post Office, Town Hall, Community Hall and the commercial core.
MO-7.4a	**Hopper Creek Pathway**. Complete the Hopper Creek path system in the areas with gaps and, where possible, explore the potential for widening the path to improve multi-modal opportunities.
MO-7.5	**Connections with Alleys.** Encourage pedestrian/bike connections where none currently exist, including alleys.
MO-8.3d	**Bicycle Transport.** Work with transit providers to ensure there are adequate facilities to transport bicycles.
MO-9.1	**Student Safety.** Prioritize bicycle and pedestrian safety for students travelling to and from school.
MO-9.1a	**Safe Routes to School Program.** Develop a Safe Routes to School Program and strive to improve infrastructure for parents and students choosing to walk and bike to school by promoting school faculty and parent participation, applying for Safe Routes to School grants, identifying the issues associated with unsafe bicycle and pedestrian facilities between neighborhoods and schools, and executing plans to improve those facilities.
MO-13.1	**Transportation Emissions.** Encourage community members to walk, bicycle, carpool, vanpool, and take transit to reduce greenhouse gas emissions.
MO-13.1c	**Public Education.** Educate residents and employees about the health and environmental benefits of walking and cycling and provide information in public places to assist in utilizing these modes of travel.
MO-13.3b	**Town Employee Commute.** Provide Town employees with incentives to use alternatives to single occupant auto commuting, such as transit subsidies, bicycle facilities, ridesharing services, flexible schedules, and telecommuting when practical. Provide incentives to commute in electric vehicles, such as free EV charging

City of Napa

City of Napa General Plan (2022)

The policies in the Napa General Plan largely align with the NVTA Countywide Bicycle and Pedestrian Plans. While both countywide plans and Napa's General Plan recommend a low stress, connected active transportation network, utilizing Complete Streets strategies, improving safety, and bicycle parking in Napa, Napa's Vision Zero policy is only included in the General Plan. Additionally, while the General Plan does mention developing a Safe Routes to School program in collaboration with the Napa Unified School District, the General Plan does not discuss education or encouragement tactics; these are, however, included in the Countywide Bicycle and Pedestrian Plans.

Table 17: Napa General Plan Transportation Element Policies

Number	Policy
TE 1-1	Maintain a roadway network that serves not just automobile operations, but also multimodal movement and adjacent land uses. Develop multi-modal level of service (LOS) objectives and performance targets with differing priorities depending on road types.
TE 1-2	Foster a more connected system of streets, pedestrian facilities, and bicycle facilities as new development and redevelopment is undertaken, or as opportunities are presented.
TE 1-3	Develop and maintain a low Level of Traffic Stress (LTS) connected bicycle network consistent with the adopted City of Napa Bicycle Plan.
TE 1-6	Support Complete Streets and planned roadway improvements through right-of-way dedication as new development and redevelopment projects are undertaken.
TE 2-1	Work towards safer streets to reduce and eventually eliminate fatal and severe injury collisions among vehicles, pedestrians, and bicyclists by adopting a Local Roadway Safety Plan and Vision Zero Plan.
TE 2-2	Evaluate methods and undertake transportation facility improvements to promote biking, walking, and safer street crossings. Establish a target date for buildout of currently planned active transportation network improvements.
TE 2-3	Apply traffic calming principles where appropriate with consideration of functional classification, emergency access, and vehicular traffic volumes to support livable and complete streets. Conduct an update of the City of Napa Traffic Calming Guidelines.
TE 2-4	As part of streetscape design, incorporate features that enhance safety for all users and establish effective mode transitions, where appropriate. Examples of these features include bus pullouts and shelters, street lighting, enhanced crossing features such as rectangular rapid flashing beacons, high-visibility crosswalk striping, curb extensions, and pedestrian refuge islands, and curbside management features such as pickup/dropoff locations for shared ride/transit network companies and spaces for delivery vehicles to park safely for short durations.
TE 2-5	Study and prepare designs for the Study Corridors to evaluate future improvement for all modes in coordination with existing bicycle, pedestrian, and transportation plans. Coordinate with other agencies (e.g., NVTA, Caltrans, County of Napa, etc.) as needed for study development.
TE 2-6	Establish and maintain a system of pedestrian facilities and crossing enhancements that are consistent with the Town's Bicycle Plan and Pedestrian Plan.
TE 3-1	Support strategies to further enhance the pedestrian and cyclist experience in Downtown Napa.
TE 3-2	Collaborate with the Napa Valley Unified School District (NVUSD), and public and nonprofit partners in creating and Implementing a Safe Routes to Schools plans and securing dedicated funding to provide safe and equitable access for students to local schools.
TE 3-3	Promote a connected pedestrian and bicycle network that provides safe and direct access between destinations, such as from existing residential areas, schools and Napa Valley College,

	shopping, employment centers, and connections to regional trail systems, such as the Napa River Trail, the Vine Trail, and the Bay Trail.
TE 3-4	Promote increased pedestrian and bicycle travel citywide.
TE 3-5	Improve connections to existing pedestrian and bicycle facilities from existing neighborhoods.
TE 3-6	Follow the current, adopted City of Napa Bicycle Plan and work to implement the bicycle facilities
TE 3-7	Implement bicycle and pedestrian improvements during proposed development review in accordance with the City of Napa Bicycle Plan and City of Napa Pedestrian Plan where feasible and appropriate.
TE 4-1	Encourage and educate residents and visitors to take alternative modes of transportation within the City Limits by providing transit stops that promote a fun, clean, safe, and accessible transit experience.
TE 10-3	Work with NVTA to promote sustainable transportation choices by supporting more efficient and accessible mass transit services to BART and SMART Train, the Vallejo Ferry, San Francisco, and Oakland, with easy bicycle service on all connections.
TE 10-4	Continue to support and implement the use of alternative transportation modes to reduce car trips, such as bikeshare, electric bikes, and electric scooters, by providing proper infrastructure such as designated parking areas.

City of Napa Local Roadway Safety Plan (2022)

The City of Napa's LRSP identifies programs and policies to increase safety in Napa. Education and enforcement programs and policies are consistent with the Countywide Bicycle and Pedestrian plans, however, as mentioned above, Napa's General Plan does not include specific education or enforcement related programs or policies. Additionally, Napa's LRSP is the first plan to mention emergency medical services (EMS) policies.

Table 18: City of Napa LRSP Programs and Policies

Theme	Program or Policy
Education	Conduct public information and education campaign for intersection safety laws regarding traffic signals, stop signs, and turning left or right. Partner with Safe Routes to School to conduct bicycle and pedestrian safety programs in Napa's schools.
Enforcement	Install targeted enforcement at high-injury intersections to monitor right-of-way violations, speed limit laws and other violations that occur at intersections. Continue to place a high priority on enforcement of motorist and pedestrian violations that most frequently cause injuries and fatalities among pedestrians.
Emergency Medical Services	Install emergency vehicle pre-emption systems Improve resource of deployment for emergency responses to collision sites. Ensure emergency routes are clear and well defined

City of American Canyon

City of American Canyon 2040 General Plan (Public Review Draft September 2024)

The policies recommended by the American Canyon General Plan align with the goals of the NVTA Countywide Bicycle and Pedestrian Plans that preceded it. However, while other jurisdictional plans mention and include policies related to ADA accessibility and meeting required ADA standards, the American Canyon General Plan includes a "universal design" policy and "context sensitive design" policy. The Mobility Element's policies and programs related to active transportation are in the table below.

Table 19: City of American Canyon General Plan Mobility Element Policies

Number	Description
	Policies
MOB-1.1	**Complete Streets**. Maintain and update street standards that serve not just automobile operations, but also multimodal movement and adjacent land uses, including pedestrians, motorists, bicyclists, and transit riders of all ages and abilities, in a form that is compatible with and complementary to adjacent land uses, and promotes connectivity between uses and areas.
MOB-1.2	**Complete Street Standards.** Review current arterial, collector, and local street standards and update as necessary to conform to best practice classification standards and NACTO complete streets guidelines.
MOB-1.4	**Development Review.** Evaluate new development to ensure that the safety, comfort, and convenience of pedestrians, bicyclists and transit users are given equal level of consideration to motor vehicle operators.
MOB-1.5	**Sidewalks.** Require sidewalks on all arterial and collector streets. Where feasible, separate sidewalks from streets on arterials and collectors with landscaping including a tree canopy to create shade.
MOB-1.6	**Transportation Facility Construction and Modification.** When constructing or modifying transportation facilities, strive to provide for the movement of vehicles, commercial trucks, alternative and low energy vehicles, transit, bicyclists, and pedestrians appropriate for the road classification and adjacent land use.
MOB-1.7	**Promote Walking and Bicycling**. Promote walking and bicycling for transportation, recreation, and improvement of public health.
MOB-1.9	**SR 29 Mobility.** Work with regional partners, including Caltrans, NVTA, and other agencies to explore a Complete Streets approach that will expand the travel capacity of SR 29.
MOB-1.11	**Reduce the Need to Drive.** Implement land use policies designed to create a pattern of activity that makes it easy to shop, play, visit friends, and conduct personal business without driving.
MOB-1.12	**Neighborhood Context.** Support safe, complete, and well-connected neighborhood street, bicycle, and pedestrian access and connections that balance circulation needs with the neighborhood context.

MOB-1.17	**Reduce Vehicle Miles Traveled**. Through layout of land uses, improved alternate travel modes, and provision of more direct routes, strive to reduce the total vehicle miles traveled by city and non-residents traveling to American Canyon to work or shop.
MOB-1.20	**Bicycle Plan Funding.** Include funding for the City' s Bicycle Plan updates and bikeway improvements consistent with the Bicycle Plan in the City' s transportation financing program and TIF, recognizing the multi- modal travel needs of the City.
MOB-1.21	**Address Mobility Needs**. Recognize and meet the mobility needs of persons using wheelchairs and those with other mobility limitations.
MOB-1.22	Collaborate with the Napa Valley Unified School District (NVUSD), and public and nonprofit partners in creating and Implementing a Safe Routes to Schools plans and securing dedicated funding to provide safe and equitable access for students to local schools.
MOB-1.23	**Pedestrian Connections to Employment Destinations.** Encourage the development of a network of continuous walkways within new commercial, town center, public, and industrial uses to improve workers' ability to walk safely around, to, and from their workplaces. Where possible, route pedestrians to grade separated crossings over State Route 29.
MOB-1.24	**Bicycle Facilities.** Bicycle facilities shall be provided to complete a continuous bikeway system, consistent with state standards, as shown on the Bikeway Plan Map. In cases where existing right of way constraints limit development of Class II or Class IV facilities, Class III signage and demarcation may be permitted at the discretion of the City Engineer. Deviations from these standards and from the routing shown on the diagram shall be permitted with the approval of the City Engineer.
MOB-1.25	**Street Trees.** Ensure that street tree plans consider shade and comfort for pedestrians and bicyclists and traffic calming benefits.
MOB-1.26	**Universal Design.** Provide pedestrian facilities that are accessible to persons with disabilities and ensure that roadway improvement projects address accessibility by using universal design concepts such as bus pullouts and shelters, street lighting, and curbside management features such as pickup/drop- off locations for shared ride/ transit network companies and spaces for delivery vehicles to park safely for short durations.
MOB-2.1	**Vision Zero.** Strive for the elimination of all traffic fatalities and severe injuries while increasing safe, healthy, and equitable mobility for all.
MOB-2.2	**Context Sensitive Design.** Improve multimodal transportation safety by expanding the City’ s non- motorized transportation infrastructure using context sensitive design.
MOB-2.3	**Bicycle Safety.** Increase the safety of those traveling by bicycle by sweeping debris from and repairing bicycle paths and lanes.
MOB-2.4	**Improved Bikeway Visibility.** Use visual cues, such as brightly colored paint on bike lanes or a one-foot painted buffer strip, along bicycle routes to provide a visual signal to drivers to watch out for bicyclists and nurture a " share the lane" ethic, prioritizing bikeways with recent automobile-bicycle collisions.

MOB-2.5	**Speeds on Residential and Arterial Streets.** Explore innovative ways to reduce vehicular speeds through residential neighborhoods to posted speed limits, such as implementing traffic calming strategies such as: enhanced cross walks, lighted crosswalks, reducing lane widths, and others).
MOB-2.6	**Site Designs and Safety.** Ensure, through the development review process, that development projects follow best design practices to reduce conflicts between multiple travel modes.
	Programs
A	**Capital Improvement Program.** Update the CIP annually to incorporate necessary circulation system improvements.
B	**Update Street Standards.** Update the City's street standards based on the complete streets guidelines published by the National Association of City Transportation Officials (NACTO).
C	**Active Transportation Plan.** Prepare and update every five years an Active Transportation Plan to replace the Bicycle Master Plan and include pedestrian facilities. The Plan should include a full range of facilities for bicycle travel, including Class I bike/multiuse paths, Class II bike lanes, Class III bike routes, and Class IV separated bikeways, to provide a continuous system of bikeways throughout the city.
F	**Active Transportation Funding.** Annually allocate TIF funds for the Active Transportation Plan updates and bikeway design and improvements consistent with the Active Transportation Plan implementation program.
G	**Bicycle Use by City Employees.** Establish a program to encourage bicycle use among City employees.
H	**Bicycle Facility Development and Maintenance.** Prepare and update every five years a bike facility development and maintenance program that includes the following provisions: ▪ Signage consistent with according to Caltrans or City standards; ▪ Lighting where needed; ▪ Bicycle paths and lanes on bridges and overpasses; ▪ Bicycle- safe drainage grates; ▪ Bikeways free of hazards such as uneven pavement or gravel; ▪ Merging or crossing signage where bike routes and paths make transitions into or across roadways; ▪ Promoting classes on bicycle safety in the schools in coordination with the Napa Valley Unified School District; and ▪ Sweeping debris from and repairing bicycle paths and lanes.
J	**Pedestrian Crosswalk Installation.** Install clearly marked crosswalks at intersections near all commercial uses, as well as clearly marked pedestrian paths within parking areas. While mid-block crossings are discouraged, if conditions warrant and are approved by City Engineer, crosswalks and signage indicating pedestrian activity should be installed at midblock entrances where existing commercial uses are adjacent to other high- intensity uses, such as parks and schools where necessary for safety. Where possible, pedestrians should be routed to grade separated crossings over State Route 29.

K	**Pedestrian Connections to Schools.** Continue developing the existing network of walkways between schools and residential uses and encourage the development of new continuous walkways between schools and residential uses. Where possible, route pedestrians to grade separated crossings over State Route 29.
L	**Vision Zero.** Prepare and update every five years a Vision Zero program and install safety countermeasures consistent with the results and recommendations of the Local Roadway Safeway Plan (LRSP).

City of American Canyon Local Road Safety Plan (LRSP; 2022)

The City of American Canyon LRSP identifies recommended systemic countermeasures divided into three categories: Education, Enforcement, and Engineering. These countermeasures, described in the table below, are essentially programmatic efforts and/or policies and are consistent with other plan's programs and policies.

Table 20: American Canyon LRSP Recommend Systemic Countermeasures

Category	Countermeasure
Education	Pedestrian and bicycle education campaign (crossing at crosswalks, wearing high-visibility clothing at night, following the bicycle rules of the road, etc.)
	Safe driver education for all drivers
	Safe driving campaign for students
Enforcement	Speed enforcement and management
Engineering	Install bike infrastructure
	Add sidewalks/close sidewalk gaps
	Pedestrian Crossing Enhancements: Provide pedestrian countdown timers, updated push buttons, and leading pedestrian intervals at signalized intersections
	Flashing Yellow Arrows/Protected Left Turn signal heads at signalized intersections
	Evaluate installation of green bike conflict markings at intersections
	Evaluate adding bike boxes at intersections

Appendix
Policy/Program Inventory: State and Regional Plans
(by category/theme)

		State Plans		Regional Plans								
		Caltrans District 4 Bicycle Plan (2018)	Caltrans District 4 Pedestrian Plan (2021)	NVTA Vision Zero Plan (2023)	SR 29 Comprehensive Multimodal Corridor Plan (2020)	Advancing Mobility 2045 (2021)	Napa Countywide Pedestrian Master Plan (2016)	Napa Countywide Bicycle Master Plan (2019)	Napa Valley Community-Based Transportation Plan (2020)	NVTA Travel Behavior Study (2020)	Napa County Safe Routes to School Program	NVTA Accessible Transportation Needs Assessment
Access/ADA	Curb Ramps					✓						
	Meet and Address Mobility Needs											
	ADA Compliance Tracking											
Best Practices	Low Stress Facilities	✓						✓				
	Bay Area Best Practices Recommendations	✓	✓									
	Pedestrian Facilities		✓				✓					
Connected Bike and Pedestrian Networks	Prioritize Trail Connections						✓					
	Prioritize Safe Routes to Schools						✓		✓		✓	
	Prioritize Safe Routes for Seniors						✓					
	Prioritize Safe Routes to Transit						✓		✓			
	Prioritize Routes to Employment Centers											
	Prioritize Low Stress Facilities / all ages and abilities network						✓					
	Prioritize Intersection Safety											
	Fill sidewalk gaps											
	Prioritize connected bicycle and pedestrian networks											
	Bicycle Parking						✓				✓	
Data and Evaluation	Data collection and analysis		✓									
	Counts program						✓	✓				
	Comprehensive Network Database							✓				
Design/Engineering	Implement Complete Streets Policies	✓	✓					✓				
	Design Standards / Guidelines (Adhere to existing and/or create/implement)		✓				✓	✓				
	Traffic Calming			✓		✓						
	Pedestrian Facilities / Crossing Improvements and enhancements					✓	✓					
	Construction Coordination					✓						
	Site Plan/Development Review Checklist (to ensure bike/ped safety and access)						✓					
	Existing Bikeway Policy							✓				
Designation/Status Efforts	US Bike Route Systems	✓										
	Bicycle Friendly Community							✓				
Education and Encouragement and Community Engagement and Outreach	Bicycle transportation training	✓										
	Vision Zero Educational Campaign											
	Pedestrian safety outreach						✓				✓	
	Pedestrian and or Bicyclist Education and Public Awareness Campaign						✓				✓	
	Roadway user education (for all users)							✓				
	Bicycling safety and benefits outreach campaign							✓			✓	
	Safe Driver Education											
	Bike Commuter Vouchers / Employee Commute Programs							✓				
	Encouragement Events (Bike to Work day, commute challenges, etc.).										✓	
	Prioritize Underserved communities	✓	✓									
Enforcement	Pedestrian Safety Enforcement						✓					
	Bicycle Safety Enforcement											
	Traffic/Speed Safety Enforcement											
	School Circulation Activity Monitoring						✓					
Equity	Prioritize Underserved communities		✓					✓	✓			
Funding and Implementation	Implementation Plan						✓					
	Allocate Capital Improvement Plan (CIP) Funding to bike and pedestrian projects						✓					
	Grant Funding						✓					
Maintenance	Repair/maintain sidewalks						✓				✓	
	Repair/maintain crosswalks						✓				✓	
	Repair/maintain curb ramps						✓				✓	
	Repair/maintain bicycle facilities							✓			✓	
	Regional agency Coordination						✓					
	Citywide reporting tool						✓					
	Maintain vegetation/landscaping interference with bicycle and pedestrian facilities						✓	✓			✓	
Safe Routes to School	Improve/maintain pedestrian facilities around schools					✓					✓	
	SRTS Programming / Implementation						✓	✓			✓	
	School Guard Crossing Training						✓					
	Education and Encouragement						✓				✓	
	Engineering Walk Audits						✓					
	School Pick-up and Drop-off enforcement/circulation plan or policy						✓				✓	
	Evaluation/Surveys						✓					
Safety	Media Safety Campaign						✓	✓				
	EMS Safety Response											
	Reduce collisions for bicycles and pedestrians						✓	✓	✓		✓	
Staff capacity	Dedicated Bicycle Planner							✓				
	Advisory Committees											
Parking	Parking Plan						✓					
Partnerships	Local Agencies and Organizations	✓	✓				✓					
	Bikeshare							✓				
Placemaking	Wayfinding							✓				
Transit-related Amenities	Pedestrian and Bicycle facilities					✓			✓			
Vision Zero	Vision Zero Educational Campaign			✓								
	Countywide Collision Data Database						✓					
	Community Engagement and Outreach						✓					
	Adopt Vision Zero Policy or goal							✓				
	Develop Action Plan							✓				

Appendix
Policy/Program Inventory: Regional and Local Plans
(by category/theme)

		Regional Plans									Local Plans																				
		NVTA Vision Zero Plan (2023)	SR 29 Comprehensive Multimodal Corridor Plan (2020)	Advancing Mobility 2045 (2021)	Napa Countywide Pedestrian Master Plan (2016)	Napa Countywide Bicycle Master Plan (2019)	Napa Valley Community-Based Transportation Plan (2020)	NVTA Travel Behavior Study (2020)	Napa County Safe Routes to School Program	NVTA Accessible Transportation Needs Assessment	Calistoga ATP	Calistoga General Plan	Calistoga Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	Calistoga Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))	St. Helena General Plan	St. Helena Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	St. Helena Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))	Town of Yountville General Plan	Town of Yountville Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	Town of Yountville Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))	City of Napa General Plan	City of Napa Bicycle Plan	City of Napa Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	City of Napa Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))	City of Napa Local Road Safety Plan	City of American Canyon General Plan	City of American Canyon Local Road Safety Plan	City of American Canyon Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))	City of American Canyon Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	Unincorporated County Pedestrian Plan (Napa Countywide Pedestrian Master Plan (2019))	Unincorporated Napa County Bicycle Plan (Napa Countywide Bicycle Master Plan (2019))
Access/ADA	Curb Ramps			✓																											
	Meet and Address Mobility Needs																								✓						
	ADA Compliance Tracking					✓																						✓			
Best Practices	Low Stress Facilities																														
	Bay Area Best Practices Recommendations				✓																										
	Pedestrian Facilities																														
Connected Bike and Pedestrian Networks	Prioritize Trail Connections				✓																✓		✓		✓						
	Prioritize Safe Routes to Schools				✓		✓		✓					✓				✓			✓		✓		✓						
	Prioritize Safe Routes for Seniors				✓													✓			✓		✓		✓						
	Prioritize Safe Routes to Transit				✓		✓														✓		✓		✓						
	Prioritize Routes to Employment Centers																								✓						
	Prioritize Low Stress Facilities / all ages and abilities network				✓																✓										
	Prioritize Intersection Safety																✓				✓										
	Fill sidewalk gaps																✓														
	Prioritize connected bicycle and pedestrian networks											✓		✓			✓				✓										
	Bicycle Parking				✓				✓		✓			✓			✓				✓				✓						✓
Data and Evaluation	Data collection and analysis																				✓										
	Counts program				✓	✓					✓																				
	Comprehensive Network Database					✓																									
Design/Engineering	Implement Complete Streets Policies					✓								✓			✓				✓				✓		✓				
	Design Standards / Guidelines (Adhere to existing and/or create/implement)				✓	✓							✓			✓	✓		✓	✓			✓	✓				✓	✓	✓	✓
	Traffic Calming	✓		✓								✓				✓			✓												
	Pedestrian Facilities / Crossing Improvements and enhancements			✓	✓																✓				✓	✓					
	Construction Coordination			✓									✓				✓						✓								
	Site Plan/Development Review Checklist (to ensure bike/ped safety and access)				✓								✓	✓		✓	✓		✓	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓	✓
	Existing Bikeway Policy					✓								✓			✓			✓				✓			✓				✓
Designation/Status Efforts	US Bike Route Systems																														
	Bicycle Friendly Community					✓																									
Education and Encouragement and Community Engagement and Outreach	Bicycle transportation training																				✓										
	Vision Zero Educational Campaign																														
	Pedestrian safety outreach				✓				✓		✓														✓						
	Pedestrian and or Bicyclist Education and Public Awareness Campaign				✓				✓		✓				✓			✓					✓			✓					
	Roadway user education (for all users)					✓																									
	Bicycling safety and benefits outreach campaign					✓			✓		✓				✓			✓														
	Safe Driver Education																										✓				
	Bike Commuter Vouchers / Employee Commute Programs					✓												✓													
	Encouragement Events (Bike to Work day, commute challenges, etc.).								✓		✓				✓						✓				✓		✓				
	Prioritize Underserved communities																														
Enforcement	Pedestrian Safety Enforcement				✓						✓		✓				✓			✓			✓			✓			✓	✓	
	Bicycle Safety Enforcement										✓								✓									✓		✓	✓
	Traffic/Speed Safety Enforcement																								✓		✓				
	School Circulation Activity Monitoring				✓																										
Equity	Prioritize Underserved communities					✓	✓										✓														
Funding and Implementation	Implementation Plan				✓																									✓	
	Allocate Capital Improvement Plan (CIP) Funding to bike and pedestrian projects				✓																				✓						
	Grant Funding				✓									✓			✓				✓										
Maintenance	Repair/maintain sidewalks				✓				✓		✓		✓			✓			✓				✓		✓	✓			✓	✓	
	Repair/maintain crosswalks				✓				✓		✓		✓			✓			✓				✓						✓	✓	
	Repair/maintain curb ramps				✓				✓		✓		✓			✓			✓				✓						✓	✓	
	Repair/maintain bicycle facilities					✓			✓		✓						✓			✓				✓		✓		✓				✓
	Regional agency Coordination				✓						✓		✓	✓		✓					✓										
	Citywide reporting tool				✓						✓		✓			✓			✓		✓								✓	✓	
	Maintain vegetation/landscaping interference with bicycle and pedestrian facilities				✓	✓			✓		✓		✓	✓		✓	✓		✓	✓	✓			✓	✓		✓		✓	✓	✓
Safe Routes to School	Improve/maintain pedestrian facilities around schools			✓					✓						✓			✓													
	SRTS Programming / Implementation				✓	✓			✓				✓			✓		✓	✓		✓		✓	✓	✓				✓	✓	
	School Guard Crossing Training				✓								✓																		
	Education and Encouragement				✓				✓																						
	Engineering Walk Audits				✓																										
	School Pick-up and Drop-off enforcement/circulation plan or policy				✓				✓																						
	Evaluation/Surveys				✓																										
Safety	Media Safety Campaign				✓	✓							✓			✓			✓				✓						✓	✓	
	EMS Safety Response																							✓							
	Reduce collisions for bicycles and pedestrians				✓	✓	✓		✓			✓					✓			✓			✓	✓	✓						
Staff capacity	Dedicated Bicycle Planner					✓								✓			✓			✓									✓		✓
	Advisory Committees																						✓								
Parking	Parking Plan				✓								✓			✓			✓												
Partnerships	Local Agencies and Organizations				✓																		✓		✓						
	Bikeshare					✓																									
Placemaking	Wayfinding					✓					✓			✓			✓			✓			✓								✓
Transit-related Amenities	Pedestrian and Bicycle facilities			✓			✓											✓					✓								
Vision Zero	Vision Zero Educational Campaign	✓																													
	Countywide Collision Data Database				✓																										
	Community Engagement and Outreach				✓																										
	Adopt Vision Zero Policy or goal					✓							✓			✓			✓						✓		✓				✓
	Develop Action Plan					✓							✓			✓			✓	✓							✓				✓

Appendix B
Community Engagement Summary

NAPA VALLEY TRANSPORTATION AUTHORITY

Table B.1: Workshop 1 Comments

Comment
Improve bike path from Thomas/California St. to downtown. So something different instead of sharp turns and poles at intersections on the wine trail from Thomas to Yountville. I know of 2 serious crashes! Improve road quality/smoothness everywhere so bikes don't have to swerve into traffic to avoid cracks and potholes
Thank you so much. Looking forward to seeing this process progress! The broader coordination is fantastic! Love the lmola corridor wow
Fix 5 corners. Commuter train to Calistoga. Bike lanes with barriers on all main streets, Trancas, Jefferson, 1st, 2nd, 3rd, Silverado Trail
I like to see bike "protected intersections" and conflict markings. I'd really like to see Silverado Trail have bike lanes, class II, or better yet a class I bike path. Silverado Trail between Lincoln and Hagen is really dangerous but doesn't have any reasonable alternative routes. Love the idea of turning Lincoln into one lane each way with a center turn lane and protected bikes lanes
The maps were useful to gain perspective about areas that are safe/less safe to travel. We are excited to see many people caring about similar issues around the valley. Hopefully, more traction can be gained around schools for bike and walking paths
Close downtown to walking only
Moving north/south by bicycle in relatively easy in the valley. The main barrier is moving east/west. Improve the movement off the vine trail east/west and between Silverado
On project timeline board: re demand assessment. Also consider transportation routes between where people work, live, etc. Green conflict markings needed in Yountville where hwy 29 exits from Nard S. onto California.
We need a well connected active transportation network that people feel safe using. It needs to be maintained to keep it safe. Bike facilities should be protected or at least buffered if there is high stress on roadway
More bike paths! If you provide the bike infrastructure, it will take cars off road. Silverado Trl from Lincoln to Trancas is dangerous. Need separate bike lane!
Parking outside Napa with shuttles (weekends). Easy to rent bikes around town
Please 1) more and better marked bike lanes 2) more sidewalks (or shelter) 3) safer walk/ride routes around schools
1) Provide bike parking in all downtown parking garages 2) Ebikes are a "game changer" and will drastically increase bike travel. Can we support? 3) Fee structure to ride vine trail. Bike rental companies are making $$ on transit rental. Change $$/day to fund bike investment
I have seen these ideas/proposals many times. Nothing has improved. I have provided input and never hear back about tangible improvements
Cyclists are getting injured and dying. We need to do everything we can to value our community safer for them. We need a vulnerable user ordinance (yes, even if the consequences are just civil). We need rumble strips on the fog line on Silverado Trail (even if some cyclists complain. They will be safer). We need to have monthly sweeping of bike lanes (not sweeping debris into them but out of them). We need better bike lanes and narrower street lanes and most of all we need lower speed limits. Speed kills.
Bike lanes on highway 29
Thank you for soliciting our input. I loved hearing about some possible plans in the works. I appreciate how NVTA is trying to get people out of their cars. Please take extra care at looking at low-income neighborhoods so those residents have safe options.

Comment
This was great, please continue to engage the community throughout this process!
Some info on what is already being planned so that we can add thoughts or build on ideas
Is there a way to highlight on the maps which areas are already receiving, or are planned to receive attention/improvements? I just wanted to avoid placing stickers in areas already on the list to be updated.
Prioritize bike safety upgrades on Silverado Trail - Napa to St. Helena
Great open house! I attended to advocate for pedestrian infrastructure in general and, more specifically, continuous sidewalk networks along busy streets within the city of Napa as well as pedestrian street lighting and handicap-accessible crosswalks. Thanks for listening!
I already walk and bike for transportation - but I would do so a lot more with 1) better lighting, especially on bike paths (class 1s) and popular bike routes; 2) more separated class IV bike lanes on high speed/volume roads and 3) later bus service if it gets dark and/or rains
We need more designated cross walks on 3rd St. and Patchett with the flashing lights. The people driving on 3rd street go way too fast and it is dangerous to try to cross the street if you're walking
1) street level lighting to make it safer to walk at night and see the bad sidewalk 2) repairing sidewalks 3) much better bicycle safety everywhere 4) make 1st St from City Hall to Oxbow a walking street
Redesign the incoming traffic into the valley. Coordinate bus schedule to specific areas where clusters of people work, i.e. clusters of wineries, restaurants, etc. for all of the low-income people who have to drive into the valley. Approach large wineries to see if they could/would support tied stronger shifts so a bus schedule could work
1. Thank you so much for including an "all ages and abilities" perspective right from the start! 2. From a public health, equity and climate change perspective, please keep functional A.T. (as equal to, or greater than recreational A.T.) at the fore in this effort. 3. Go hard on A.T. connectivity and circulation in the new American Canyon developments
Excited for the future and actualization of the plans!
Valle Verde and Trancas needs lights so people can get access to the nature area at the end of Valle Verde. Because we can't cross the street, we don't go):
Well done! Thank you
Thank you all! Love and appreciate you guys.
1. Crossing Third Street at Franklin is extremely dangerous! Cars go at least 15 miles an hour over limit. 2. Crossing by foot/car at Division and Riverside-blind in both directions heading east - needs stop sign on Riverside - three way stop 3. I have walked to Imola Park and ride from Food City neighborhood-very dangerous along Imola! Not lit, no sidewalks. 4. There was once a crosswalk at Spruce crossing Jefferson which the city eliminated!!! When I called to ask why, I was told that having a crosswalk there made the city more liable for pedestrians. Need high visibility crosswalks and rapid flashing beacons.
Please more blinking lights at crossways/paths. Pedestrians' safety is a must!! Please sign me up for CAC safety council.
Please improve walking and biking safety on Silverado Trail between Trancas and Lincoln

Table B.2: First Interactive Map Comments

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	The area between the 5-way intersection at Silverado Trail/Coombsville Rd/Third St and the Silverado Middle School is lacking infrastructure for walking and biking and is need of significant safety improvements.	38.295999	-122.259722	2	0
I Wish	Napa	Need pedestrian crossing improvements and traffic calming here.	38.324193	-122.301189	1	0
I Wonder	Napa	The trail behind Copia has been washed out since storms in 2006/07. Nearly 18 years...I wonder whether this will ever get fixed.	38.303821	-122.280343	1	0
I Love	Yountville	I love the pathways that wind through Yountville! Thanks to the town for opening up access to our creeks to kids and families!	38.404139	-122.359865	2	0
I Wish	Napa	Flashing light cross walk, at Cabot and Marina drive, and paint sidewalk red near that crosswalk for safe crossings	38.280771	-122.289279	0	0
I Wish	Napa	Silverado Trail between Hagen and Lincoln needs wider shoulders.	38.31634	-122.273927	3	0
I Wish	Napa	The city paved the middle of Jefferson, but bikes use the side parking lane where they did not pave. WTF? I guess I can just ride in the middle of the road and piss off all the drivers.	38.290812	-122.294397	0	0
I Wish	Napa County	I would like to see more lighting, water refills/ a bathroom. And safety buttons like some campuses have	38.525943	-122.498417	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	Need traffic calming all along River Park Blvd. Lane striping was voted on last year via Ed Moore's survey, but nothing has materialized to-date. We continually have high-speed traffic especially during late hours of the night. Fisherman's Park at the end of the street attracts illegal behavior 24/7.	38.277934	-122.290378	1	0
I Wish	Napa County	I would love to see a better street circulation plan in St Helena to divert local traffic to secondary roads on both the east and west sides. I would also like to see Adams Street continued to the trail.	38.470794	-122.486572	0	0
I Wish	Calistoga	I wish there was a "Cyclists on Road" flashing sign that was automatically activated when cyclists rode on Petrified Forest Rd from the intersection with 128 to the intersection with Franz Valley School Rd. This is a common cycling route for those doing the Franz Valley Loop or riding to Healdsburg/Santa Rosa.	38.579373	-122.597809	10	1
I Wish	Calistoga	I wish the pavement was in better shape for cyclists.	38.589302	-122.590857	5	0
I Wish	Napa County	I wish it was easier for cyclists to cross from Picket Rd. onto 29 to head South or North.	38.580987	-122.558718	2	1
I Wish	Napa County	I wish it was safer to go from Bale Lane to Silverado Trail to Crystal Springs Road. Crystal Springs Road is popular with cyclists and Bale is a good way to get to the Vine Trail	38.554571	-122.500624	2	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	I wish government offices would install showers, as it might encourage county workers to bike to work. No one wants to bike and show up sweaty, then have to put on work clothes. (I no longer work for the county, but this was the main reason I didn't bike to work, ever)	38.296134	-122.285385	0	0
I Wish	American Canyon	I would love some type of safer way for our kids to cross the intersection.	38.164475	-122.252769	5	0
I Wish	Napa	I wish there was a bike trail (not touching the roadway) along Trancas. I ride my bike from my home west of Hwy 29 to Bel Aire Plaza, but I walk it along Trancas and Bel Aire is as far east as I will go.. I once rode to Safeway and felt very unsafe. I will not ride along Trancas bc I fear being hit by a car at any moment.	38.321996	-122.304096	1	0
I Wish	Napa	I wish the bike trail going from Redwood/29 toward Downtown were less isolated. I would love to have my kid ride a bike to school at Mayacamas, but the trail has some very isolated areas which feel unsafe and I'm concerned about my kid becoming a victim of a robbery or sex crime. As an adult female I feel unsafe through some areas, even on a bike. I won't let my kid ride through there even with a buddy.	38.320448	-122.304611	0	0
I Love	Napa	I love that northwest Napa is so bike friendly! I escort my child to Northwood	38.323882	-122.314224	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		Elementary School daily on bike, and I can bike to Bel Aire Plaza for errands. I've also tended the "Bike to School Day" table the last two years. I love seeing all the kids show up on their bikes/scooters/skates/feet. I would love to find ways to encourage human power every day instead of only once a year. Too much traffic and too much carbon footprint coming from cars that drive less than two miles to school.				
I Wish	Yountville	Need green bike path logo on Yount Street and on road by underpass en route to south bound bike path so that bikes can safely access the path while avoiding oncoming traffic coming from vets' home and from cars turning off of Solano	38.397207	-122.358856	1	0
I Wish	Yountville	Please add crosswalk functionality to this light by Ramp'd Kitchen. There is already a streetlight here but no crosswalk light for bikes to use	38.40548	-122.368512	0	0
I Wish	Napa County	Would like green bike crosswalk so that cyclists can cross Highway 29 to enter onto Yount Mill Road	38.422226	-122.389884	2	0
I Wish	Napa County	Would like green bike crosswalk to allow cyclists to cross safely off of Yountville Cross Road onto Finnel	38.413753	-122.356839	2	0
I Wish	Napa County	Would like green bike crosswalk so that cyclists can safely cross highway 29 here	38.427437	-122.340574	2	0
I Wish	Napa County	Need green bike crosswalk at this T junction to safely	38.346638	-122.328215	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		cross Solano, enter onto Orchard				
I Wish	Napa County	Paint green bike crosswalk stripes across Oakville Crossroad T junction b/c cars edge up through the intersection and cut off bike traffic, can be very scary to ride in front of Oakville Grocery. Ideally also paint green stripes in front of the Oakville Grocery entrance and exit as well	38.436716	-122.401772	2	0
I Wish	St Helena	Create a bike route painted with green bike logo and crosswalks from the police department parking lot north bound through St Helena to the entrance of the bike path	38.509221	-122.454901	3	0
I Wish	Napa County	Add green bike crosswalks for the entirety of the bike path (Napa to Calistoga) when it crosses intersections -- cars pull too far forward and can be dangerous b/c many people are not aware that it is legal for bikes to be on the road, nor do they realize that the road is a part of the bike path	38.553267	-122.524252	2	1
I Wish	Napa County	Can you change the new crosswalk light to a regular red/green light? Cars seem confused and all come to a stop while I wait for the crosswalk light to come on, and it seems to anger drivers if I don't go when they try to waive me through (I don't know where exact location of the new light is on this map)	38.54783	-122.511635	1	0
I Wish	Calistoga	Picture of sign	38.579373	-122.597809	2	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Calistoga	That would be amazing. It is one of the best cycling routes in Calistoga and that stretch feels very dangerous.	38.579373	-122.597809	3	0
I Wish	Calistoga	Please make this happen for the safety of cyclists and vehicles alike.	38.579373	-122.597809	0	0
I Wish	Napa County	I wish this road were safer for students to ride bike and walk. There are no sidewalks or bike lanes.	38.279007	-122.26254	1	0
I Wish	Napa County	This portion of Silverado is a challenge for cyclists. Widen the road and provide a separate lane for cyclists and pedestrians.	38.31634	-122.273927	0	0
I Wonder	Napa	Let's fix this trail and the one along the Napa River from Trancas to Lincoln. It's all full of holes and cracks.	38.303821	-122.280343	0	0
I Wonder	Napa	Very difficult area for cyclists and pedestrians. Widen the road, add crosswalks	38.28864	-122.275064	1	0
I Wish	Napa	This road is too narrow for cyclists with no apron. Pick ups at school causes cars to park on the roadside blocking any potential travel lanes for bikes.	38.297953	-122.273605	1	0
I Wish	Napa County	Only 1/2 of the road has smooth pavement; the east side is bumpy and full of potholes. Please pave this portion of the road.	38.289128	-122.241611	1	0
I Wish	Napa	One of the slowest intersections in Napa. Cars are baked up and prevent right turns for cyclists onto S. Coombs. Change light timing and create a right turn option	38.281768	-122.293582	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	Improve bumpy pavement here.	38.281785	-122.300963	1	0
I Wish	Napa County	River trail is full or bumps and cracks. It needs to be repaved through Kennedy Park.	38.272352	-122.280149	2	0
I Wish	Napa	This is a tough transition from the Vine Trail through the intersection. Provide better signage and timing of lights for cycles to cross.	38.32107	-122.310287	1	0
I Wish	Napa County	This crossing is always full of gravel. More regular sweeping is needed.	38.352595	-122.331219	0	0
I Wish	Napa	This is the worst intersection in Napa. There are potholes and the need for change. Traffic on Silverado is often backed up for 2 light changes.	38.299351	-122.276051	0	0
I Wish	Napa	This is a bumpy road and needs to be repaved.	38.292513	-122.276716	0	0
I Wonder	Napa	Cars often try to turn left here across lanes of busy Soscol and the wait time during afternoon rush can be 10 -15 minutes. Suggest no left turn here.	38.292412	-122.277864	2	0
I Wish	Napa	There are 3 sets of railroad tracks here that are in disrepair. The Wine Train is obligated to repair the road for their crossings. The tracks and the poor pavement is a danger to cyclists.	38.296585	-122.280874	0	0
I Wish	Napa County	This bridge and street are often full of glass, liter and gravel. There should be more street sweeping here.	38.3249	-122.283829	1	0
I Wish	Napa County	This trail here and through the development needs more regular sweeping of leaves and debris.	38.25611	-122.306253	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa County	Cyclists use the stretch of Hwy 221 from Streblow to Kaiser to connect to the cycle trail. It's full of gravel and debris. Please sweep more often.	38.265933	-122.271287	1	0
I Love	Yountville	I really enjoy the paved bike trails!	38.395492	-122.360916	0	0
I Wish	Napa County	That short stretch is one of the scariest parts of my rides. Bikes, cars, and large trucks share a narrow road.	38.579373	-122.597809	0	0
I Wish	American Canyon	Better identify bike path along Newell Drive (SB & NB).	38.174242	-122.242856	1	0
I Wish	St Helena	I want to get from the S end of the new Calistoga bike trail to the st Helena town center from the north. there is only ONE BLOCK that forces bikes to cross hwy 29 twice, to get from Crinella to Fulton. You can go down by the tracks, rocky narrow path, not for kids I see bikes of all kinds stuck crossing main St. at crinella. provide one last tiny piece of the trail on the east side, please.	38.503848	-122.475586	0	0
I Wish	Napa County	I wish there was a blinking light that cyclists could activate to cross over to Myrtledale Rd when coming from Bennett Ln and vice-versa. The cars on Tubbs Ln go very fast and it's challenging to safely cross. Bennett Ln is frequented by many tourists on bikes.	38.596243	-122.601061	3	0
I Wish	Napa County	Tubbs Lane crossing: not only cyclists - a LOT of pedestrians cross from Myrtledale to Bennett Lane	38.596243	-122.601061	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wonder	Napa County	Why is our beautiful scenic Highway 29 now an eyesore with the overkill of signage warning bikers and others about common sense road awareness that any functioning bike rider already knows. A yield sign warning you that a yield sign is approaching. Really? Same goes for stop signs, etc. and none of the protective barriers along the road are consistent in look or materials The whole thing is confusing and a mess. I'm all for the bike path but the blight is a disappointment and unnecessary.	38.549508	-122.531548	2	0
I Wish	American Canyon	Sidewalk connectivity throughout American Canyon (but especially along SR 29) would greatly improve the city's walkability.	38.171172	-122.253456	2	0
I Wish	Napa	I wish we had a pedestrian zone downtown--no cars between Main and School and Third and Pearl.	38.297572	-122.28676	1	0
I Wish	Napa	I wish there was a bike safer way to get from my house off South Minahen to Fuller Park.	38.285439	-122.294057	0	0
I Wonder	Napa	I wonder how we can make Jefferson Street better for walking and biking throughout the whole corridor. It's a key part of the most direct route to a lot of destinations - yet it's one of the biggest barriers to walking or biking places because it is unsafe/uncomfortable. Can we make this a corridor	38.309398	-122.296062	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		that works for more people? Won't more foot traffic and bike riders help the businesses along the corridor? Can we make it an enjoyable place to travel actively?				
I Love	Napa	I love the SR 29 undercrossing! I used to never bike to this part of the west side of Napa because the 1st St overpass/big intersection with highway on/off ramps and Freeway Drive was too stressful and there was no space for bikes. This separated path has made biking possible for me and now I bike to meetings at brewed. and other destinations on the west side. Love the separation and the mural. It would be perfect if it had lighting.	38.300759	-122.304268	2	0
I Wish	Napa	I wish California Boulevard had more separation for bicycles, either vertical or horizontal (vertical would be better). Cars pass bicyclists very close and at high speeds (speed limit is 30-35 but cars often go faster). Especially if gravel in bike lanes forces bicyclists closer to moving traffic. It's a nice tree-lined street but stressful to bike on. I also see people park/stop cars in bike lanes often.	38.308904	-122.302826	0	0
I Wish	Napa	I wish Bel Aire Plaza was bikefriendlier. The parking lot is stressful when you're just walking from your car to the store - biking through it and the	38.32266	-122.307409	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		intersection entrance at Trancas and California is extremely busy and stressful.				
I Wonder	Napa	I wonder if we can give bicyclists more space in the bike lanes on 3rd Street. They are narrow bike lanes, and the shared parking/bike lane set-up leaves you right in the door zone.	38.295556	-122.288939	0	0
I Love	Napa	I love Seminary Street as my north/south alternative to Jefferson. It's a pleasant street to bike on.	38.299465	-122.290629	1	0
I Wonder	Napa	Seminary is a great north/south alternative for Jefferson in central Napa; however, the many stop signs are cumbersome on a bike and trying to cross 1st/2nd/3rd/Oak Street where cross-traffic is uncontrolled can be very difficult. I wonder if there's a way to improve getting across the streets for bikes and pedestrians (the RRFBs at 3rd have helped for walking so far).	38.29637	-122.2912	1	0
I Wonder	Napa	I wonder how West Lincoln Avenue can be made to be more bicycle and pedestrian friendly. Cars go fast and there is little to no bike and pedestrian infrastructure. Would also require addressing the overpass and navigating highway on/off ramps.	38.306216	-122.307916	1	0
I Wish	Napa	I wish we could complete the sidewalks on California Blvd in this area.	38.301662	-122.300912	1	0
I Wish	Napa	I wish the Vine Trail had lighting, at least in the urban centers it goes	38.311316	-122.292277	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		through. Many people rely on it for transportation during dark hours (especially in the winter) but it's so dark.				
I Love	Napa	I love that with the SR 29 undercrossing and the future protected bike lanes on Browns Valley Road, I will be able to bike to Westwood Hills Park.	38.302961	-122.319271	1	0
I Wonder	St Helena	Walking to any destinations south of Grayson Avenue to the city limits is difficult and unsafe due to lack of pedestrian facilities. There's housing, hotels, a gym, pediatrician and orthodontist (near the high school no less), and more, all within walking distance of downtown. Crossing 29 is super unsafe (you have to run across gaps of traffic) and there are no sidewalks. I have seen people walking with strollers from hotels to downtown on the side of the highway where there are no sidewalks.	38.495951	-122.458128	0	0
I Wonder	St Helena	Backroads provide valuable alternative routes to walking/biking along SR 29, especially for youth heading to schools. Can we make them friendlier to young bicyclists? Roads like Valley View Street get very busy during school arrival hours, and with bike facilities, most people feel unsafe sharing the road.	38.495181	-122.472015	0	0
I Wonder	St Helena	A lot of people walk and bike on Crane and Sulphur Springs, both recreationally and for transportation. Is	38.48888	-122.462514	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		there a way to make it safer for these folks? There are no bike or pedestrian facilities, so people are in the road/on the dirt shoulders.				
I Wish	St Helena	I wish this bridge on Pope Street had better bike facilities - the sight lines aren't great and it's a busy street.	38.504946	-122.463769	0	0
I Wonder	St Helena	Hunt Ave is a pretty significant east/west connector for the east side of town but has no bike facilities and it's easy for drivers to speed (few traffic controls, no traffic-calming). Can it be made safer for bicyclists, especially students biking to schools on the west side of town?	38.507344	-122.46628	0	0
I Wish	St Helena	I wish there were bike facilities on Madrona. This is a big speeding corridor and sharing the road can be stressful.	38.503431	-122.475822	0	0
I Wonder	St Helena	Throughout the city - I wonder if pedestrian walkways can be created to improve limited connectivity created by many dead-end/cul-de-sac streets or big blocks (like Grayson/Sulphur Springs/Crane). New streets would be impossible and not necessarily needed, but pedestrian cut-throughs can make it easier to walk and bike.	38.50261	-122.474384	0	0
I Wonder	Napa	I don't dare ride my trike along Jefferson Street. Due to the many potholes motorist try to avoid them	38.309398	-122.296062	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		and drive close to the parked cars leaving no room for a bicyclist let alone a 3-wheel trike. Do have to wait until someone is seriously injured before Jefferson Street is repaired?				
I Wish	Napa	The bike lane (north side) along Imola from S. Coombs to Hwy 29 could be safer and more attractive to pedestrians if it was broadened and made more visible to traffic. There are stretches of the current bike lane that seem too close to traffic and flood when it rains.	38.281999	-122.291699	0	0
I Wish	Napa County	I wish the bike trail alongside this frontage road could be broadened and improved for safety. Traffic passes close to pedestrians. Some cars move to the other lane to avoid walkers. and Pedestrians will walk in the street from overgrowth or to let others pass.	38.268275	-122.299204	1	0
I Wish	Napa	We need to have sidewalks on Browns Valley Rd leading to the elementary school	38.306928	-122.340467	2	0
I Wish	Napa County	It would be great to have the Vine Trail connect to the new trail near Costco. It looks like an easy addition.	38.259708	-122.281111	1	0
I Wish	Napa	It would be great to improve this dirt path to the Vine Trail, so you don't have to cross Imola and ride the streets to the access near In-Shape. When you bike ride from the west side of Imola to the Vine Trail, you head east and	38.280725	-122.278456	2	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		cross the bridge on the south side of the street. But then you have to cross Imola at the light, ride down Gasser Dr, cross Gasser at the light, then ride down Hartle to get to the Vine Trail access road. It would be much safer the way I propose.				
I Wish	Napa	Install a speed bump in the circle here at the end of the street to stop the side show burnouts late at night. I live near here and hear cars screeching doing burnouts and circles every few nights. In the summer, it can be two or three a night. After doing their burnout, they race down River Park Blvd. A simple speed bump at the circle would stop this.	38.277739	-122.282729	0	0
I Love	Napa	I love that someone is now regularly cleaning the bike path over the bridge. It makes it so much better.	38.281446	-122.284656	0	0
I Wish	Napa	Sidewalk needed	38.314269	-122.340531	0	0
I Wish	Napa	Sidewalk needed	38.311777	-122.340467	0	0
I Wish	Napa	Sidewalk needed	38.309235	-122.340961	0	0
I Wish	Napa	Sidewalk needed	38.305968	-122.339845	1	0
I Wish	Napa	Sidewalk needed	38.307383	-122.340381	0	0
I Wish	Napa	Sidewalk needed	38.304655	-122.33845	0	0
I Wish	Napa	Sidewalk needed	38.30479	-122.337098	0	0
I Wish	Napa	Sidewalk needed	38.305358	-122.332109	1	0
I Wish	Napa	Sidewalk needed (and NOT included in current project!)	38.30376	-122.322266	0	0
I Wish	Napa	Sidewalk needed (and NOT included in current project!)	38.302878	-122.318618	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	Direct access from road to bike path needed!	38.299997	-122.30574	1	0
I Wish	Napa	Bike lane needed!	38.299917	-122.303179	0	0
I Wish	Napa	Bike lanes needed from California to Jefferson!	38.295934	-122.295883	0	0
I Wish	Napa County	Sidewalks AND bike lanes needed!!	38.316794	-122.331946	1	0
I Wish	Napa	A safe way is needed for bicyclists to cross from westbound Redwood to southbound Westview on a blind and hilly curve!	38.314972	-122.331997	0	0
I Wish	Napa	I would like a paved bike and pedestrian path between Forest and Camilla on what is already a public right-of-way!	38.312762	-122.337109	0	0
I Wish	Napa	I would like Regal Drive extended from Westminster Court to Camilla Drive, including sidewalks and bike lanes (or at least a paved bike and pedestrian path created)!	38.312112	-122.337302	0	0
I Wish	Napa County	This entire section of Buhman desperately needs bike lanes and either sidewalks or an unpaved shoulder for pedestrians!!	38.291343	-122.343034	0	0
I Wish	Napa County	It would be nice if this bike and pedestrian path were wider and paved!	38.24647	-122.281992	0	0
I Wish	Napa County	These bike lanes are too narrow and overgrown with tall weeds!	38.231573	-122.260336	0	0
I Wish	Napa County	These tiny shoulders need to be widened into actual bike lanes!	38.221284	-122.262238	0	0
I Wish	Napa County	Bike lanes and sidewalks are needed here!	38.209879	-122.263437	0	0
I Wish	Napa County	The asphalt is too low where it meets the concrete overcrossing!	38.202532	-122.261031	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa County	A way to walk and ride a bike across the river between Milton Road and Green Island Road would be very nice!	38.208438	-122.306752	0	0
I Wish	Napa County	There is currently no way to travel by bicycle from Napa to American Canyon without riding on the shoulder of a highway! A connection here would create that way!	38.259708	-122.281111	0	0
I Wish	Napa	There is no easy way to ride a bike thru Napa Riverfront Green, even though it is part of the Vine Trail. I suggest removing a section of fence at this location and paving a connection between the sidewalk and the Vine Trail.	38.296917	-122.281246	0	0
I Wish	Napa	This intersection lacks a crosswalk. Also, when crossing Solano from the Vine Trail the trees and bushes to the south block your vision of approaching traffic, as well as their vision of you!	38.34377	-122.327053	0	0
I Wish	Napa County	This location needs a separate bike and pedestrian bridge. The bike lanes on Solano suddenly disappear on one side of the current bridge, then reappear on the other side! The Vine Trail uses a narrow portion of this bridge that is only half as wide as the trail normally is!	38.364966	-122.338152	0	0
I Wish	Napa County	The "paint" on these stripes is so thick that they act like speed bumps, making riding a bike over all 25 of them difficult!	38.366686	-122.339024	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa County	This spot on the Vine Trail, like many, many, others, needs repaving. Before repaving though, it needs to have all of the high spots that have resulted from the roots of thousands of trees immediately next to the trail ground down!	38.376795	-122.34441	0	0
I Wish	Napa County	All of the trees on the east side of these two bridges, along with those immediately north and south of these bridges, need to either be removed or trimmed up at least 8 feet! Visibility is poor here and the bridges are narrower than the Vine Trail and bicycles must make 4 turns to pass thru here!	38.382589	-122.348055	0	0
I Wish	Napa County	Here, as at many other crossings, are steel posts placed in the middle of the trail. I know that they are here to try to prevent cars from driving onto the trail. These posts are very dangerous, because riders must focus on not catching their handlebars (or mirrors) on these posts and crashing, when the riders should be focused on not getting run over by-passing cars!	38.385409	-122.349731	0	0
I Wish	Napa	Sidewalk needed	38.305286	-122.338597	1	0
I Wish	Napa	Sidewalk needed	38.3054	-122.337396	1	0
I Wish	Napa	Crosswalk with RRFBs needed here for bicyclists and pedestrians who are using the freeway undercrossing!	38.302596	-122.301081	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Napa	This bike path is in serious need of repaving!	38.301407	-122.30389	0	0
I Wish	Napa	I would like a bridge here for bicyclists and pedestrians (and possibly emergency vehicles) connecting the two parts of Linda Vista Avenue! This would also allow users from Brown's Valley to access Lincoln Avenue into the middle of the city without having to deal with the 1st Street overpass!	38.305861	-122.315254	0	0
I Wish	Calistoga	Foothill Boulevard is identified as a Safe Route to School, and many children cross regularly by foot to get to school. Sadly, many vehicles speed 10-15 miles above the speed limit making it very unsafe for any pedestrians who live on the hillside of the street who don't have access to a motor vehicle. I believe implementation of traffic calming measures such as optical speed bars or lowering the speed limit would help improve safety here.	38.578266	-122.589226	0	0
I Wish	Calistoga	We need a flashing bike sign or cyclist warning system here to let people know a bike is on the road. It's too dangerous biking here currently	38.579482	-122.598882	0	0
I Wish	Napa	Parents drop kids off waiting in the bike lane here. Then they make U turns in school traffic. This is incredibly dangerous for cyclists.	38.296183	-122.263294	0	0
I Love	Napa	Agree its great!	38.300759	-122.304268	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
I Wish	Calistoga	I wish all of Washington St was paved. It's NOT safe for bike riders trying to avoid potholes and not get hit by a passing car.	38.579677	-122.581967	0	0
I Wish	Calistoga	This intersection needs safety work for bicyclists and pedestrians. Drivers are trying to make a left out of CalMart onto Fair Way or don't see people in the crosswalk on Lincoln.	38.580247	-122.578318	0	0
I Wish	Calistoga	I wish Fair Way was paved from Lincoln Ave to Lake St. It's very dangerous on bike trying to avoid the potholes and not get hit by passing cars. I'd ride my bike more to the Vine trail if Fair Way was paved.	38.580751	-122.579203	0	0
I Wish	Calistoga	3rd St needs major paving. It's not safe for bikes!	38.580653	-122.581423	0	0
I Wish	Calistoga	I wish there was a safe walking path or sidewalk that made it safer to walk along Grant Street.	38.586627	-122.584956	0	0
I Wish	Calistoga	As someone whose child regularly bikes to school, I often worry about the safety of cycling on Washington St. especially during high traffic times like morning drop off and after school lets out. I wish there were a designated bike lane to encourage more students to bike to school safely.	38.580098	-122.582499	0	0
I Wish	Calistoga	If the area formally occupied by a golf course was opened (the chain link fences removed) and was redesigned to contain pathways and bikeways and recreational destinations we wouldn't have to	38.586627	-122.584956	0	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		navigate narrow and hazardous Grant Street.				
I Wonder	Calistoga	I wonder if the food cart person could move to a safer spot. They are on the sidewalk, Calmart side of Lincoln and Fair Way. They create a blind spot for drivers on Fair Way. It makes it difficult to see pedestrians starting to cross the street. Shouldn't the same 20ft law apply to food carts as it does to parked cars?	38.580211	-122.578324	0	0
I Love	Napa	I love that the development of small businesses here has made it a walkable and bikeable destination for my family	38.286871	-122.295063	0	0
I Wish	Napa	I wish this stretch of sidewalk along California was wider and better kept up for cyclists and walkers.	38.2961	-122.300298	0	0
I Wish	Napa	I wish there was a well-kept, protected path for my tween children to take from this part of town to main st and the bike path east of the river. Current options include lots of traffic on 3rd St or lots of stop signs without careful drivers in Abajo.	38.292867	-122.2962	0	0
I Wish	Napa	I wish that Shurtleff were safer for kids to use to get to/from school. There are no sidewalks along parts of the road between Imola and Wyatt, and cars often go way too fast, making it unsafe for kids who want to bike.	38.281448	-122.263541	0	0
I Wish	Napa	This is the most dangerous, scary intersection in Napa, trying to cross from Laurel	38.301422	-122.314224	1	0

Type	Jurisdiction	Comment	Latitude	Longitude	Up Votes	Down Votes
		to west bound Browns Valley Road is treacherous to say the least Vehicles routinely travel well in excess of posted speed limit Some vehicles SLAM on brakes to allow cyclist waiting for their turn to "Go"-massively dangerous to all.				
I Wish	American Canyon	I wish this stop sign had better visibility so cars would not run the stop sign. It's difficult to see the other vehicles until you're very close to the intersection.	38.180615	-122.257439	0	0
I Wish	American Canyon	I would love to see Main Street connected along the east side of hwy 29 and for it to be bike/pedestrian friendly.	38.175181	-122.252544	0	0
I Wish	Yountville	I'd love to see a stop sign instead of a yield here. I often see west bound vehicles speed through to get on 29 without looking. I worry about cyclists on the trail and pedestrians traveling to the veteran's home.	38.397728	-122.358781	0	0

Table B.3: Second Interactive Map Comments: Proposed Bicycle Network

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	I wish (non-bus vehicle) stopping were prohibited on HWY29 near the Oakville Grocery. Cyclists and e-cyclists slalom weave around stopped vehicles "popping" in and out of visibility to passing cars. Additionally, vehicles exiting Oakville Grocery experience decreased visibility. Please consider applying no-stopping to delivery vehicles too.	7856 Saint Helena Highway, Napa, California 94562, United States	0	0
Walking	Wish	I wish for a Leading Pedestrian Interval for the crosswalk across Redwood. As I try to walk or cycle cross from the SE (near Valero) to the NE (adjacent to RPR parking), cars cut in front of me (turning right from Solano onto Redwood) about 20% of the time. I experience near-miss collisions with cars about once per month. The drivers seem angrier at this intersection since the implementation of no right on red.	2000 Redwood Road, Napa, California 94558, United States	0	0
Driving	Wonder	I wonder how to improve turning left onto Soscol Ferry Road from Devlin Road during the pm weekday commute hours. Cars, the 11N Vine bus and cyclists wait for a safe opening since westbound Soscol Ferry Road vehicles don't have to stop.	110 Devlin Road, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	Deer Park Road east of Silverado Trail: • Create more shoulder where possible, perhaps by reducing lane width even by 1/2 foot. This would help to reduce speeding as well. • Include painted buffers on right leaning curves to guide vehicles to stay in their lanes rather than hugging the curve where visibility is low and a slower moving bicyclist may be (see curve buffer pic for example). • Include bike passing lanes or pullouts on uphill's where possible (see pic of Mt. Diablo example). • Add ""Bikes have full use of lane" signage. • Place ""Watch Your Speed"" message with three thermoplastic bars preceding the intersection of Sunnyside Rd. (a high crash history and a school zone), in the eastbound land preceding the Sanitarium Rd. intersection (high crash history), and in the southbound lane preceding the Mund Rd. intersection (high crash history). We are requesting the same design as that used by the County on Redwood Rd. (see pic attached). • Add conflict markings at the intersection of Silverado Trail.	301 Deer Park Road, Deer Park, California 94574, United States	0	0
Bicycling	Wish	Old Sonoma Road in the County: Install Class IIs with buffers and rumble strips	3230 Old Sonoma Road, Napa, California 94559, United States	0	0
Bicycling	Wish	Hwy 12: Install Class IIs with buffers and rumble strips	3176 Carneros Highway, Napa,	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
			California 94559, United States		
Bicycling	Wish	Silverado Trail from Deer Park in the north to the Napa City limits in the south, upgrade to Class Is with buffers.	6171 Silverado Trail, Napa, California 94558, United States	0	0
Bicycling	Wonder	Yount Mill Road: This functions as an advisory road, with so many walkers and bikers on it and low traffic volumes. Why not stripe it that way?	1820 Yount Mill Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Hardman Ave: Increase shoulder width.	1120 Hardman Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	Install Class IIs on Atlas Peak Road from Monticello to Westgate Dr.	1569 Atlas Peak Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	Would like to clarify – if recommending a Class IV on SR 29 from the roundabouts down to S Kelly Road, is Class IV going to be on both sides? Right now, when you zoom in, it shows it on the southbound side only.	Napa-Vallejo Highway, Napa, California 94558, United States	0	0
Bicycling	Wish	Jameson Canyon: Show as proposed Class I path.	Jameson Canyon Road, Napa, California 94503, United States	0	0
Bicycling	Wish	North Kelly Road at SR 29 just has a gap even though this is a really dangerous location. Needs to be addressed.	1988 North Kelly Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Agree with existing comment that since Vine Trail is no longer planning to go down Devlin, that Devlin existing Class IIs need upgrade	231 Devlin Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Make a bidirectional Class IV from the middle school to 2nd Ave on the south side of the road to increase safety	2049 Coombsville Road, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		for youth and parents biking to Stone Bridge.			
Bicycling	Wish	From Napa City Limits to Orchard, make a standard Class II, and add buffers where feasible. Lane widths are over 12 feet in some areas. This is currently VERY substandard in parts.	3073 Dry Creek Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Sanitarium Rd: Create more shoulder where possible, perhaps by reducing lane width even by 1/2 foot. This would help to reduce speeding as well. Include painted buffers on right leaning curves to guide vehicles to stay in their lanes rather than hugging the curve where visibility is low and a slower moving bicyclist may be. Include bike passing lanes on uphill's where possible. Add "Bikes have full use of lane" signage. Place "Watch Your Speed" message with three thermoplastic bars preceding the intersections of Crystal Springs Rd. and Glass Mountain Rd. (high crash histories) Could the "yield" at Sanitarium and Deer Park be a "stop" instead? Especially if it was moved back some, allowing for cars to regain speed as they merge with fast moving traffic?	512 Sanitarium Road, Deer Park, California 94574, United States	0	1
Bicycling	Wish	Given speeds, could Deer Park Rd between Silverado Trail & SR 29 be upgraded from Class II? High speeds and volumes; connecting road between Angwin communities and St. Helena;	Deer Park Road, St. Helena, California 94574, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		connection between Silverado Trail/SR 29/Vine Trail			
Bicycling	Wish	Let's propose some facility on this road	500 Kortum Canyon Road, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Petrified Forest Rd: This is ridden frequently. Upgrade to "Bike Route (Class III)" and add bicycle detection signal - and especially given that the County segment calls for a Bike Route.	933 Petrified Forest Road, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Extend Cedar Class III bike boulevard to Lincoln	1402 Cedar Street, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Recommended bike lanes on Grant St should connect to Lincoln via Stevenson or Wappo via Class IIIs	1408 Grant Street, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Fill gap on Myrtledale Rd between existing bike facilities and proposed facilities on Grant. Also, existing facility on Myrtledale appears to be Class III bike route (as of May 2024 on Google Maps), not Class II bike lanes?	3032 Myrtledale Road, Calistoga, California 94515, United States	0	0
Bicycling	Wonder	There has been much discussion of a Class I from Oak Ave terminus at Mitchell to I believe Grayson Ave. Why is that not included in this plan, at least as a study? Would be an invaluable SRTS route.	1111 Oak Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	Add a Class I down College Ave given schools & apartments but lack of ability to add bike lanes. Widen existing sidewalk to accomplish.	882 College Avenue, St. Helena, California 94574, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wonder	Fully connect Valley View St Class III with existing Class II.	945 Valley View Street, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	Being realistic about Allyn & Hudson. Pretty sure the city just repaved Allyn and put down sharrows. With residences, I doubt parking will be removable. Perhaps better to make it a Class III bike boulevard with traffic-calming? These are neighborhood streets that should be slowed down anyway. People do use them as cut throughs to get offspring.	1329 Allyn Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wish	Vine Trail along Oak/Adams is marked Class I – while it is part of the VT, it will not be a Class 1 facility. Will Vine Trail alignment have a unique color designation in final plan like it did in the last Bike Plan? That would be helpful to identify Vine Trail alignment (existing & proposed) apart from other facilities.	1304 Oak Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wish	Pope from Main to Allison needs improvement. Mark as study corridor if nothing else.	1024 Pope Street, St. Helena, California 94574, United States	0	0
Bicycling	Wish	Fill gap on Madrona Ave from Oak to Main. Include bike facilities on Fulton from Main to VT	1220 Madrona Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wish	Fill gap on Oak Ave between Madrona and Adams, likely with Class III bike boulevard	1477 Oak Avenue, St. Helena, California 94574, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	SR 29 undercrossing at California Boulevard – connections between town, Vine Trail, and the Veterans Home Desired improvement: SR 29 on/off ramps where Vine Trail crosses: high-visibility crosswalks with green conflict markings, signage warning drivers of bicyclists/pedestrians ahead on off-ramps, shorten crossings/narrow ramps to improve visibility/crossing Class II bike lane eastbound connecting Vine Trail to Class II heading into downtown Yountville. Conflict markings at on/off ramps	California Drive, Yountville, California 94599, United States	0	0
Bicycling	Wish	Extend Washington bike boulevard to Madison intersection	2 Burgundy Way, Yountville, California 94599, United States	0	0
Bicycling	Wish	Old Sonoma Road: Add buffers to Class IIs from City limits to bridge - tons of speeding in the eastbound lane, just ask NPD.	2707 Old Sonoma Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Create bikeable ways to access the River Trail between Trancas and Lincoln, perhaps near Elk way (I believe the path there is closed off), and one spot further south.	2712 Elks Way, Napa, California 94558, United States	0	0
Bicycling	Wish	Upgrade to Class II s between Browns Valley Rd. and Browns Valley Rd. There is plenty of space and this would increase consistency and connectivity between the other upgrades. Also, add conflict markings and	Partrick Road, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		upgrade the interchange on eastbound Partrick as it merges into Browns Valley.			
Bicycling	Wish	Extend proposed Class I along the river at the Oxbow entirely	600 1st Street, Napa, California 94559, United States	0	0
Bicycling	Wish	Dry Creek Rd: Upgrade to parking protected Class IVs on the east side of the street and to Class IIbs on the west side. This is a very popular recreational route and there are both few driveways and plenty of space on the road. Guessing vehicle volume is low-ish, but speeds can be high.	2076 Dry Creek Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Upgrade at the very least to Class IIs, given speeds/volumes and route to school, and popular recreational route.	1000 Buhman Avenue, Napa, California 94558, United States	0	0
Bicycling	Wonder	Shurtleff was recommended for Class IIs in last bike plan. Why is it downgraded now to Class IIIs?	2087 Shurtleff Avenue, Napa, California 94559, United States	0	0
Bicycling	Wonder	Terrace was recommended for Class IIs in last bike plan. Why is it downgraded now to Class IIIs?	1002 Wyatt Avenue, Napa, California 94559, United States	0	0
Bicycling	Wish	Silverado Trail is complicated, but it needs to be better than a Class II to be low stress based on speeds/volumes. We realize any bike facility would be a long-shot, but a bi-directional Class IV or a Class I (or a combo of the two) are the correct facilities, and likely would not cost more than a Class II anyway. The plan should reflect the appropriate facility, even if it is a long-shot.	1608 Silverado Trail, Napa, California 94559, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	East Ave will need some serious traffic-calming to function as a Class III.	1412 East Avenue, Napa, California 94559, United States	0	0
Bicycling	Wonder	Montecito Blvd – Would a Class II uphill and Class III downhill be possible? (Lakeview to East). Busy street, route to school, provide space for bicyclists going uphill.	124 Montecito Boulevard, Napa, California 94559, United States	0	0
Bicycling	Wish	Area of resorts – Meritage (which also does events), Vista Collina, Vino Bello – create a low stress bikeway on Napa Valley Corporate Drive between Bordeaux Way and Anselmo Court to connect visitors/event goers to Class I network.	2779 Napa Valley Corporate Drive, Napa, California 94558, United States	0	0
Bicycling	Wish	James Diemer Drive: Upgrade whole road to Class IIb. Even though speed limit is low, we believe speeding is still common.	James Diemer Drive, Napa, California 94558, United States	0	0
Bicycling	Wonder	SR 221 South of Soscol: We would like to better understand why both a Class I and a Class II is proposed. A class IV would be the appropriate on-street facility, or Class IIb's with rumble strips at the very least.	2100 Napa-Vallejo Highway, Napa, California 94558, United States	0	0
Bicycling	Wonder	Does proposed Class I adjacent to W Imola Ave between the River and Soscol actually connect to the VT? It should if not.	949 West Imola Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	1st Street: We strongly recommend signage on 1st near California instructing cars to move into the left lane when bikes are present. From Seminary to Main, we request that 1st Street have Class III signage and sharrows added - this is already a	1242 1st Street, Napa, California 94559, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		pretty traffic-calmed area, but the wayfinding and instruction for bicyclists to take the lane (especially for visitors biking to downtown) would help reinforce sharing the road. Class II bike lanes should be added from Main across the 1st Street bridge to connect to proposed Class IIs east of Soscol. (Westbound transition at Main from Class II bike lanes and Class III bike boulevard would need to be clearly marked).			
Bicycling	Wish	Extend Beard Rd Class III to Trancas	3245 Beard Road, Napa, California 94558, United States	0	0
Bicycling	Wish	Complete Yajome bike boulevard to Lincoln (both north and south of Lincoln)	2223 Yajome Street, Napa, California 94558, United States	0	0
Bicycling	Wish	Lincoln Ave - Include Class IVs where feasible.	966 Lincoln Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	Complete Pearl St bike boulevard to Vine Trail	968 Pearl Street, Napa, California 94559, United States	0	0
Bicycling	Wish	A clearer/wider entry from Main/West to Oxbow Commons would be really helpful. Very awkward how it is now and also a tight squeeze with pedestrians where it's next to the parking lot wall	1122 Main Street, Napa, California 94559, United States	0	0
Bicycling	Wonder	Oak St bike boulevard seems very short – why doesn't it extend to California, or at least to Jefferson along the park?	1581 Oak Street, Napa, California 94559, United States	0	0
Bicycling	Wonder	Pine from Walnut to Coombs is an important east-west corridor, especially given schools – make Class III bike	1788 Pine Street, Napa, California 94559, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		boulevard, if not the entire way, then especially from Seminary (where one bike boulevard abruptly ends) to Coombs (a well utilized route to school that needs bulbout for pedestrians as well).			
Bicycling	Wonder	In NVTA Imola plan, there are on-road facilities for the east segment as well as the Class I proposed, but not seeing the on-road facilities here.	1032 Imola Avenue, Napa, California 94559, United States	0	0
Bicycling	Wonder	Could Freeway Drive be upgraded? It's narrow south of Laurel but it's high stress as is. This would also be a good candidate for a bidirectional Class IV, with no driveways on the Freeway side. Traffic calming is needed on this road, especially if Class IVs are not implemented.	359 South Freeway Drive, Napa, California 94558, United States	0	0
Bicycling	Wonder	Could West Lincoln be Class II until road narrows? Could road be widened around the bend? This is a pinch point on a route to school. Speed limit is 30, high volumes. Could Lincoln overpass be upgraded? High volumes & speeds.	2085 West Lincoln Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	Solano Ave (Redwood to Lincoln) needs improved facilities, as current Class IIs are substandard in areas and not low stress given speeds and volumes. A bi-directional cycle track on the east side seems like a good option. If not feasible, then work especially hard to install a bidirectional Class IV from the Vine Trail connection on Soscol to where the VT picks	3331 Solano Avenue, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		up on the north side of Redwood on Soscol.			
Bicycling	Wonder	This proposed Class I along the Butler Bridge does not connect to bicycle facilities on either side. What is the purpose of this isolated segment of Class I?	California Highway 12, Napa, California 94558, United States	0	0
Bicycling	Wonder	Add Class III bike boulevard on Pinewood Dr for connectivity in proposed bike boulevard network.	2850 Pinewood Drive, Napa, California 94558, United States	0	0
Bicycling	Wonder	Extend Partrick Rd Class II west to Tall Grass Dr to connect bike lanes to more neighborhoods	1022 Partrick Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	Byway East - Add Class II lanes? With few crossings to Vine Trail, bicyclists may need to travel here when heading east of highway. Or maybe just Monarch to El Centro.	California Highway 29, Napa, California 94558, United States	0	0
Bicycling	Wonder	Why not extend Baxter Ave Class III bike boulevard to Trancas? Seems that's where traffic-calming and bike facilities would be really helpful given traffic ingress/egress	3432 Baxter Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	Old Soscol Way – needs to be upgraded. There's already a lot of red zones and unnecessary parking lots (everything here has parking lots).	3300 Old Soscol Way, Napa, California 94558, United States	0	0
Bicycling	Wish	Identify Soscol Ave as study corridor all the way not just south of 3rd. The whole road is appropriate for Class IVs.	796 Soscol Avenue, Napa, California 94559, United States	0	0
Bicycling	Wish	Would love to see Class 1 from the 5-way to the Middle School.	Tulocay Drive, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	Extend Trower recommended Class IV to Dry Creek Rd., especially on the south side of the road. At least Class IIb to east terminus of Trower on east side. Achieve by narrowing vehicle lanes? Why not plan for Class IV to Big Ranch Rd with road extension?	4001 Pinot Drive, Napa, California 94558, United States	0	0
Bicycling	Wonder	The parts of Flosden Road where the path is not at least the minimum 8 feet should not be marked as existing Class I.	2555 Flosden Road, American Canyon, California 94503, United States	0	0
Bicycling	Wish	Class IIs on American Canyon Road on either side of the SR 29 are not safe or comfortable. Those segments need to be upgraded. We strongly believe we can get a Class IV or Class I through the whole stretch, especially with the upcoming roundabout project with SR 29. At least designate as a study corridor for bike facility upgrades.	3331 Broadway Street, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Consider adding a bike network connection between the Class I on Rolling Hills Drive and Donaldson Way East via Rolling Hills Drive. Maybe just a Class III bike boulevard	403 Rolling Hills Drive, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Recommended Class I on Rolling Hills Drive that connects to SR 29 via S Napa Junction Road was a recommended Class I all the way through in last Bike Plan. Now that connecting segment on S Napa Junction Road is a rural Class III. That's not low stress at all, and arguably on the busiest section of the road, since	163 South Napa Junction Road, American Canyon, California 94503, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		people will be entering/existing highway. Restore Class I connection.			
Bicycling	Wonder	With installation of Class I paths on SR 29, the existing Class I that runs along American Canyon Creek and currently ends at Banbury Way should be extended to connect to the SR 29 Class I. Class I connections between adjacent neighborhoods and cul-de-sacs should also be considered to maximize direct connections to Class Is and encourage bike/ped travel, especially in southwest quadrant of AmCan where there are many adjacent neighborhoods	156 Hartford Ct, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Danrose Dr from SR 29 to Class I path should be a Class III bike boulevard, not rural bike route. Busy with traffic due to Safeway plaza. You could also remove parking from the west side of the street (no houses facing that way) and maybe have room for Class IIs.	824 Danrose Drive, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Add Class III bike boulevards on Chaucer Ln and/or Hummingbird Way? Would be helpful for students biking to middle school.	640 Chaucer Lane, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Extend recommended Class IV on W American Canyon Road to SR 29. At the very least, add buffers and continue bike lane all the way to the intersection. No bike facilities through this high-injury intersection is really not acceptable.	109 West American Canyon Road, American Canyon, California 94503, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wonder	Add Class III bike boulevard along Crawford Way from SR 29 to Elliott Drive – especially due to new Crawford Way Apartments project coming in	219 Crawford Way, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	W. Donaldson Way as a recommended Class III bike boulevard west of the highway is a downgrade from last Bike Plan, where it was recommended Class II, which would be more appropriate given volumes. Also recommended facility does not connect with existing Class IIs, so fill that gap. Space is tight here but it's very busy and too busy to be a shared corridor for all ages and abilities. Maybe remove one side of parking and create a Class I on one side.	231 West Donaldson Way, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Why is this plan recommending a Class III bike boulevard on Donaldson Way where there is an existing Class II? This is a downgrade from the last Bike Plan and what's already existing.	905 Donaldson Way, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Also included in Ped Plan – but the gaps in the Class Is along SR 29 on both sides around Eucalyptus Dr to Napa Junction Rd should be filled. Big connectivity issue, seems really odd to keep a gap.	3945 Broadway Street, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Theresa Ave (Napa Junction Rd to Eucalyptus Dr) was a Class II in the last bike plan but is now a Class III bike boulevard. Why the downgrade?	97 Theresa Avenue, American Canyon, California 94503, United States	0	0
Bicycling	Love	A bike path across the creek here would be really great in increasing connectivity.	1120 Linda Vista Avenue, Napa,	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
			California 94558, United States		
Bicycling	Wonder	There are no bike lanes on Congress Valley, yet the map is showing them as complete. It would be great to show them as proposed.	1195 Congress Valley Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	Again, there are no bike lanes on this road.	2280 Buhman Avenue, Napa, California 94558, United States	0	0
Bicycling	Wonder	There are no bike lanes currently on the County portion of Buhman, but Class IIs would be great. Change to proposed, rather than current.	1310 Buhman Avenue, Napa, California 94558, United States	0	0
Bicycling	Wish	We need a bike lane on the street. Calistoga elementary school encourages the community to walk or bike to school. We need a safer route for children to bike.	1406 4th Street, Calistoga, California 94515, United States	0	0
Bicycling	Wonder	I used to ride my bike on Magnolia Drive daily, to get to Napa Valley College. It was a safe and pleasant alternative to the disasters that are Imola and Soscol Avenues. Magnolia has been closed since (I think) the COVID pandemic. Why can't it be reopened to walkers and cyclists?	Spruce Drive, Napa, California 94559, United States	0	0
Bicycling	Wish	There needs to be some sort of warning system here that cyclists are biking here. It is a windy segment of road without any advance warning.	650 Petrified Forest Road, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Wish the new Bv bike lanes connect through here or the adjacent alleyway to downtown.	1439 E Street, Napa, California 94559, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Transit	Love	Love Love LOVE the BART Connector bus to get to the Airport. Please make this a 7-day service, and include late nights so we can get back home after an evening landing! Also, express service to the Vallejo Ferry on weekends (but 7-day BART service first please).	1900 West Imola Avenue, Napa, California 94559, United States	0	0
Walking	Wish	It would be amazing if there was a foot/bike crossing over 29 connecting both ends of Laurel St. that could serve as a quick route from the Fuller Park area to the outlets and Browns Valley, but also from Westwood to downtown.	California Highway 29, Napa, California 94559, United States	0	0
Bicycling	Love	The undercrossing is amazing, it's a great shortcut and the mural under the bridge is super cool. More safe crossings of Highway 28 please!	California Highway 29, Napa, California 94559, United States	0	0
Bicycling	Wish	Better signage/wayfinding for northbound riders on the Vine Trail. I regularly get asked at this junction by people "how do I get to the trail?" when they come out onto Trancas.	2005 Redwood Road, Napa, California 94558, United States	0	0
Bicycling	Wish	I think more parents would feel comfortable letting their kids' bike to school (so many benefits to this) if Washington street was safer to bike on. The road is rough and there is no clear designation for bikes.	1605 Washington Street, Calistoga, California 94515, United States	0	1
Walking	Wish	The City has had a plan to put in a walking path on this stretch of Grant Street for so long, but there are been very little movement. So many	2032 Grant Street, Calistoga, California 94515, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		residents walk along this stretch with young children, elderly, strollers, and pets. As it is, it is very unsafe how close these walkers are to the traffic that is often speeding.			
Bicycling	Wish	The B&G club often leaves their trash, green waste, and recycling bins out in the bike line for 3-4 days at a time instead of just on garbage day. Can NVTA help communicate this issue to their staff?	1409 Lake Street, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Please add sharrows along Washington St. because cars are constantly trying to pass around bikes when they do not have the room to do so and it's a dangerous stretch for bikes. Especially since so many small children bike to school along this route.	1509 Washington Street, Calistoga, California 94515, United States	0	1
Bicycling	Wonder	Should there be a bike facility on Corporate Way that connects to the future bike path on 221?	875 Napa Valley Corporate Way, Napa, California 94558, United States	0	0
Bicycling	Wish	There used to be an idea for an improved connection between Old Sonoma and Duhig Road. Add that back - this is a popular and unsafe area to cross.	Carneros Highway, Napa, California 94559, United States	0	0
Bicycling	Wish	Add a bike facility on Cartegena Way that connects to the green line (bike path) to the east.	Cartagena Way, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Why not route this on D Street on the alley?	1616 E Street, Napa, California 94559, United States	0	0
Bicycling	Love	I'm looking forward to the improvements here.	760 Lincoln Avenue, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Walking	Love	Love this for both biking and walking.	876 Water Street, Napa, California 94559, United States	0	0
Bicycling	Wonder	This is a very uncomfortable route for biking. Car traffic is very fast, and the pavement is irregular.	1064 Imola Avenue, Napa, California 94559, United States	0	0
Walking	Wonder	The school has paved over where the sidewalk ought to be, prioritizing drivers over those on foot.	1210 Shetler Avenue, Napa, California 94559, United States	0	0
Walking	Wish	Crossing from the east side of Shurtleff to Camille Park on foot feels dicey. There's poor visibility if you cross at the southernmost park entrance, and walking to the Seville Dr intersection often requires stepping into the road to avoid parked vehicles.	1948 Shurtleff Avenue, Napa, California 94559, United States	0	0
Bicycling	Wish	This is an uncomfortable left turn.	850 West Imola Avenue, Napa, California 94559, United States	0	0
Bicycling	Love	The bike lanes are a huge improvement for cross town traffic in South Napa.	950 West Imola Avenue, Napa, California 94559, United States	0	1
Walking	Wish	The inconsistent sidewalks here make it difficult to safely walk to Target and Raley's.	1026 Shetler Avenue, Napa, California 94559, United States	0	1
Walking	Wish	I frequently walk this block and there is no safe place to walk except the school parking long.	2098 Imola Avenue, Napa, California 94559, United States	0	0
Bicycling	Wonder	This should probably be a Class III Bike Route, not a Bike Boulevard, as it is a very rural area.	698 Las Posadas Road, Angwin, California 94508, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	The Silverado Trail between Pope Street and Deer Park Road, through "the narrows" is not a Class II Bike Lane. The bike lane it is too narrow. This is because the road is not striped properly. I have met with the County on site and commented ad nauseam on past bike plans. This is a dangerous misrepresentation of the conditions on the ground. If this is not revised for this plan, I will recommend to the St. Helena City Council that they not adopt the plan. I have provided photos of the issues for the last 20+ years and if you need photos again, I can provide them in a week. Please get on your bike and ride this section, both north and south!	1730 Silverado Trail North, Deer Park, California 94574, United States	0	0
Bicycling	Love	The speed cushions on grant St. have been amazing at slowing down traffic without forcing bikes to go over a speed bump as well.	2102 Grant Street, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Biking with my kids to school in the morning, this right turn is always scary because there isn't enough room for bikes to fit in-between the cars and the curb.	1507 Washington Street, Calistoga, California 94515, United States	0	1
Bicycling	Wish	Anonymous22 October, 2025 Comment I wish UVDS and the Town of Yountville would manage to near-zero UVDS bins in the bike-lanes through Yountville. My recommendation is that UVDS does not pick up bins that encroach on the bike lane.	6772 Washington Street, Yountville, California 94599, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	Anonymous22 October, 2025 Comment I wish UVDS and the Town of Yountville would manage to near-zero UVDS bins in the bike-lanes through Yountville. My recommendation is that UVDS does not pick up bins that encroach on the bike lane.	2041 Madison Street, Yountville, California 94599, United States	0	0
Other	Wish	I wish for a Flashing Light crosswalk for our veterans who walk, cycle and use other active transportation modes.	California Drive, Yountville, California 94599, United States	0	0
Other	Wish	I wish for a Flashing Light crosswalk for our veterans who walk, cycle and use other active transportation modes.	California Drive, Yountville, California 94599, United States	0	0
Other	Wish	I wish for a Flashing Light crosswalk for our veterans who walk, cycle and use other active transportation modes.	1 California Drive, Yountville, California 94599, United States	0	0
Bicycling	Love	Hurray for Bike Route (Class III)	6761 Jefferson Street, Yountville, California 94599, United States	0	0
Bicycling	Wonder	I wonder about the utility of this Bike Route (Class III). Consider extending it to the north to meet the Shared-Use Path (Class I) at the end of Heritage Ct. Seems like a path to nowhere, but perhaps it's the provided bike route to keep bikes off the parallel Shared-use Path (Class I)?	6488 Heather Street, Yountville, California 94599, United States	0	0
Bicycling	Wish	I wish there was no private parking at the former Bordeaux House 20' from the NE corner of this intersection.	2015 Webber Avenue, Yountville, California 94599, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Walking	Wish	I wish there were no parking 20' from the NE corner of this intersection.	2161 Pedroni Street, Yountville, California 94599, United States	0	0
Bicycling	Wonder	I wonder if there is sufficient Yount St road width for a Class III Bike Route, parking on both sides and sidewalk on both sides. This stretch does not seem very safe for cyclists currently. And where are the UVDS bins supposed to be staged?	6537 Yount Street, Yountville, California 94599, United States	0	0
Bicycling	Wish	California Drive is one way between the Security Station and California Circle. I wish this bike trail would be established in both directions. Currently it maps only the direction from the Vet's Home toward HWY29. It needs to run on the other part of the "Y" too.	798 California Drive, Yountville, California 94599, United States	0	0
Bicycling	Wish	I wish for a bike lane free of plant growth. Plants (mostly blackberries?) growing up into the 3D bike-lane space.	1707 Yountville Cross Road, Napa, California 94599, United States	0	0
Bicycling	Wish	I wish this path were well labeled as Shared-Use by stenciling the bike path symbol on the path or some signs that signal which side to walk and which side to cycle.	9 Ghirardi Place, Yountville, California 94599, United States	0	0
Bicycling	Wish	I wish UVDS and the Town of Yountville would manage to near-zero UVDS bins in the bike-lanes through Yountville. My recommendation is that UVDS does not pick up bins that encroach on the bike lane.	6787 Jefferson Street, Yountville, California 94599, United States	0	0
Bicycling	Wish	I wish for rumble strips adjacent to Hwy29 between Madison and North Washington.	Saint Helena Highway, Yountville, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wonder	I wonder if there is precedent for a diagonal-across-the intersection crosswalk being safer than two right angle crosswalks. I understand it directs westbound cyclists to the Vine Trail. It seems to increase risk and decrease confusion.	6770 Washington Street, Yountville, California 94599, United States	0	0
Bicycling	Wish	Would love to see sharrows on Main St to reinforce cyclists right to share the roadway	1277 Main Street, St. Helena, California 94574, United States	0	0
Bicycling	Love	Would love to see a designated north south shared use Class I path to get through town. To cross town on a bike on School, Randolph, Main streets you have to cross 1st, 2nd and 3rd which are not stop controlled	929 Parkway Mall, Napa, California 94559, United States	0	1
Bicycling	Love	CalTrans needs to widen HWY 121 from Atlas Peak to Silverado. With bike lanes.	1215 Monticello Road, Napa, California 94558, United States	0	0
Bicycling	Love	The County needs to crack seal and blade patch Hagen Road, from Silverado to 3rd. Ave. Also tree trim just east of Silverado on the North side.	1225 Hagen Road, Napa, California 94558, United States	0	0
Bicycling	Love	The city needs to crack seal the whole section of Dry Creek from Redwood Road to the County section. Also, pothole patch the holes also.	1400 Dry Creek Road, Napa, California 94558, United States	0	1
Bicycling	Love	Pueblo should have bike lanes from Beard to Soscol. Also, at the intersection of Pueblo and Yajome the city should build curb extensions, because of all the kids walking to school.	1540 Menlo Avenue, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Love	There should be rumble strips on Silverado from Trancas to Sage Canyon Road.	2921 Silverado Trail, Napa, California 94559, United States	0	0
Bicycling	Wish	The City should change this section of Redwood from Dry Creek to Solano to one lane in each direction, with buffered bike lanes, with a turn lane in the middle. Traffic volume is low with high rate of speed.	3325 Baywood Lane, Napa, California 94558, United States	0	1
Bicycling	Wonder	There are existing Class II bike lanes on Kimberly Drive, not a Class I path	316 Kimberly Drive, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Existing Class II bike lanes on Donaldson Way East & Shenandoah not shown on map	Shenandoah Drive, American Canyon, California 94503, United States	0	0
Bicycling	Wonder	Public comment from St Helena Harvest Festival - How realistic or valuable would a Class I be on Starr, vs buffered bike lanes?	1171 Starr Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	What is the intent for the yellow study corridors? Are they for future improvements to be determined based on needs?	1712 Hemlock Street, Napa, California 94559, United States	0	0
Bicycling	Wish	The Jefferson Street corridor has public schools capping it at the north and south end, with businesses all along it, yet no continuous safe bicycle route. This should be a focus area.	3244 Jefferson Street, Napa, California 94558, United States	0	0
Bicycling	Wonder	Wonder if we could get buffered or even protected bike lanes on Airport - it's SOOO wide and people drive fast.	1555 Airport Boulevard, Napa, California 94558, United States	0	0
Bicycling	Wish	I wish Oak Knoll was safer for cyclists. It is narrow, no	Oak Knoll Avenue, Napa, California 94558, United States	0	1

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		shoulder, lots of traffic and to top it all off - A ditch!			
Walking	Wonder	Why isn't their a crosswalk and pedestrian blickey lights from the D street alley to the bike path under the freeway?	1075 California Boulevard, Napa, California 94559, United States	0	0
Bicycling	Wonder	Lincoln, by the high school has no bicycle infrastructure. Students would be risking their lives to try to ride to school. Lincoln, by The Hub has no bicycle infrastructure. People risk their lives if they want to ride a bike to the bike shop. Ridiculous	2505 Jefferson Street, Napa, California 94558, United States	0	2
Bicycling	Wonder	How will this intersection be made safer for cyclists crossing the highway to get onto Duhig Rd?	5400 Old Sonoma Road, Napa, California 94559, United States	0	0
Bicycling	Wonder	Crane Ave was recently repaved, not sure status on striping. Will be traffic-calmed Class III from Grayson to roughly the tennis courts and then Class II the rest of the way to Sulphur Springs	347 Crane Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	Hard to tell what's going on for recommendations on Grayson (even zoomed in they overlap too much), but Grayson was repaved and has Class IIs on the west end and Class IIIs that start at the baseball field.	1644 Grayson Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	Why is there both proposed and existing Class IIs marked on Silverado Trail in this area?	4600 Silverado Trail, Calistoga, California 94515, United States	0	0
Bicycling	Wonder	No existing Class II bike lanes on Grant St	1628 Grant Street, Calistoga, California 94515, United States	0	0
Bicycling	Wonder	Lake from Grant to Silverado Trail does not have existing Class II bike lanes. City is currently doing a repaving	1814 Lake Street, Calistoga, California 94515, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		project - not sure the status, but it will likely include a Class II one way and Class III the other way.			
Bicycling	Wonder	Existing bike lanes end closer to Fisher St - do not extend all the way to Fair Way.	1513 Lake Street, Calistoga, California 94515, United States	0	0
Bicycling	Wonder	Dangerous RR crossing here with exposed rails and potholes very close to access of the Vine Trail. Have the Vine Train to the repairs for the damage their trains caused.	816 Vallejo Street, Napa, California 94559, United States	0	1
Bicycling	Wonder	Huge problem of broken asphalt and potholes at the RR tracks crossing in north and south direction. Only 1 of 3 crossing has good concrete support. This is dangerous for bikes and cars. The Vine Train seems to have money to repair the crossings and should be obligated to fix the damage their trains caused.	710 Soscol Avenue, Napa, California 94559, United States	0	1
Bicycling	Wonder	There are dangerous potholes on the eastbound side of the street that are shaded by shadows from vegetation. Please repair the potholes.	3101 Old Sonoma Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	Why not add striping for a bike lane through the state park?	3535 Saint Helena Highway, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	Lincoln Ave. is a disaster for bikes. Cars are pulling in/out of diagonal spaces. Suggest parking lots for cars and have the state highway folks add protected bike lanes downtown. It will help business.	1467 Lincoln Avenue, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Provide a signal button or proximity detector for bike	4606 Oak Knoll Avenue, Napa,	0	2

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		crossing the highway. Also, keep the intersection free of loose gravel.	California 94558, United States		
Bicycling	Wonder	Improve signals at the entrance to the shopping center. Cars going west turning into the shopping center often block westbound Trancas for bikes.	3350 California Boulevard, Napa, California 94558, United States	0	0
Bicycling	Wonder	Make this intersection easier to navigate from the Vine Trail across 2 freeway onramps. Remove signposts from bike lanes.	6770 Washington Street, Yountville, California 94599, United States	0	0
Bicycling	Wonder	The developer is obligated to provide part of this connection. Now, the only connection between the Costco center/housing and downtown Napa is on the crowded highway. This is a much-needed economic development issue for the City of Napa.	1060 Kaiser Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	This route through recently paved Kennedy park is an embarrassment. Seems not to be a priority for the Parks Department or Public Works, yet it is a high use bike and walkway. Find the funds and make it happen.	1 North Newport Drive, Napa, California 94559, United States	0	1
Bicycling	Wish	Cycling here is on curvy sidewalk. Why not add a bike lane and provide access through speed bumps for bikes.	252 Wetlands Edge Road, American Canyon, California 94503, United States	0	0
Bicycling	Wish	Bumpy asphalt now being repaired. Add bike lane.	507 Green Island Road, American Canyon, California 94503, United States	0	0
Bicycling	Wish	Only west side of the street has smooth paving. East side need paving now.	1141 4th Avenue, Napa, California 94559, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	Cars waiting to pick up school kids block the curb in the afternoon making passage difficult for cyclists going east and uphill.	1001 Little Street, Napa, California 94558, United States	0	0
Bicycling	Wish	Improve pavement on 3rd Avenue.	1093 2nd Avenue, Napa, California 94558, United States	0	1
Bicycling	Wish	Visibility at this intersection is poor for bikes and cars turning right block cycling access to a right turn. Add bike lane.	2006 Silverado Trail, Napa, California 94558, United States	0	2
Bicycling	Wish	There is no way for bicycles to trip the light to change for a left turn onto Trancas. Install a proximity trip for the traffic light soon.	2035 Silverado Trail, Napa, California 94558, United States	0	3
Bicycling	Wish	This trail is in terrible shape; ruts can cause bikes to get caught. Tired of waiting for the Flood Control people to do something. Patch and repair is needed now.	10 Towpath Drive, Napa, California 94558, United States	0	1
Bicycling	Wish	Difficult to cross here at signal. Need crosswalks and signal enhancements.	407 Soscol Avenue, Napa, California 94559, United States	0	0
Bicycling	Wonder	Silverado Trail has no apron, cycling in dangerous. Suggest curbs and a bicycle land separate from vehicle lanes.	1860 Silverado Trail, Napa, California 94558, United States	0	3
Bicycling	Love	As a Napa resident who commutes to Devlin (near Airport), adding an alternative to as much of Devlin as possible would make me feel much safer. Devlin as a workaround to avoid the highway gets very fast (sometimes reckless) drivers on a road with sometimes narrow shoulders with gravel/trash. Traffic calming of some kind on Devlin could also help.	1221 Soscol Ferry Road, Napa, California 94558, United States	0	3

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Love	Connecting downtown Napa to Napa Valley Corporate Drive, Devlin, etc. would be hugely beneficial for Napa residents to be able to commute to work by bicycle.	1060 Kaiser Road, Napa, California 94558, United States	0	1
Bicycling	Wish	No shoulders on Silverado Trail in section from Hagen south to "M" resort.	1878 Silverado Trail, Napa, California 94558, United States	0	2
Bicycling	Wonder	How often are crews going to replace the poles that vehicles keep knocking down? Seems like an ever-losing battle that could be better managed with bike lane divider bumps. Also, when will the police do speed checks on Imola bridge? Most vehicles are doing 45-50mph when it's 35mph limit.	West Imola Avenue, Napa, California 94559, United States	0	0
Bicycling	Love	Thank you for repaving this section and adding dedicated bike lanes.	2701 Soscol Avenue, Napa, California 94558, United States	0	1
Bicycling	Wish	Please pave the remaining few meters so cyclists can connect to Lincoln without having to go over crushed gravel and/or through RiverPointe.	Burrows Court, Napa, California 94558, United States	0	2
Driving	Wish	Is this going to be a roundabout? I often see vehicles speeding through yellow/red lights.	801 Silverado Trail, Napa, California 94559, United States	0	1
Bicycling	Wish	This section has narrow shoulders + turns + blink hill = dangerous cycling. Any help is appreciated to prevent a collision.	4207 Old Sonoma Road, Napa, California 94559, United States	0	1
Bicycling	Wish	Every cyclist knows the middle section of Partrick is VERY dangerous to descend. Why did the bottom and top	Partrick Road, Napa, California 94558, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		get repaved (thank you) but not the middle?			
Bicycling	Wish	One section of the westbound bike lane has protruding vegetation, requiring cyclists to veer into westbound vehicle lane.	3055 Old Sonoma Road, Napa, California 94558, United States	0	1
Driving	Wish	Pavement in this intersection has significant holes. Franklin south of this intersection has already been repaved; this and the few blocks north need to be included.	295 Franklin Street, Napa, California 94559, United States	0	0
Bicycling	Wish	Has anyone explored building hiking and mountain biking trails on this unused land NE of the existing Skyline trails?	Napa, California 94558, United States	0	0
Bicycling	Wish	This section seriously needs repaving. Recently there was patchwork to fill the parallel cracks but that is an insufficient repair. Bicycles with narrow tires are still in danger, and traveling via skateboard or inline skates is nearly impossible given the very rough surface.	1 North Newport Drive, Napa, California 94559, United States	0	1
Bicycling	Wonder	Similar to existing comment, cycling south through the double roundabout is fine, but coming back north requires crossing over both Hwy 221 lanes from the left to the right. Whether that's possible depends on the amount of traffic, but some cyclists would never even dare this maneuver. Whoever planned the double roundabout should have shared the blueprints with a cyclist before moving forward.	Napa-Vallejo Highway, Napa, California 94558, United States	0	0
Bicycling	Wish	No defined bike lane or solid white line striping makes for dangerous cycling on these	Devlin Road, American Canyon,	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		turns, especially with large trucks.	California 94558, United States		
Bicycling	Love	This probably one of the most dangerous places routinely ride. Riding west from Dry Creek to Lynn Dr there is no shoulder. Cars are often very impatient and try to pass even when they can't see oncoming traffic around the corner. Coming east, there are huge potholes that are very dangerous	2855 Redwood Road, Napa, California 94558, United States	0	1
Bicycling	Love	This road is in terrible condition. Avoiding the potholes and cars at the same time is HARD	1121 Thompson Avenue, Napa, California 94558, United States	0	1
Bicycling	Wish	Many bicycles ride along big ranch, some are with wine tasting touring companies. It is so dangerous people drive so fast on this road. It would be wonderful to have some sort of dedicated safe bike lane. Even walking is extremely dangerous.	2003 Big Ranch Road, Napa, California 94558, United States	0	3
Bicycling	Wish	It would be great if the trees/bushes could be cut back on the bridge. It's a blind spot for both directions. Can't see people, bikes, cars on the bridge before it's to late. Can't see people or bikes coming from the other direction either.	1100 Dunaweal Lane, Calistoga, California 94515, United States	0	1
Bicycling	Wish	Upper dry creek has deteriorated to the point many cyclists have stopped riding it.	5780 Dry Creek Road, Napa, California 94558, United States	0	1
Bicycling	Wish	Intersection is so rough that cyclists move to the center of road to avoid ruts and damaged pavement. Seems to be a safety hazard	7830 Saint Helena Highway, Napa, California 94562, United States	0	4

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Wish	Coordinate with County of Sonoma to extend this to Burndale/12 intersection, and consider adding a HAWK signal to improve safe crossings.	Ramal Road, Sonoma, California 95476, United States	0	0
Bicycling	Wish	Feels like this road is wide enough to provide protected or buffered bike lane, especially if big housing project is going in on the former Harvest school site.	2454 Old Sonoma Road, Napa, California 94558, United States	0	3
Bicycling	Wish	Vine Trail is no longer proposing to go along Devlin, but this road does need better bike lanes. Can road accommodate protected or even just buffered bike lanes? Existing NB lane is often overgrown with weeds.	231 Devlin Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	Clean up this area - tie proposed Class I on SR 221 into existing roundabouts, and connect remaining segment to south side of Soscol Ferry. Remove duplicate Class I on Soscol Ferry Rd.	1020 Soscol Ferry Road, Napa, California 94558, United States	0	1
Bicycling	Wonder	No need to rebuild new Class I path adjacent to County path to detention center, but does need connection from south end of existing to proposed for remaining segment.	2300 Napa-Vallejo Highway, Napa, California 94558, United States	0	0
Bicycling	Love	Another popular bike route that would benefit from better bike lanes. Redwood Rd between Dry Creek & BV Rd is narrow and twisty. Shoulders quickly get obstructed by leaves and debris from trees.	2821 Redwood Road, Napa, California 94558, United States	0	4
Bicycling	Love	Another very popular biking route, more so now that it	1243 Orchard Avenue, Napa,	0	2

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		has been repaved. It would be great to have a Class 2 along it.	California 94558, United States		
Bicycling	Love	This is a very popular biking and walking route. It would be great to have signage & road markings reinforcing this.	1556 Yount Mill Road, Napa, California 94558, United States	0	1
Bicycling	Love	Love to have Class 2 lanes along this downtown by-pass route	1813 Sulphur Springs Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Love	This section is very curvy, and it would be great to have consistent bike lanes along it.	2981 Lake County Highway, Calistoga, California 94515, United States	0	0
Bicycling	Wish	Would love to see Class 2 lanes up to Bennett Lane. Traffic volume is usually pretty light, but there is no shoulder along this section.	3271 California Highway 128, Calistoga, California 94515, United States	0	0
Bicycling	Love	This has been needed for a long time. There are great bike facilities down here on the east and west of Hwy 29, but a giant gap down the middle.	3330 Broadway Street, American Canyon, California 94503, United States	0	0
Bicycling	Love	This would be a great recreational ride. If built, it could be a great attraction for valley visitors, especially with the new resorts in the Carneros area.	3290 Cuttings Wharf Road, Napa, California 94559, United States	0	0
Bicycling	Wonder	Northbound cyclists should never travel on Hwy 29 at this location. Turning onto N. Kelly Rd is a better option, but crossing should have RRFB's, and shoulder of N. Kelly needs to be improved.	1988 North Kelly Road, Napa, California 94558, United States	0	0
Bicycling	Wonder	A Class 3 on Hwy 29?	398 Devlin Road, Napa, California 94558, United States	0	1
Bicycling	Love	This is great. The Soscol Junction is great for cycling	Napa-Vallejo Highway, Napa,	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		south, but there's no safe way to travel north, unless you want to ride on the narrow shoulder against traffic.	California 94558, United States		
Bicycling	Love	This would be great (if it connects to the Vine Trail). Currently, if you're riding east on Imola, you have to negotiate a very dangerous left hand turn onto Gasser Ln to access the Vine Trail.	850 West Imola Avenue, Napa, California 94559, United States	0	3
Bicycling	Wish	Soscol Ave, both north and south, is heavily travelled by bikes and cars. Protected lanes would be great!	2012 Soscol Avenue, Napa, California 94558, United States	0	1
Bicycling	Love	I've been waiting for years to see the River Trail connect to the Oxbow. It provides a safer way to make an upvalley loop utilizing the Vine Trail and the Silverado Trail.	1114 Jordan Lane, Napa, California 94559, United States	0	0
Bicycling	Wonder	I love seeing more Class 1 trails, but don't see this one as very useful. Byway East isn't very bike friendly, so I see this as one of those "bikeway to no-where" scenarios.	1908 Valencia Street, Napa, California 94558, United States	0	0
Bicycling	Love	Would love to see Class 2 lane along here. Will require widening the road, though, as there are ditches along most of the shoulder on both sides.	977 Salvador Avenue, Napa, California 94558, United States	0	1
Bicycling	Love	Would love to see a Class 2 along Oak Knoll. This road gets a lot of bike traffic, including tourists, but has little to no room off of roadway.	1170 Oak Knoll Avenue, Napa, California 94558, United States	0	3
Bicycling	Wonder	Pavement along this section is very poor. Would this proposed improvement include repaving?	1019 Rutherford Road, Napa, California 94573, United States	0	1

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
Bicycling	Love	Would be great to have Class one connector from Hwy 29 & Vine Trail to Silverado Trail	565 Hunt Avenue, St. Helena, California 94574, United States	0	1
Bicycling	Wonder	This was the old proposed alignment for the Vine Trail. Current planned alignment is Class 3 on Oak Avenue.	1055 Crinella Court, St. Helena, California 94574, United States	0	1
Walking	Wonder	Why isn't the little path here recommended to be a full trail?	2126 Madrona Avenue, St. Helena, California 94574, United States	0	0
Bicycling	Wonder	There are fairly recent improvements including buffered bike lanes on parts of Salvador. Update map to show.	1843 Salvador Avenue, Napa, California 94558, United States	0	2
Bicycling	Wonder	Coombsville really needs protected or at least buffered bike lanes. Why no proposed improvements? Please put in bike lane buffer, and protected bike lane near the school.	1069 Coombsville Road, Napa, California 94558, United States	0	3
Bicycling	Wonder	This road shows as proposed Bike Boulevard and as a Study Corridor. Which is it? Suggest BB on southern half, Class I bridge over creek, BB up to Shurtleff, and Study Corridor from Shurtleff to Coombsville.	2011 South Terrace Drive, Napa, California 94559, United States	0	0
Bicycling	Wish	This part of West Lincoln has extremely poor pavement, no sidewalks, and is very dangerous for bicycle riders - especially children trying to get to/from school.	2144 West Lincoln Avenue, Napa, California 94558, United States	0	2
Bicycling	Wonder	I wonder when Calistoga is going to repave this street. It is a major hazard for bikes, cars, first responders, etc...	1418b 3rd Street, Calistoga, California 94515, United States	0	0
Bicycling	Wish	There is a posted sign at Cal-Mart showing no left turn. I wish it was enforced. I've almost been hit in the	1506 Lincoln Avenue, Calistoga, California 94515, United States	0	0

Mode of Transportation	Category	Comment	Address	Down Votes	Up Votes
		crosswalk while walking my bike across and via car on Fair Way while making a right turn onto Lincoln. This whole intersection needs a better review for all types of transportation.			
Bicycling	Wish	Crossing at this intersection to connect back to the trail is very dangerous and has gotten worse with the red light camera in place. Southbound cars don't have a protected left and are watching oncoming traffic to turn which creates a hazard in the crossword. Personally, I have almost been hit 4 times since the red light cam activated while having the crossing signal on and being in the crossword. I'd ask for a review of this intersection and its safety for those utilizing the "car free" vine trail.	3397 Solano Avenue, Napa, California 94558, United States	0	1

Table B.4: Second Interactive Map: Proposed Pedestrian Network Comments

Category	Comment	Address	Down Votes	Up Votes
I Wonder	I know there's been a lot of work on figuring out the Vine Trail alignment between Yountville and St Helena, particularly in this area. Is this alignment up to date?	7391 Saint Helena Highway, Napa, California 94558, United States	0	0
I Wonder	Proposed sidewalk on west side seems duplicative with shared-use path	8572 Saint Helena Highway, St. Helena, California 94558, United States	0	0
I Wish	lets propose some facility here	500 Kortum Canyon Road, Calistoga, California 94515, United States	0	0
I Wish	A sidewalk from this intersection to the Linda Falls trail entrance might be helpful, as the parking area across Howell Mountain Road is a common parking place for people going to Linda Falls.	235 Howell Mountain Road, Angwin, California 94508, United States	0	0
I Wish	Extend recommended sidewalk in front of Howell Mountain Elementary to Toyon St to connect to some of the nearby neighborhoods	510 White Cottage Road North, Angwin, California 94508, United States	0	0
I Wonder	Remove proposed sidewalk lines - do not connect to anything	Silverado Trail North, Deer Park, California 94574, United States	0	0
I Wonder	Remove or explain duplicative proposed Class I. Explain proposed alignment in park where currently it doesn't exist.	Saint Helena Highway, St. Helena, California 94574, United States	0	0
I Wonder	Realign or explain this Class I	1313 Silver Street, Calistoga, California 94515, United States	0	0
I Wish	Fully fill gap with proposed sidewalk	965 Silverado Trail, Calistoga, California 94515, United States	0	0
I Wonder	Extend proposed sidewalk on Grant St to intersection with Stevenson or Wappo where people can cross to existing sidewalk.	1507 Grant Street, Calistoga, California 94515, United States	0	0
I Wonder	What is happening here with this Class I? No existing facilities around there. End of Money Ln seems to be a private driveway.	2080 Mora Avenue, Calistoga, California 94515, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wonder	Why is there both a proposed sidewalk and a proposed Class I on the same side? Should just be the Class I.	2054 Grant Street, Calistoga, California 94515, United States	0	0
I Wonder	Proposed sidewalk along Foothill – why not make it a Class I so bicyclists also have a safe route?	1722 Foothill Boulevard, Calistoga, California 94515, United States	0	0
I Wonder	Does the little path on south side of Pope between Starr and Peppertree really count as a sidewalk? Highly doubt it's ADA compliant, and not sure it should be counted.	576 Pope Street, St. Helena, California 94574, United States	0	0
I Wish	Add a Class I down College Ave given schools & apartments but lack of ability to add bike lanes. Widen existing sidewalk to accomplish.	900 College Avenue, St. Helena, California 94574, United States	0	0
I Wish	Many people walk to/around this area of south St. Helena, especially with V Sattui Winery, wineries along west side, and plaza with Press restaurant/the MAC/Flora Springs. With nearby hotels (Harvest Inn, El Bonita, etc), partial sidewalks in this area, and traffic congestion on SR 29, this area needs to better accommodate pedestrian movement. This will be especially necessary when Vine Trail goes in. Especially needs something for pedestrians to cross at White Lane to get to V Sattui. People run across the highway here all the time currently.	1148 White Lane, St. Helena, California 94574, United States	0	0
I Wish	Crossing improvements needed at Main & Grayson with Mills realignment, given upcoming Farmstead hotel project and Our Town St Helena affordable housing project going in. Crosswalks needed on all four legs of intersection, as well as sidewalk connection to intersection on south side of realigned Mills (on north end of affordable housing project). There should also be a Class I proposed on Mills according to other plans.	501 Main Street, St. Helena, California 94574, United States	0	0
I Wonder	Crossing improvements needed at Vintage Ave with VT installation given walkability from high school and location of pediatrician and orthodontist	1100 Vintage Avenue, St. Helena, California 94574, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wonder	Proposed sidewalk on Main St from existing sidewalk in front of district office to Salvestrin seems not to serve much of a purpose? Unless it's accompanied by SR 29 pedestrian crossing improvements at Dowdell, but that's not clear in this map.	397 Main Street, St. Helena, California 94574, United States	0	0
I Wonder	Sidewalk gap closure in front of El Bonita seems like it doesn't really serve a purpose? Doesn't connect to anything as is, and will be duplicative since that is where the VT is supposed to run.	195 Main Street, St. Helena, California 94574, United States	0	0
I Wonder	Proposed Vine Trail alignment is not correct through the city, and is on the wrong side of Main St in the south of downtown area	1080 Main Street, St. Helena, California 94574, United States	0	0
I Wish	Not sure the gap closure on west side of South Crane should be a priority or if it's feasible. Or if so, maybe just to Vallejo St. Discussion with City Public Works about bike facilities in this area sounded like this part of S Crane is already very constrained - adding sidewalk on the west side seems infeasible and would serve very few past Vallejo St.	375 Crane Avenue, St. Helena, California 94574, United States	0	0
I Wish	Spring Street between Valley View St and Crane Ave: Fill sidewalk gaps	1918 Spring Street, St. Helena, California 94574, United States	0	0
I Wonder	Is sidewalk on south side of Yountville Cross Rd between Yount and Stags View Lane planned with repaving? Is it really feasible? Also why does it extend to city boundaries and then dead end?	1951 Yountville Cross Road, Yountville, California 94599, United States	0	0
I Wonder	Class I off Stanly Ln going to dead end at Napa River? Is that for river access off of the Bay Trail? A spot to rest?	Soscol Ferry Road, Napa, California 94558, United States	0	0
I Wish	Would love to see Class 1 from the 5-way to the Middle School.	579 Coombsville Road, Napa, California 94558, United States	0	0
I Wish	Southbound Silverado Trail approaching Soscol Ave should have sidewalk gap filled to avoid unnecessary crossings on Silverado Trail.	141 Silverado Trail, Napa, California 94559, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wish	Burnell sidewalk gap closure should extend to 8th St where pedestrians can cross Soscol Ave at a lighted crosswalk.	300 Burnell Street, Napa, California 94559, United States	0	0
I Wonder	Alta Heights neighborhood seems sparse on sidewalks despite neighborhood elementary school in walking distance.	1420 Banks Avenue, Napa, California 94559, United States	0	0
I Wish	Sidewalk gap on Byway East between Valencia St and El Centro Ave should be filled. Potential route to school.	4100 Byway East, Napa, California 94558, United States	0	0
I Wish	The gap on El Centro Ave by Willow Elementary near Jefferson intersection should be a proposed gap closure – would allow students to cross El Centro at Verbena St closer to the school rather than next to a busy intersection where Jefferson traffic doesn't have any traffic control (therefore faster vehicle turns).	1417 El Centro Avenue, Napa, California 94558, United States	0	0
I Wish	Sidewalk gaps on Jefferson near Willow Elementary are not included as proposed pedestrian gap closures – this is critical on such a busy corridor on routes to several nearby schools. Fill sidewalk gaps.	4010 Jefferson Street, Napa, California 94558, United States	0	0
I Wonder	Not addressing Marin St sidewalk gap between Park and Lincoln seems like a missed opportunity, especially with school and as a quieter parallel route to California Blvd.	2515 Marin Street, Napa, California 94558, United States	0	0
I Wonder	The proposed Class I across Main Street seems like it should be north of the creek.	1038 Main Street, Napa, California 94559, United States	0	0
I Wish	Fill gaps on Laurel between Griggs and Freeway Dr. Lot of foot traffic in the area.	2740 Laurel Street, Napa, California 94558, United States	0	0
I Wonder	Would like more info on recommended Class I on W Imola between SR 29 and Hunt St	1900 West Imola Avenue, Napa, California 94559, United States	0	0
I Wish	Fill sidewalk gap on Solano Ave off of W Lincoln	2445 Solano Avenue, Napa, California 94558, United States	0	0
I Wonder	Fill sidewalk gap between West Park School and Bradford St	2409 West Park Avenue, Napa, California 94558, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wonder	Why are no sidewalks proposed for County pocket in Pueblo Vista area, especially along routes to nearby schools?	1600 Carol Drive, Napa, California 94558, United States	0	0
I Wish	Fill sidewalk gap on W Pueblo from Rancho Dr to Massa Dr	2481 West Pueblo Avenue, Napa, California 94558, United States	0	0
I Wonder	Fill sidewalk gap on Cornwall, even if just on one side, given route to school.	15 Cornwall Avenue, Napa, California 94558, United States	0	0
I Wonder	Are the sidewalk gaps here being filled with BVR road repaving project?	2959 1st Street, Napa, California 94558, United States	0	0
I Wonder	Can gap on Redwood Rd between Lynn and Reuben be filled?	2677 Redwood Road, Napa, California 94558, United States	0	0
I Wonder	Not closing sidewalk gap on Linda Vista between Trower and Northwood school entrance seems like a missed opportunity given route to school.	3920 Linda Vista Avenue, Napa, California 94558, United States	0	0
I Wonder	No sidewalk gap closure on Hermosa Dr off Salvador near middle school seems like a missed opportunity	3091 Hermosa Drive, Napa, California 94558, United States	0	0
I Wonder	Were Salvador Ave sidewalk gaps filled with recent project? Proposed sidewalk on south side east of Summerfield Dr seems like an error. Would be more useful between Jefferson and Manchester, prioritize filling this gap.	1610 Salvador Avenue, Napa, California 94558, United States	0	0
I Wonder	Citywide for American Canyon: Maybe more Class I/sidewalk only connections between cul-de-sac neighborhoods should be considered. That would encourage more active travel and make active travel more direct and convenient than driving. There are a lot of dead-end/cul-de-sac neighborhoods throughout the city that could benefit from this.	3 Mosaic Court, American Canyon, California 94503, United States	0	0
I Wonder	Multiple Class Is existing/proposed on Newell Dr is confusing. In one spot it looks like two paths are proposed on top of each other and across the street from the existing path.	7000 Newell Drive, American Canyon, California 94503, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wonder	Class I/ped path gap on S Napa Junction Road east of the highway will likely be an issue - fill this gap with Class I or sidewalk.	163 South Napa Junction Road, American Canyon, California 94503, United States	0	0
I Wonder	Fill gaps between the proposed Class I on the west side of SR 29 between Napa Junction Road and Poco Way. Also on the east side between S Napa Junction and existing at Eucalyptus	3945 Broadway Street, American Canyon, California 94503, United States	0	0
I Wonder	Add a connection between west end of Knightsbridge Way and proposed Class I.	428 Knightsbridge Way, American Canyon, California 94503, United States	0	0
I Wonder	Fill all sidewalk gaps on W Donaldson Way	207 West Donaldson Way, American Canyon, California 94503, United States	0	0
I Wonder	Why doesn't proposed sidewalk on Eucalyptus between Theresa and Rio del Mar go all the way to Theresa? Fill this gap to provide connectivity.	6 Eucalyptus Drive, American Canyon, California 94503, United States	0	0
I Wonder	Connect proposed Class I on Hess Dr to existing sidewalk on Lombard Rd	185 Lombard Road, American Canyon, California 94503, United States	0	0
I Wonder	Connect proposed Class I on Paoli Loop Rd to existing Class I on east side of SR 29 – understanding difficulties with crossing the RR tracks, you can see there is already an existing desire line here that will be more utilized with proposed Class I.	Broadway Street, American Canyon, California 94590, United States	0	0
I Wonder	A parent was struck by a vehicle in the crosswalk here this morning while dropping off their child. Police and fire responded to the crash. This intersection has special yellow crosswalks too. More protection measures for ped/bikes should be implemented here.	1341 Berry Street, Calistoga, California 94515, United States	0	0
I Wonder	I wonder if there's a way to make this intersection safer for pedestrians.	1506 Lincoln Avenue, Calistoga, California 94515, United States	0	0
I Love	Thank you for including Grant Street! We're hoping to have a fully integrated walking path here.	2320 Grant Street, Calistoga, California 94515, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wish	The Fairgrounds need to have pedestrian paths that offer leisure space and walking areas.	2025 Grant Street, Calistoga, California 94515, United States	0	0
I Love	This is an unaddressed portion of road where many students walk to get across Foothill Blvd. Thank you for including it!	1523 Foothill Boulevard, Calistoga, California 94515, United States	0	0
I Wish	This is an unsafe intersection for pedestrian traffic. Possibly connecting the sidewalk with a crosswalk would be helpful? Also: consider a roundabout at this intersection to make traffic flow safer for everyone.	2080 Lincoln Avenue, Calistoga, California 94515, United States	0	0
I Wish	Suggest prioritizing gap closure of existing sidewalk along Silverado Trail between East Ave and Lincoln Ave.	1745 Silverado Trail, Napa, California 94558, United States	0	0
I Wish	I would love a full sidewalk leading out to the middle school for the families, and kids. It's currently very dangerous with traffic.	Cedar Drive, Napa, California 94559, United States	0	1
I Wish	There is not a designated place for pedestrians. You walk through the shopping center parking lot as a pedestrian. Would at least like a designate place in the parking lot	1850 Old Sonoma Road, Napa, California 94559, United States	0	0
I Wish	Would like to see slip lane from Jefferson to Hayes removed. The sight lines from Jefferson to Hayes are very poor and you cannot see pedestrians walking north on Jefferson across the Hayes intersection	1272 Hayes Street, Napa, California 94559, United States	0	0
I Wish	Kids walking to Shearer Elementary (between Pine and Oak need a consistent sidewalk on Jefferson	220 Jefferson Street, Napa, California 94559, United States	0	0
I Wish	I wish there was a sidewalk all the way from the Silverado Trail down Coombsville, to the middle school. Middle School students walk here frequently and my kids and I walk here and it feels unsafe.	505 Coombsville Road, Napa, California 94558, United States	0	1
I Wish	I wish there were continuous sidewalks from Silverado Trail to Silverado Middle School along Coombsville Road. The school is a community focal point and pedestrians often walk in the busy, sunny road in dangerous conditions.	1071 Coombsville Road, Napa, California 94558, United States	0	2

Category	Comment	Address	Down Votes	Up Votes
I Wonder	There is not a complete sidewalk on the north side of Third St. between Silverado and Juarez. It would be great if this gap could be filled in.	801 Silverado Trail, Napa, California 94559, United States	0	1
I Wish	I wish there were a sidewalk on the south side of Coombsville for the ENTIRE block between Davis and Silverado. Pedestrians, especially Silverado Middle School students, frequently walk on the shoulder of the road here, in dangerous conditions.	9 Coombsville Road, Napa, California 94558, United States	0	3
I Wish	I wish there were a sidewalk on the south side of Coombsville between Hennessy and Davis. Pedestrians, especially Silverado Middle School students frequently walk on the shoulder of the road here, in dangerous conditions.	112 Coombsville Road, Napa, California 94558, United States	0	3
I Wonder	If Vine Trail will be on west side of highway, should a sidewalk connect from Grayson/Mills down to Dowdell on the east side of the highway?	501 Main Street, St. Helena, California 94574, United States	0	1
I Wish	Comment from St Helena Harvest Festival attendee - Crosswalk at Allison is dangerous due to vehicle speeds and poor sight lines. Noted that there have been several crashes in vicinity. See TIMS CASE ID: 9643937	924 Pope Street, St. Helena, California 94574, United States	0	0
I Wonder	Pretty sure Crawford Way apartment project at this location will add sidewalks here	325 Crawford Way, American Canyon, California 94503, United States	0	0
I Wonder	Sidewalk does exist on east side of Crane Ave where it is marked as proposed.	375 Crane Avenue, St. Helena, California 94574, United States	0	0
I Wonder	There is no sidewalk gap here.	1376 Grayson Avenue, St. Helena, California 94574, United States	0	0
I Love	this is a great addition to the riverfront for those accessing from the west (the majority of residents)!	100 Riverside Drive, Napa, California 94559, United States	0	0
I Love	this will be a great addition for kids going to school and every day pedestrians!	1900 West Imola Avenue, Napa, California 94559, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wish	Suggest closing gap in sidewalk here	218 Soscol Avenue, Napa, California 94559, United States	0	1
I Wonder	I don't think there is an existing Class I here. Is this meant to be proposed?	209 Kimberly Drive, American Canyon, California 94503, United States	0	0
I Wonder	Sidewalk from Community Park I parking lot to ACMS basketball court next to the track is not marked.	28 Spikerush Circle, American Canyon, California 94503, United States	0	0
I Wonder	The "sidewalk" fronting Napa Junction Magnet School is actually an existing Class I path.	500 Eucalyptus Drive, American Canyon, California 94503, United States	0	0
I Wonder	Existing Class I (Vine Trail) here is not marked.	3360 Solano Avenue, Napa, California 94558, United States	0	1
I Wish	Sidewalk exists here (according to Google Maps)	2001 Salvador Avenue West, Napa, California 94558, United States	0	0
I Wonder	Existing sidewalk in front of Hall Wines not marked.	436 Saint Helena Highway South, St. Helena, California 94574, United States	0	0
I Wish	I wish the power line pole wasn't blocking the sidewalk. Parrish also has overgrown bushes and fencing that blocks the sidewalk. We have children who have to use the middle of the street to get to 7/11 because Parrish Rd's sidewalks are not wide enough, even non existent in some parts. We have elderly who use wheelchairs on Parrish that can't use the sidewalks at all.	2180 Parrish Road, Napa, California 94559, United States	0	1
I Wonder	Isn't the City currently adding sidewalks on many of the streets in this neighborhood?	44 Chelsea Avenue, Napa, California 94558, United States	0	0
I Wish	There should be a crosswalk here.	249 Jefferson Street, Napa, California 94559, United States	0	0
I Wonder	This is weird.	9 Burnette Court, Napa, California 94558, United States	0	0

Category	Comment	Address	Down Votes	Up Votes
I Wonder	Why is this here? It doesn't connect to anything?	3 Highland Drive, Napa, California 94559, United States	0	0
I Wish	I really wish this crosswalk were safer. Cars never stop when I'm trying to cross here	411 Coombsville Road, Napa, California 94558, United States	0	3

Appendix C

Bicycle Level of Traffic Stress Methodology & Bicycle Connectivity

NAPA VALLEY TRANSPORTATION AUTHORITY

Bicycle Level of Traffic Stress

Level of traffic stress (LTS) is a suitability rating system from the perspective of different subsets of the population, which measures the perceived comfort, safety and convenience associated with bicycling or walking in or adjacent to vehicle traffic. Studies have shown that 60 percent of the population will be deterred from bicycling or walking if an active transportation facility features high levels of traffic stress and they will only choose the routes with the highest levels of perceived safety.[1] The less stressful the experience, and the lower the LTS score, the more likely bicycling or walking is to appeal to a broader segment of the population.

A bicycle and pedestrian network will attract greater numbers of residents, employees and visitors of all ages and abilities if it is designed to reduce the level of stress associated with potential conflicts with motor vehicles and safely connect people to their destinations. Facilities that provide greater separation between vehicle traffic and people walking and bicycling, as well as minimize the potential for stressful conflicts between these road user groups, will result in the lowest levels of traffic stress and highest comfort using the facility.

The original LTS methodology was developed by Mekuria, Furth, and Nixon in *Low Stress Bicycling and Network Connectivity,* Report 11-19, published by the Mineta Transportation Institute (MTI) (May 2012). Since the original 2012 MTI paper, Peter Furth has continued to update the LTS criteria for road segments, most recently in 2022[2]. This analysis employs the most updated 2022 criteria for road segment LTS analysis, described in additional detail below.

Methodology

The bicycle LTS methodology considers a variety of roadway infrastructure characteristics to determine the LTS score of a roadway or intersection, including:

- Level of separation from vehicular traffic
- Street width (number of lanes), daily traffic volumes and/or functional classification
- Presence and width of bike lanes, parking lanes, medians and turn lanes
- Frequency of bike lane blockage
- Speed limit or prevailing speed of adjacent street or streets being travelled along or crossed
- Intersection control type

Level of traffic stress scores are governed by the worst-case principle, meaning that the highest stress score associated with analyzed criteria will determine the LTS score of the overall segment, with LTS 1 being the lowest stress and LTS 4 being the highest stress. The application of these criteria-specific bicycle LTS analysis is described below.

[1] "Four Types of Transportation Cyclists in Portland," Geller, 2006

[2] https://bpb-us-e1.wpmucdn.com/sites.northeastern.edu/dist/e/618/files/2014/05/LTS-Tables-v2.2.pdf

Figure B.1 describes each LTS score by bicycle user type or category. Sixty percent of the population falls within the interested but concerned LTS 1 or LTS 2 categories. Bicycle LTS analyzes roadway segments, intersection approaches and intersection crossings, and the worst score among the three analysis categories determines the overall LTS score of the overall segment.

Table C.1: Bicyclist Comfort Typology



Comfort Typology of Bicyclists				
Design User Profile	Non-Bicyclist	Interested but Concerned	Somewhat Confident	Highly Confident
Bicycling Preferences	Uncomfortable bicycling in any condition, have no interest in bicycling, or are physically unable to bicycle.	Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separate bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.	Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.	Comfortable riding with traffic, will use roads without bike lanes.
Percent of General Public	31-37%	51-56%	5-9%	4-7%

The criteria for analyzing Bicycle LTS is broken into three categories:

- Physically separated paths or lanes, such as Class I shared-use paths or Class IV cycle tracks
- Streets with standard bicycle lanes, such as Class II or Class II buffered bicycle lanes
- Streets without bicycle lanes, also referred to as mixed traffic

Physically separated paths or lanes are generally assigned LTS scores of one due to the greater separation from vehicular traffic, while the LTS scores associated with the other two categories vary based on a variety of factors.

The criteria for analyzing the segment LTS of streets with Class II bicycle lanes are presented in Table B.1 and Table B.2, which are separated by segments that feature an adjacent parking lane, and those that do not. As shown, the segment BLTS score considers bicycle lane width, presence and parking lane width, speed and lanes per direction.

Table C.2: BLTS Criteria for Segment with Bike Lane and Adjacent Parking Lane

Number of lanes	Bike lane reach = bike + parking lane width	Prevailing or Posted Speed			
		0-28.5	28.5-33.5	33.5-38.5	38.5-43.5
1 thru lane per direction or contraflow lane	15+ ft	LTS 1	LTS 2	LTS 2	LTS 3
	<15 ft	LTS 2	LTS 2	LTS 3	LTS 3
1-way multilane	15+ ft	LTS 2	LTS 3	LTS 3	LTS 3
	<15 ft	LTS 3	LTS 3	LTS 3	LTS 3
2-way, 2 lanes per direction	15+ ft	LTS 2	LTS 3	LTS 3	LTS 3
	<15 ft	LTS 3	LTS 3	LTS 3	LTS 3
Other 2-way multilane	any	LTS 3	LTS 3	LTS 3	LTS 3

Notes

1. *If bike lane is frequently blocked (as may be the case in commercial areas), use mixed traffic criteria.*
2. *Minimum bike lane reach is 12 ft. For narrower reach, use Mixed Traffic criteria.*
3. *Bike lane reach includes any marked buffer next to the bike lane; also, add 2 ft if road has one thru lane per direction and a central two-way turn lane.*
4. *Use mixed traffic criteria if it would result in lower LTS.*

Table C.3: BLTS Criteria for Segment with Bike Lane, no Adjacent Parking Lane

Number of Lanes	Bike lane Width	Prevailing or Posted Speed					
		0-28.5	28.5-33.5	33.5-38.5	38.5-43.5	43.5-48.5	48.5+
1 thru lane per direction or contraflow lane	6+ ft	LTS 1	LTS 1	LTS 2	LTS 3	LTS 3	LTS 3
	Less than 6 ft	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
2 thru lanes per direction	6+ ft	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	Less than 6 ft	LTS 2	LTS 2	LTS 2	LTS 3	LTS 4	LTS 4
3+ lanes per direction	Any width	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4

Notes

1. *If bike lane is frequently blocked (as may be the case is commercial areas), or if parking is allowed in an advisory lane, use mixed traffic criteria.*
2. *Minimum bike lane width is 4 ft next to a curb and 3.5 ft next to a road edge or discontinuous gutter seam. For narrower bike lanes, use Mixed Traffic criteria.*
3. *Bike lane width includes nay market buffer next to the bike lane; also, add 2 ft if road has one thru lane per direction and a central two-way turn lane.*
4. *Use mixed traffic criteria if it would result in lower LTS.*

Table B.3 presents the criteria for analyzing segments without bicycle lanes that require a bicyclist to ride with mixed traffic. If daily traffic volume is available, then that data should be considered in the analysis. If daily volume data is not available, functional classification should be analyzed in place of daily traffic volumes. As shown, lower speed roadways and higher speed roadways are analyzed differently, but both categories consider presence of a marked centerline, number of through lanes per direction, daily traffic volume or functional classification, and speed.

Table C.4: BLTS Criteria for Segments in Mixed Traffic

Number of Lanes	ADT	Posted or Prevailing Speed						
		0-23.5	23.5-28.5	28.5-33.5	33.5-38.5	38.5-43.5	43.5-48.5	48.5+
Unlaned 2-way street (no centerline)	0-750	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	751-1500	LTS 1	LTS 1	LTS 2	LTS 3	LTS 3	LTS 3	LTS 3
	1501-3000	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	3001+	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
2-way with 1 lane per direction and centerline, or wide* 1-way, 1 lane	0-1000	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	1001-1500	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	1501+	LTS 2	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
Narrow* one-way, 1 lane	0-600	LTS 1	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 3
	601-1000	LTS 2	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	1001+	LTS 2	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
2 thru lanes per direction	0-8000	LTS 3	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
	8001+	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4
3+ thru lanes per direction	Any ADT	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4	LTS 4

Notes

** A one-way street is "narrow" if its width is less than 30 ft with parking on both sides, less than 22 ft with parking on one side, or less than 15 ft with no parking. Otherwise, it is wide.*

Bicycle Connectivity

Roads with high LTS are barriers for most bicyclists. These barriers limit connectivity between neighborhoods and to key destinations. Based on the LTS analysis conducted, an assessment of bicycle connectivity was completed. In this assessment, bicycle connectivity is defined as either high-stress or low-stress connectivity. Destinations with low-stress connectivity are connected to residential units (origins) along the low-stress bicycle network, or roads that score LTS 2 or lower.

The goal of this analysis is to identify which destinations are well connected along the low-stress bicycle network, and which destinations are poorly connected. This assessment also resulted in maps that visualize low-stress bicycle connectivity.

Methodology

Low-stress bicycle connectivity is assessed based on whether an origin and a destination were connected along the low-stress bicycle network. A low-stress bicycle connection was drawn between an origin and a destination if a bicycle trip could be completed along streets that scores LTS 2 or lower.

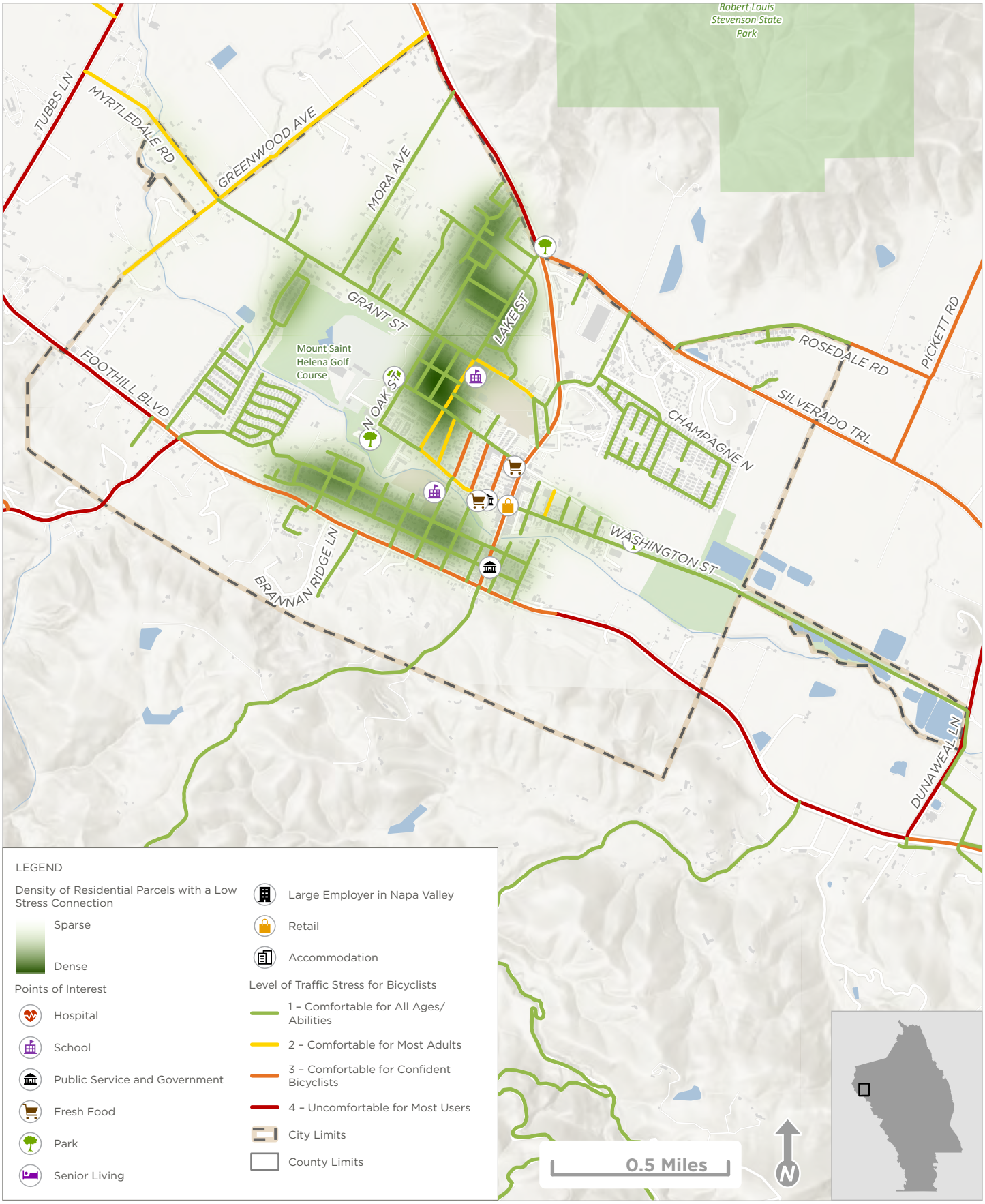
Origins

Origins in this assessment are identified as residential units or starting places for bicycle trips. The analysis does not include every residence in Napa County, but rather a point of origin where multiple residents may begin their trip. Points of origin are identified every 50 feet if one or more residences are present.

Origins are only considered if they are 1.5 miles or less along the roadway network from a destination. This distance represents the distance a bicyclist is willing to ride to their destination and the low-stress bicycle network.

Results

The output of the bicycle connectivity assessment is a series of connectivity maps describing low-stress connectivity to key destinations throughout Napa County. The figures below show a connectivity heat map, where areas in dark green have the best low-stress bicycle connectivity. In addition, the AT Plan includes the percentage of origins (residential units) that are connected to each destination along the low stress network. For these tables, and a discussion of the connectivity results, see Chapters 7-12.

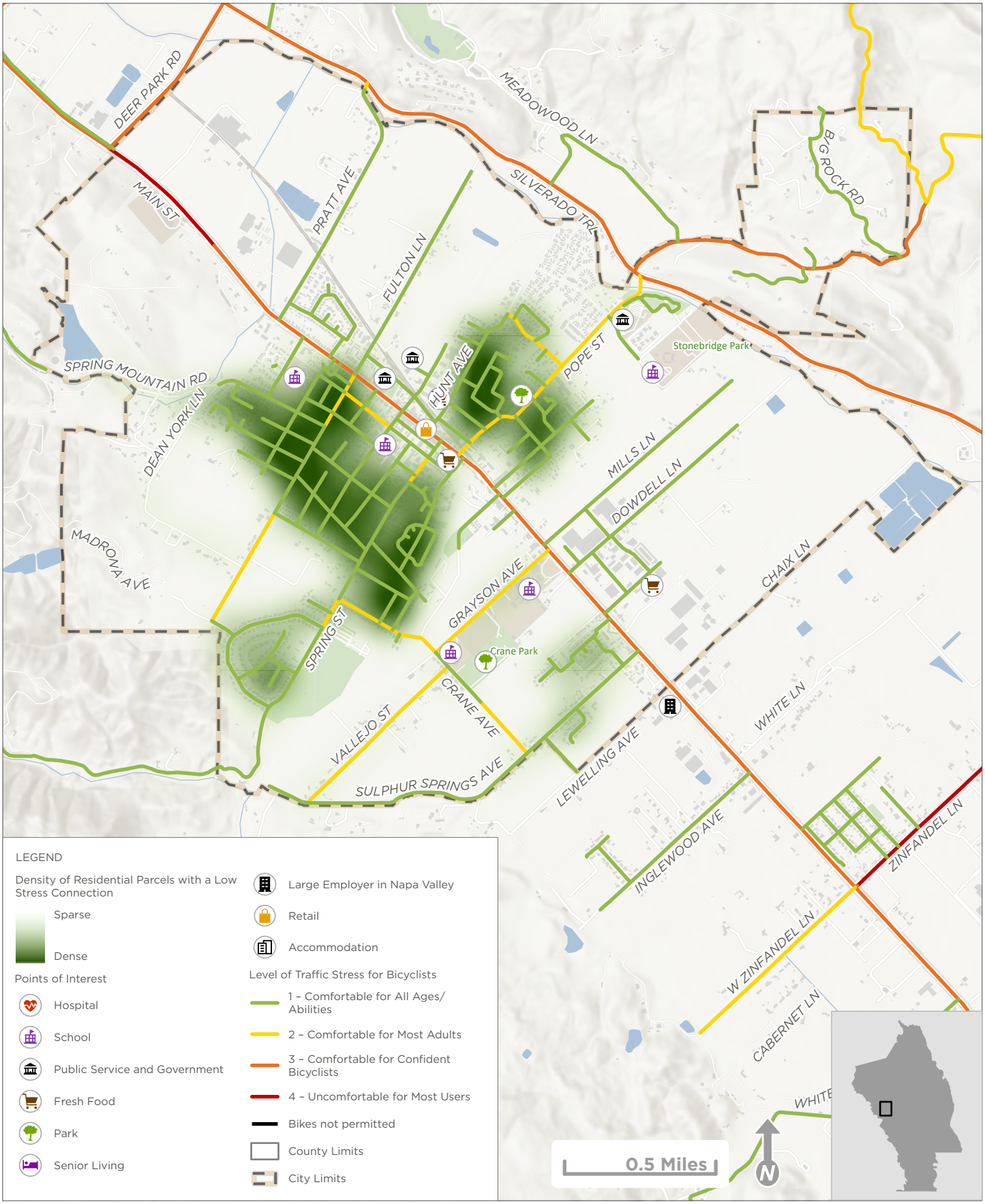


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Calistoga
Connectivity

FIGURE C.1

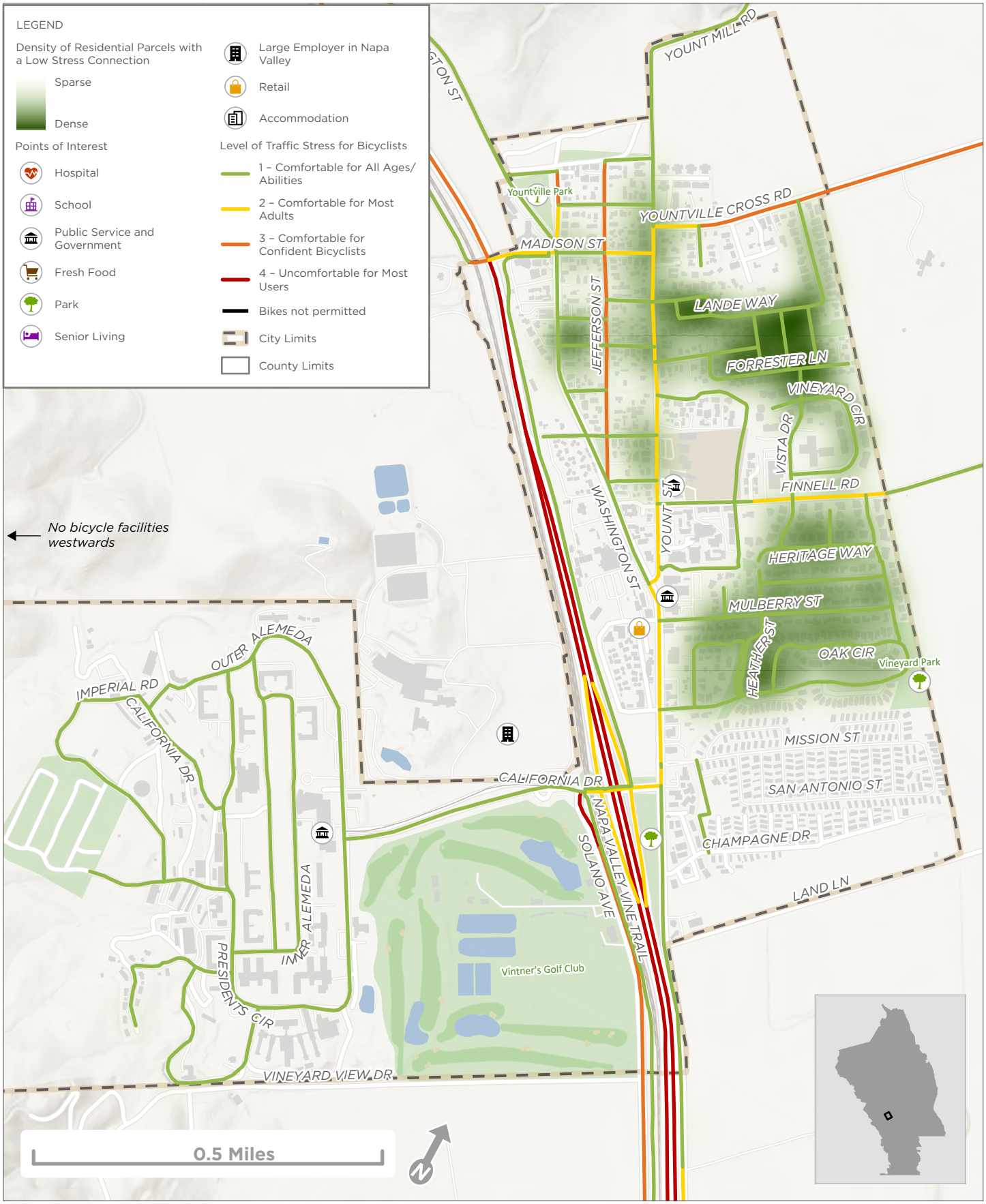


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of St. Helena
Connectivity

FIGURE C.2

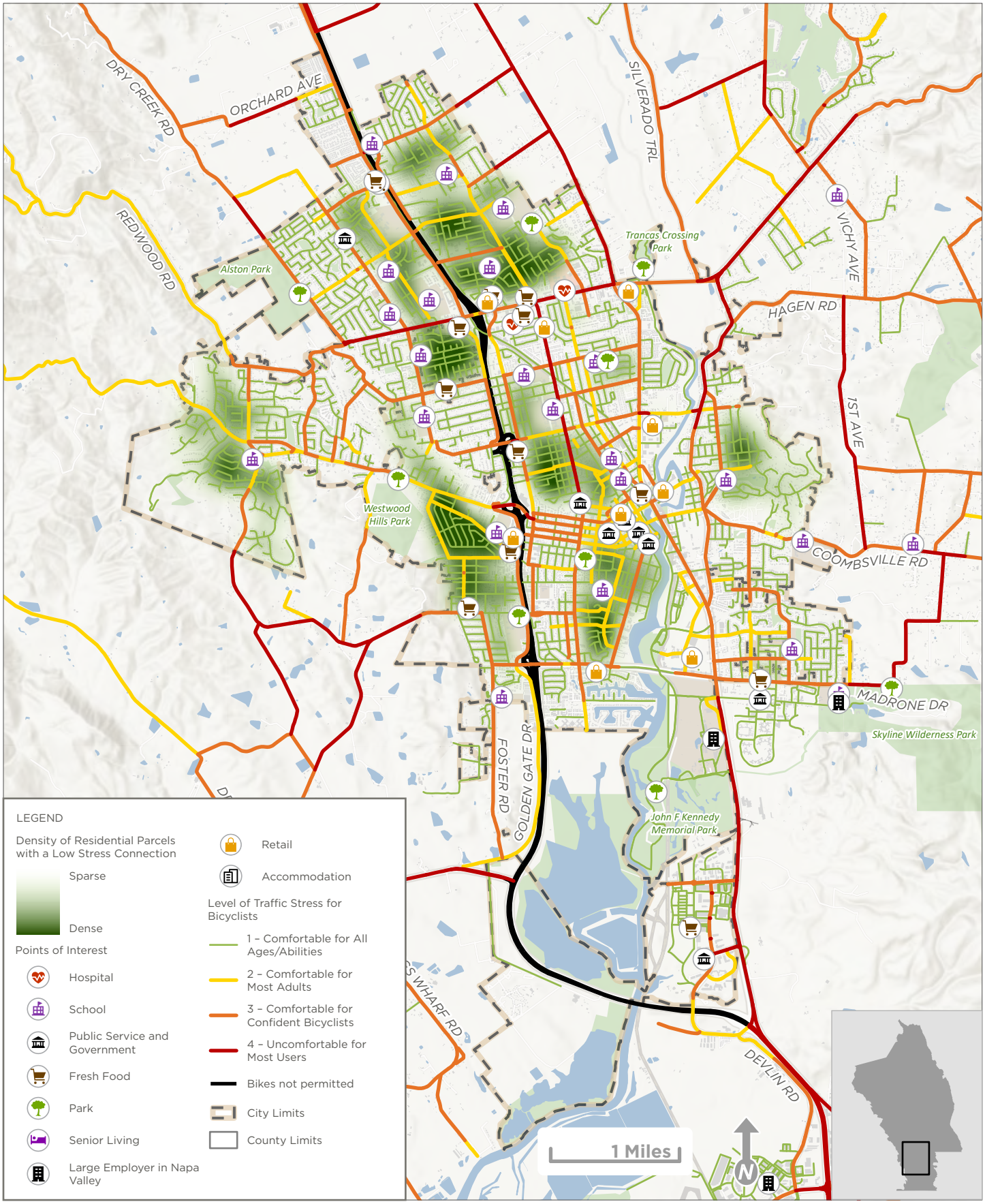


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

Town of Yountville
Connectivity

FIGURE C.3

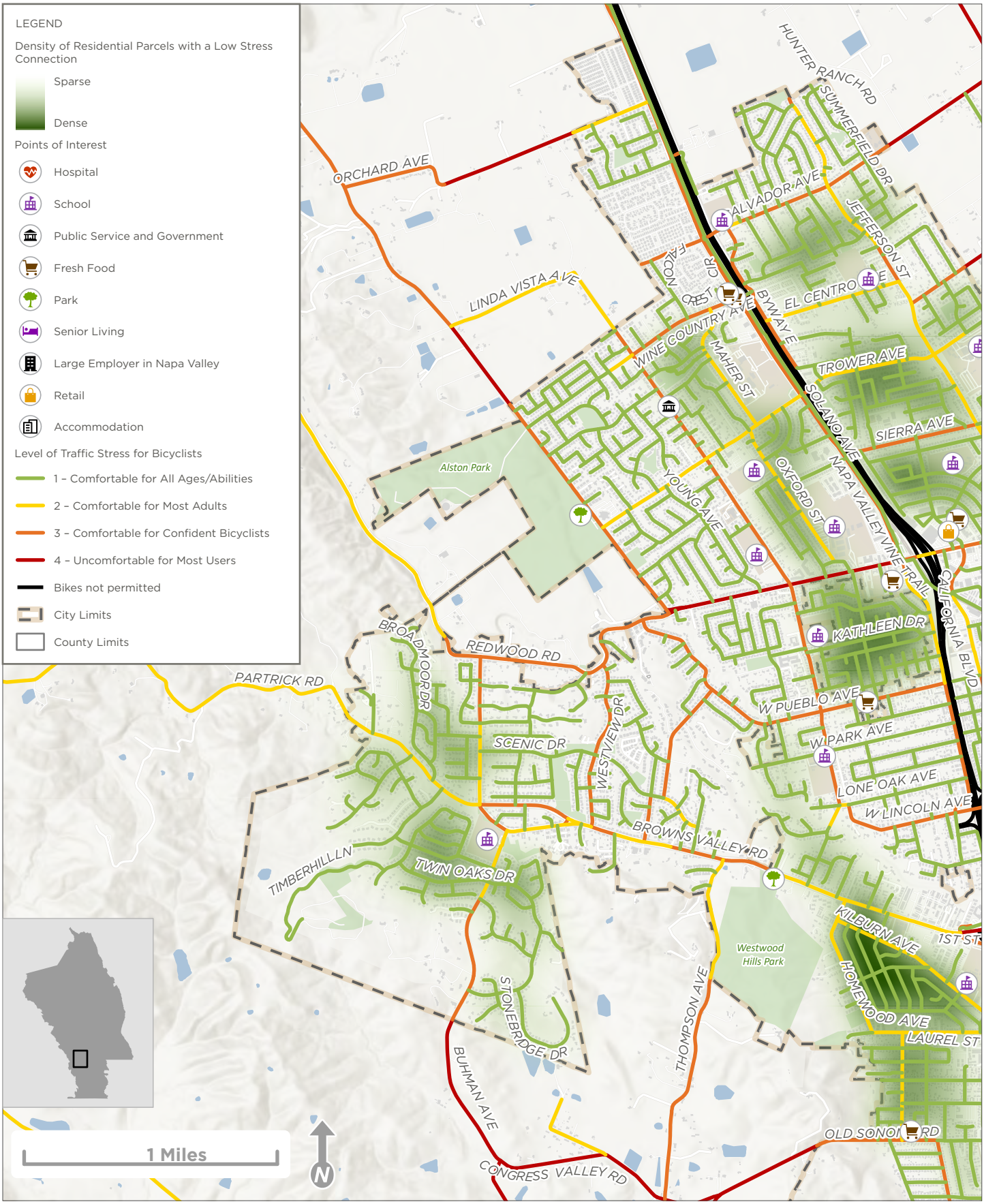


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa
Connectivity

FIGURE C.4

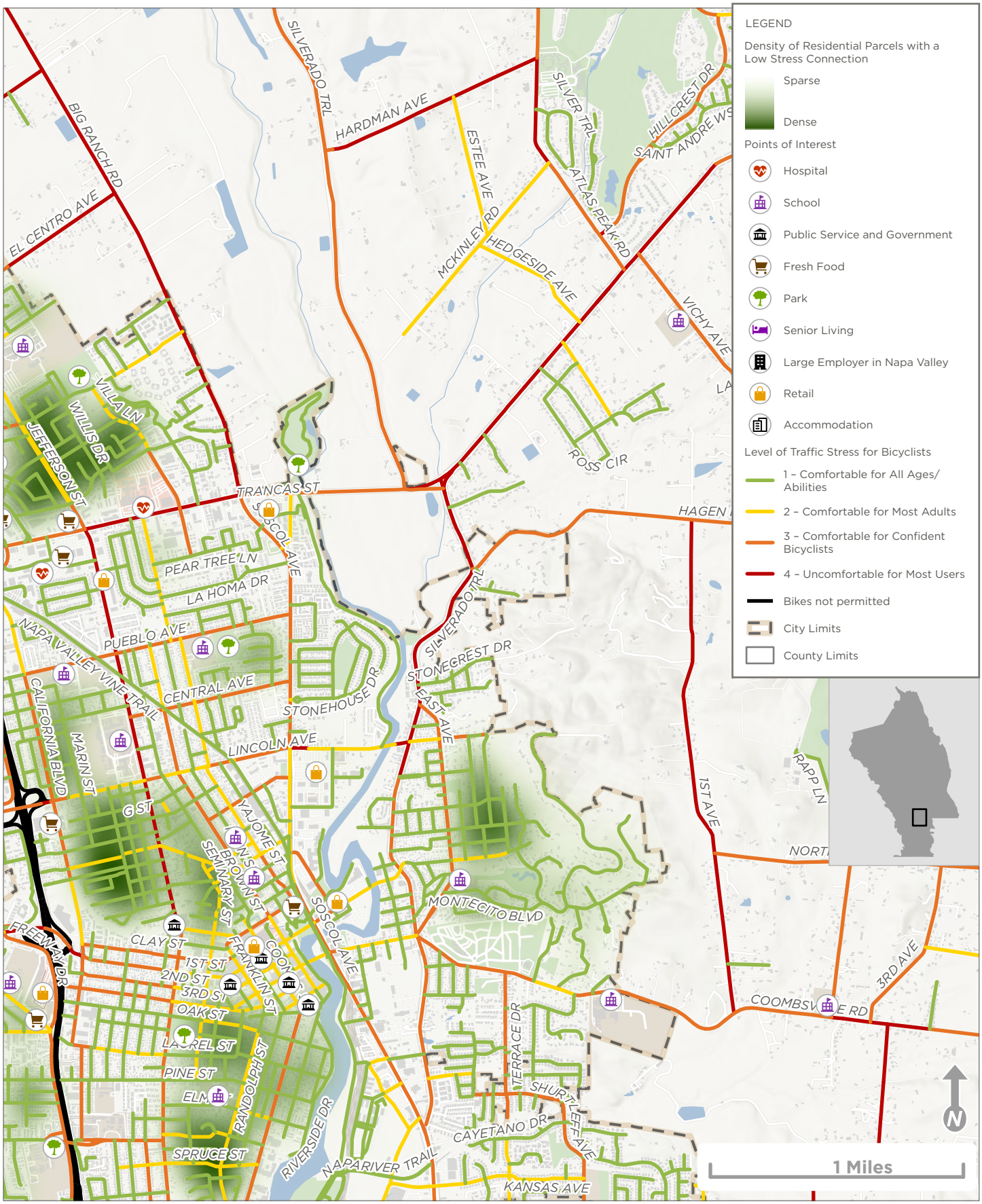


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northwest Connectivity

FIGURE C.5

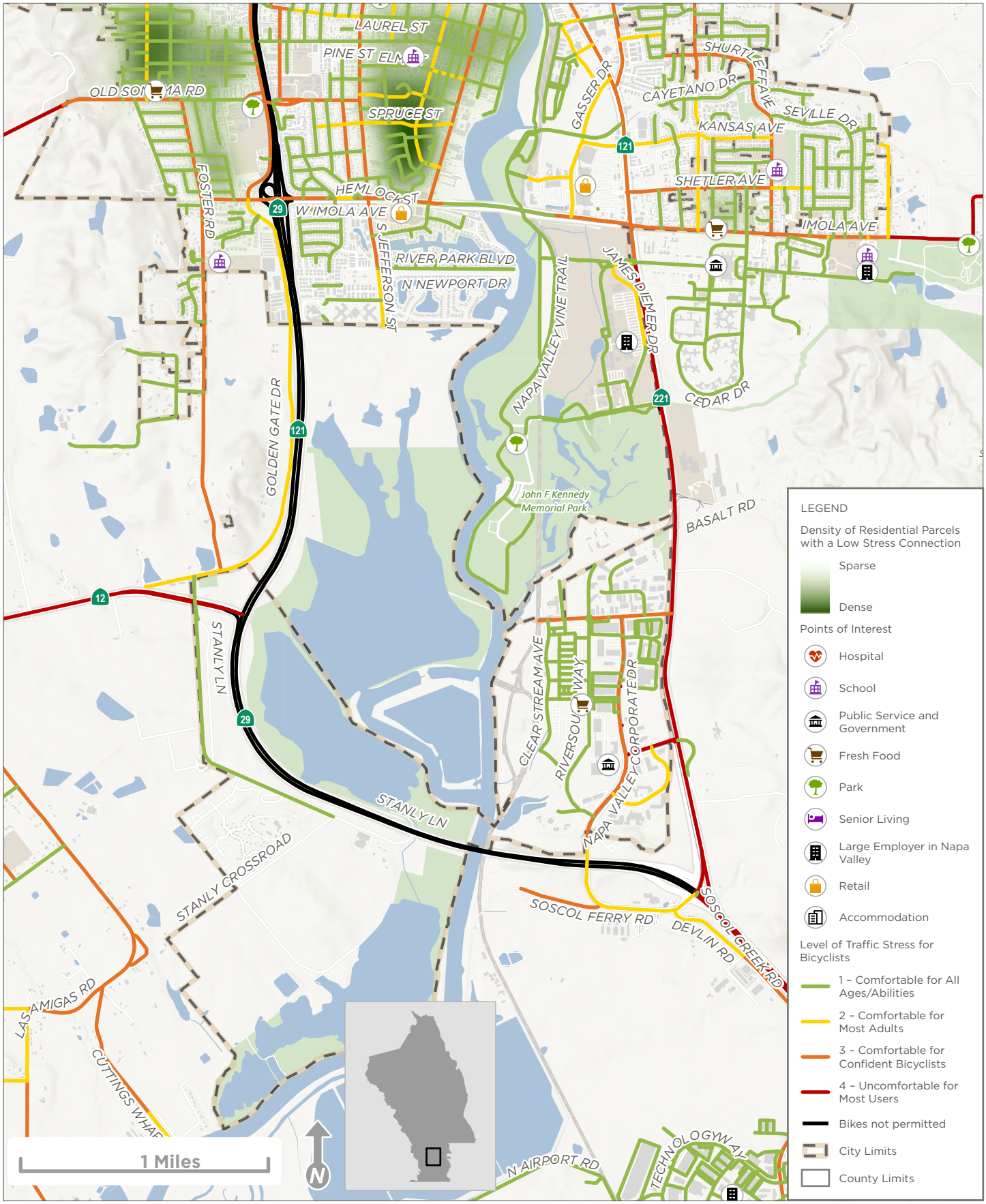


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - Northeast Connectivity

FIGURE C.6

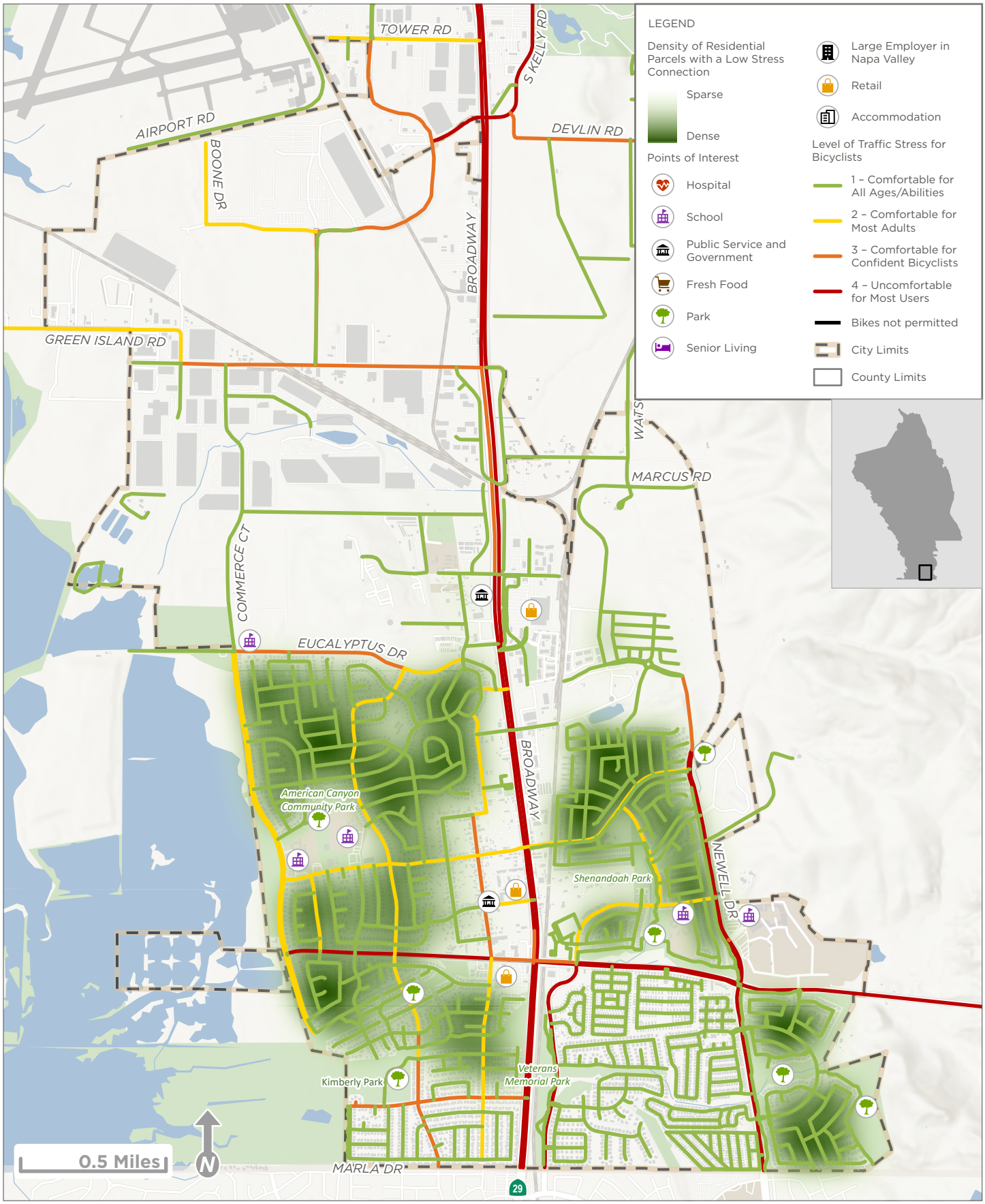


NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of Napa - South Connectivity

FIGURE C.7



NAPA COUNTYWIDE ACTIVE TRANSPORTATION PLAN

NVTA NAPA VALLEY TRANSPORTATION AUTHORITY

City of American Canyon
Connectivity

FIGURE C.8

Appendix D
Treatment Toolkit

NAPA VALLEY TRANSPORTATION AUTHORITY

NAPA COUNTY
ACTIVE TRANSPORTATION PLAN
TREATMENT TOOLKIT

MARCH 2026



NVTA
NAPA VALLEY TRANSPORTATION AUTHORITY

TOOLE DESIGN

GHD

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INTRODUCTION

The purpose of this Toolkit is to provide best practice guidance and other considerations to engineers, planners, and community members. This Toolkit introduces bicycle and pedestrian facility treatments, providing an overview, engineering guidance, and additional contextual considerations for each treatment. The Toolkit is not comprehensive nor intended to take the place of design standards prepared by local agencies, Caltrans, or any other entity.

The content in this Toolkit aligns with the following key principles:

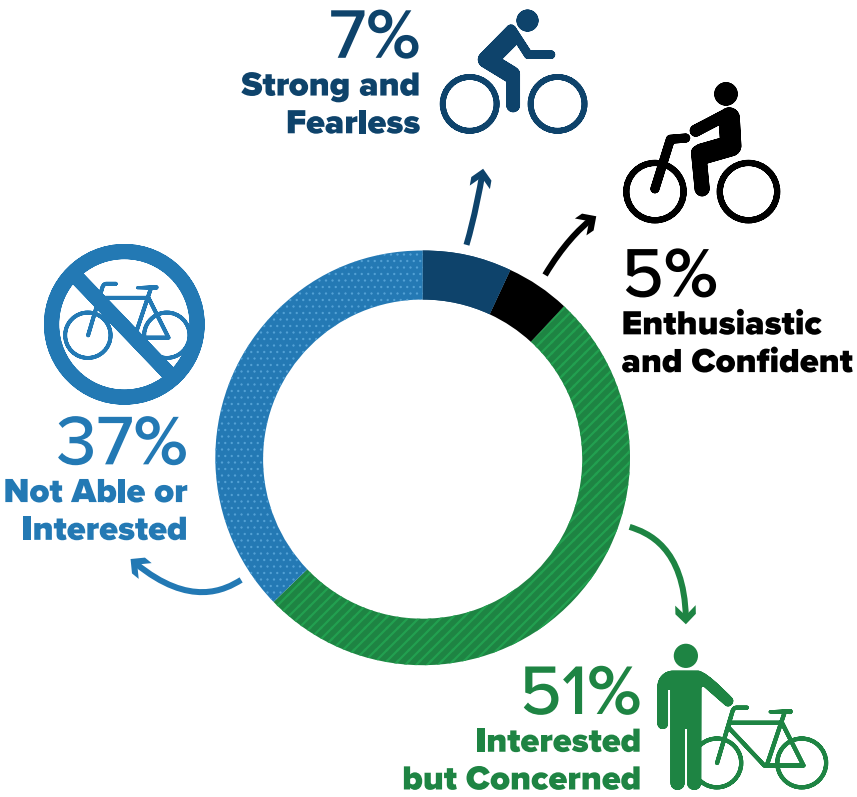
- **The bicycling and walking networks should accommodate people of all ages and abilities.**
- **Bicycle travel on all streets should be safe, continuous, direct, and convenient.**
- **The pedestrian network should not only be safe, but also attractive and dignified, and account for the fact that we are all pedestrians at some point of every trip.**

BICYCLE FACILITIES



1

POTENTIAL BICYCLE USERS



Types of Bicyclists

Many factors contribute to whether people will choose to ride a bicycle for utilitarian trips like commuting to work or school, or running errands. Two of the primary considerations are safety and comfort. Research has found that most of the American population is interested in bicycling for transportation but does not currently do so because they feel unsafe or uncomfortable. In fact, most people in the U.S. have little tolerance for interacting with motor vehicle traffic unless volumes and speeds are very low. This group is referred to as "Interested but Concerned" bicyclists, reflecting both their interest in bicycling for transportation as well as concerns about safety and comfort when interacting with motor vehicle traffic.

Interested but Concerned bicyclists feel safest and most comfortable riding on low-traffic, low-speed streets or on separate paths or other facilities that provide protection or physical separation from fast-moving traffic. Interested but Concerned bicyclists include people of all ages and abilities, including but not limited to disabled users, older adults, and families. The Napa Active Transportation Plan recommends facilities that are comfortable for Interested but Concerned bicyclists, which serves Enthusiastic and Confident bicyclists, as well.

REFERENCES

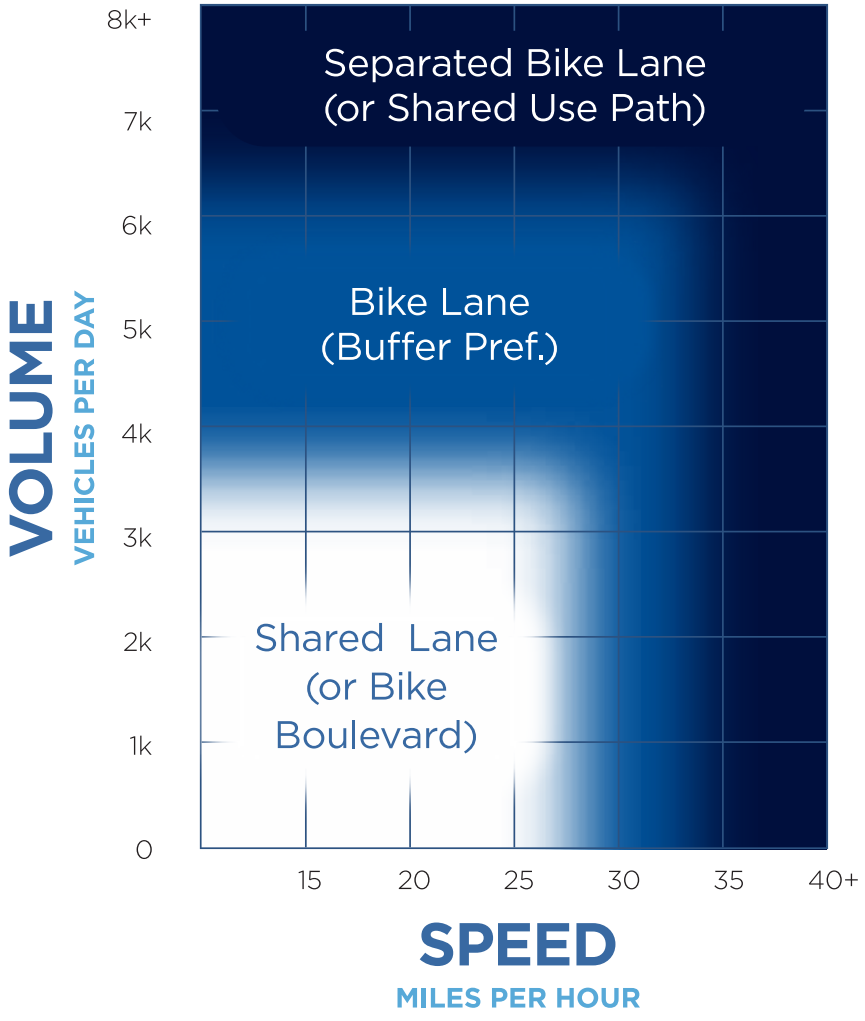
Dill, J. McNeil, N. "Revisiting the Four Types of Cyclists: Findings from a National Survey" Transportation Research Board 95th Annual Meeting, 2016.

BICYCLE FACILITY SELECTION

Designing for Interested but Concerned Bicyclists

Interested but Concerned bicyclists prefer physical separation between the bike lane and vehicle lane as traffic volumes and speeds increase. The bikeway facility selection chart below identifies preferred bikeway facilities for Interested but Concerned bicyclists at different roadway speeds and traffic volumes. Transitions are based on a shift in the 2010 Highway Capacity Manual (HCM 2010) bicycle level of service from A to B (assuming no parking, 12' outside travel lane, 6' bike lane, 8' buffered bike lane), or a C to D transition with on-street parking (8' parking lane). Speed thresholds (which refer to posted speed) are based on bicycle level of traffic stress.

Where the preferred bikeway facility may not be feasible, consider reducing posted speed limit and/or installing traffic calming features to reduce roadway speed or volumes in order match the bicycle facility to road conditions.



REFERENCES

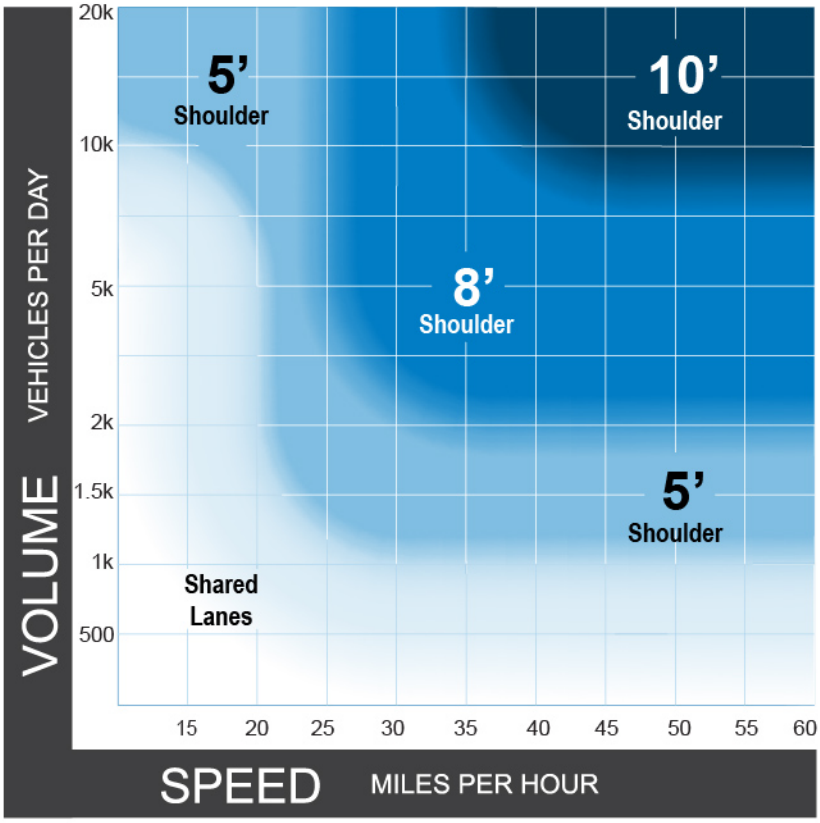
AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Highway Capacity Manual. 2010.

BICYCLE FACILITY SELECTION

Shoulder Widths for Rural Roadways

In rural areas, shoulders are often provided instead of more robust bicycle facilities. Shoulder width should be based on traffic volumes and posted speeds in the rural context. For the purposes of determining the appropriate shoulder width, it is assumed that posted speeds are approximately the same as operating speeds. If operating speeds differ from posted speeds, then operating speed should be used instead of posted speed. For additional guidance and considerations for treatments along rural roadways with no dedicated bicycle facilities see page 16.



Notes

1 *This chart assumes the project involves reconstruction or retrofit in constrained conditions. For new construction, follow recommended shoulder widths in the AASHTO Green Book.*

2 *A separated shared use pathway is a suitable alternative to providing paved shoulders.*

3 *Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.*

4 *If the percentage of heavy vehicles is greater than 10%, consider providing a wider shoulder or a separated pathway.*

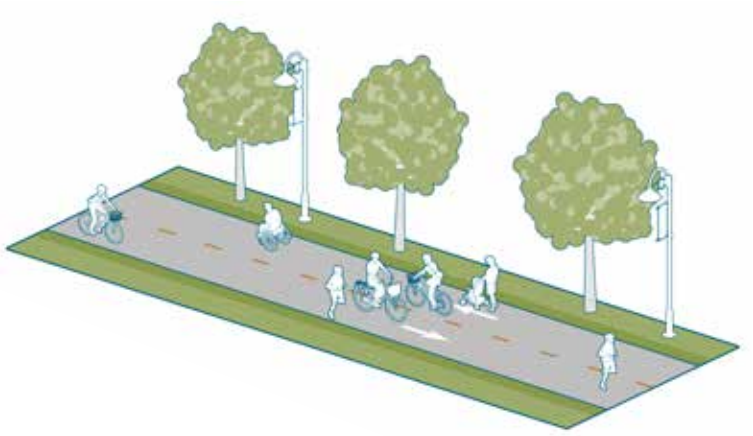
Source: AASHTO Guide for the Development of Bicycle Facilities, 5th Edition, 2024

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

SHARED-USE PATHS (CLASS I)

A shared-use path is a two-way facility physically separated from motor vehicle traffic and used by bicyclists, pedestrians, and other non-motorized users. Shared-use paths can be located in an independent alignment, such as a greenbelt or abandoned railroad, or constructed along roadways.



GUIDANCE

- Recommended widths vary based on the user types, anticipated volumes, and context, but shared-use paths should generally be 12 feet wide with 3-foot shoulders on each side. See Caltrans DIB-94 and the AASHTO Bike Guide for more guidance on facility widths.
- Shared-use paths may be desirable along high-volume or high-speed roadways, where accommodating the targeted type of bicyclist within the roadway in a safe and comfortable way is impractical.
- Although the minimum required path width is 10 feet, a path width of 8 feet is the minimum width that may be used for a short distance to accommodate a physical constraint such as an environmental feature.
- Trails expected to serve a high percentage of pedestrians (30 percent or more) or be used by large maintenance vehicles should be wider than 10 feet.
- Fourteen feet is the preferred width where volumes are high (> 100 total users in the peak hour), there are steep grades, or high volumes of users who need additional operating width are anticipated (e.g., children or skaters).

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. Highway Design Manual. 2020.

Caltrans. DIB-94: Complete Streets Contextual Design Guidance. 2024.

FHWA. Achieving Multimodal Networks. 2016.

- Maximum grade should not exceed 5 percent. There may be certain situations in which physical constraints prevent compliance with the 5 percent maximum grade, in which case mitigations such as providing additional path width for slower bicyclists to dismount and walk, providing resting intervals with flatter grades, or providing pedestrian handrails should be considered. Grades less than 0.5 percent should be avoided, if possible.
- Provide protective railings/fences at 42 inches high if the trail and graded shoulder are directly adjacent to a steep slope and drop, as defined in Chapter 5 of the AASHTO Guide for the Development of Bicycle Facilities.
- Ideally, provide a graded shoulder area of 3 to 5 feet on at least one side of path where feasible. The shoulder area should be maintained and recoverable in all weather conditions.
- Consider providing lighting at path/roadway intersections at a minimum and at other locations where personal security may be an issue.
- All shared-use paths must conform to the current editions of both the AASHTO and ADA guidelines.
- Shared-use paths are pedestrian facilities and are required to be fully accessible. They must conform to Public Rights-of-way Accessibility Guidelines (PROWAG) if in a public right-of-way or Advance Notice of Proposed Rulemaking (ANPRM) on Accessibility Guideline for Shared-Use Paths if in a private right-of-way.

SHARED-USE PATHS (CLASS I)



CONSIDERATIONS

- Shared-use paths are appropriate when an on-street route may be perceived as unsafe due to the speed of the road, the majority of users are recreational or leisure users, or to provide a direct route between points of interest.
- Shared-use paths typically have a lower design speed for bicyclists than on-street facilities and may not provide appropriate accommodation for more confident bicyclists who desire to travel at greater speeds. In some situations it may be appropriate to provide an on-street bikeway in addition to a shared-use path along the same roadway.
- Path width should be informed by the number and type of users, and the differences in their speeds. For example, a path used by higher-speed bicyclists and children walking to school may experience conflicts due to the difference in user speeds. Additional user types like roller bladers, skateboarders, and dog walkers can introduce similar conflicts. By widening the path to provide space to accommodate passing, conflicts can be reduced.
- A path may benefit from the separation of users by user speed, type, or direction. When separating users, consider the path width and paving material preferred by each user.
- Shared-use paths may present increased conflicts between path users and motor vehicles at intersections and driveway crossings. Conflicts can be reduced by minimizing the number of driveway and street crossings present along a path and otherwise providing high-visibility crossing treatments.
- Path clearances are an important element in path design and reducing user conflicts. Vertical objects should be set back at least two feet from the edge of the path. Path shoulders may also reduce conflicts by providing space for users who step off the path to rest, allowing users to pass one another, or providing space for viewpoints.
- Trails on grades greater than 3 to 5 percent should be wider to account for higher bicycle speed in the downhill direction and additional space for faster bicyclists to pass slower bicyclists and pedestrians in the uphill direction.
- On sections with long steep grades, provide periodic sections with a flat grade to permit users to stop and rest.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. Highway Design Manual. 2020.

Caltrans. DIB-94: Complete Streets Contextual Design Guidance. 2024.

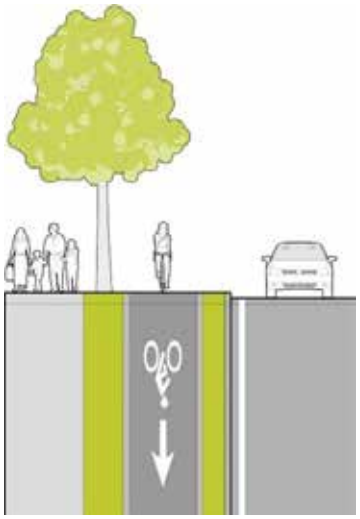
FHWA. Achieving Multimodal Networks. 2016.

SHARED-USE PATHS (CLASS I)

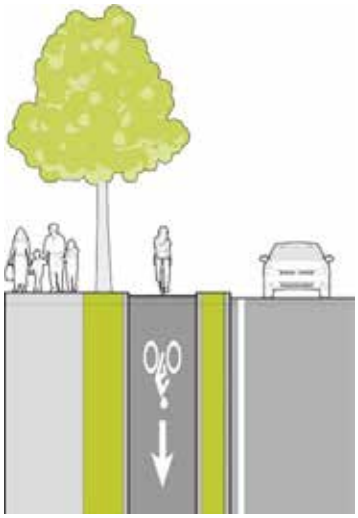
- Consider providing amenities such as restrooms, bike racks, and portable water at trailheads, and covered rest stops along the trail to ensure that paths are welcoming to a variety of user types, including families with children and seniors.
- Consider providing maps and signs to improve wayfinding for users, such as signs that show trail names, connections to nearby trails, and/or nearby destinations.
- Bollards within the clear width of shared-use paths are generally discouraged due to increased crash risk and potential delays to emergency response. Instead, prioritize regulatory signage, clear visual cues indicating the facility is not intended for motor vehicle use, and entry designs that discourage vehicle access without introducing fixed obstacles. Where physical measures are necessary, use markings and geometric design elements, such as narrowed or split path entries, to deter vehicle intrusion while maintaining a clear, predictable path for shared-use path users.
- Center line striping is optional on shared-use paths and should be applied strategically based on context and safety needs. When used, center lines help separate opposing travel directions and may be applied continuously or at targeted locations, such as curves with limited sight distance, unlit segments where nighttime use is expected, approaches to intersections, or near centerline obstructions like bollards.

SEPARATED BIKE LANES (CLASS IV)

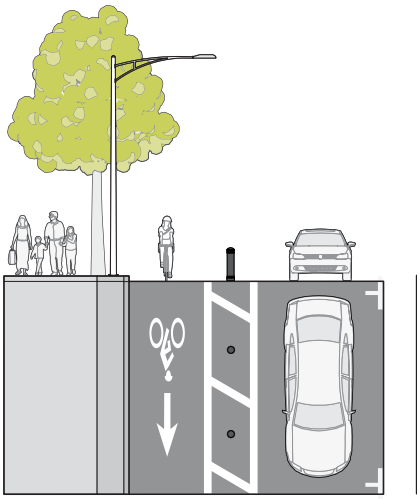
Separated bike lanes are a dedicated bikeway facility type that combines the user experience of a shared-use path with the on-street infrastructure of a conventional bike lane. They are physically separated from motor vehicle traffic by a vertical element and are distinct from the sidewalk. Separated bike lanes can be constructed at sidewalk grade, roadway grade, or an intermediate grade between the sidewalk and street. Separated bike lanes can be designed to serve one-way bicyclist traffic or two-way bicyclist traffic.



One-way sidewalk-level separated bike lane



One-way intermediate-level separated bike lane



One-way, street-level separated bike lane with bollards

GUIDANCE

- Separated bike lanes are a dedicated bike-only facility type and should be considered on any road with one or more of the following characteristics:
  - Traffic lanes: 3 lanes or greater.
  - Posted speed limit: 30 mph or more.
  - Traffic: 6,000 vehicles per day or greater.
  - On-Street parking turnover: frequent.
  - Streets that are designated as truck or bus routes.
- One-way separated bike lanes should be 5' wide minimum but widths of 7' are preferred to allow for passing.
- Buffer width may vary depending on type of vertical separation used, but typically is 3' wide. If adjacent to on-street parking, a minimum 3'-wide buffer is required.

CONSIDERATIONS

- Separated bike lanes are preferred over shared-use paths in higher density areas, commercial and mixed-use development, and near major transit stations or locations where peak pedestrian volumes are anticipated to exceed 200 people per hour on a shared use path.
- Separated bike lanes are more attractive to a wider range of bicyclists than striped bikeways on higher volume and higher speed roads since they are designed to prevent motor vehicles from driving or waiting in the bikeway. They also provide greater comfort to pedestrians by separating them from bicyclists operating at higher speeds.
- Choice of one- or two-way facility should be based on connectivity, bicyclist desire lines, roadway configuration, and potential intersection conflicts. Generally, one-way facilities are preferred.
- The allocation of space can vary from midblock locations to intersection approaches. Providing a larger street buffer at intersections can be achieved by tapering the bike lane toward the sidewalk as it approaches the intersection and narrowing or eliminating the sidewalk buffer.
- See Driveways section in Chapter 5 for details on how to address driveway crossings.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. DIB 89-02: Class IV Bikeway Guidance (Separated Bikeways/ Cycle Tracks). 2022.

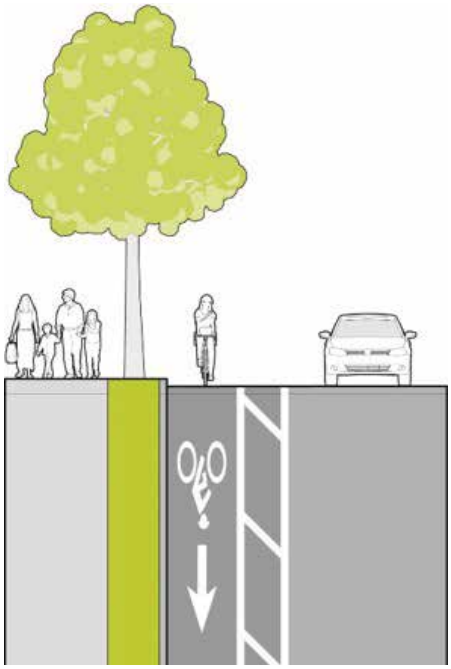
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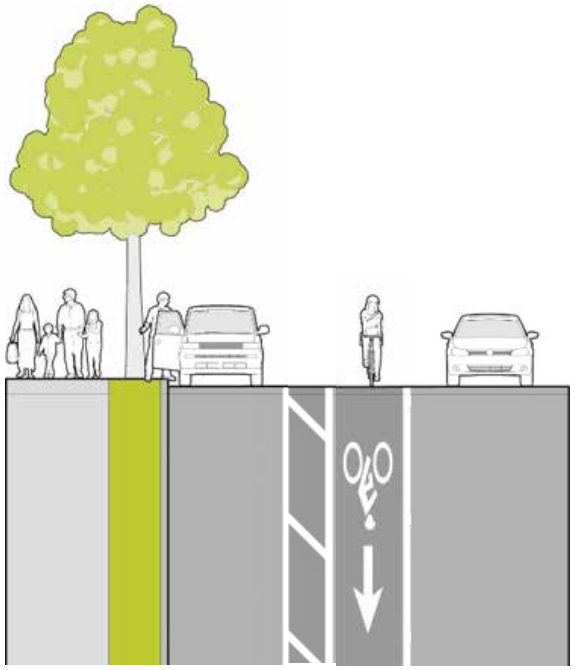
NACTO. Urban Bikeway Design Guide. 2014.

BUFFERED BIKE LANES (CLASS II)

Buffered bike lanes are created by painting a buffer zone between the bike lane and the adjacent travel lane. While buffers are typically used between bike lanes and motor vehicle travel lanes to increase bicyclists' comfort, they can also be provided between bike lanes and parking lanes in locations with high parking turnover to discourage bicyclists from riding too close to parked vehicles.



Buffered bike lane adjacent to a curb



Buffered bike lane adjacent to parking

GUIDANCE

- Place buffered or unbuffered bike lanes next to travel lane where speeds are 30 mph or slower and when traffic volume are fewer than 6,000 vehicles per day.
- Bike lanes must be a minimum of 4 feet wide and ideally 5–6 feet wide, with an additional painted buffer of at least 2 feet (or 3 feet when adjacent to parking). Consistent with AASHTO guidance, where bike lanes are located adjacent to a gutter or pan that is less than 5 feet wide, the gutter area should not be counted toward the effective bike lane width, as it does not provide usable operating space for bicyclists.

CONSIDERATIONS

- Can be used on one-way or two-way streets.
- Consider placing buffer next to parking lane where there is commercial or metered parking.
- When 7' of pavement width is available, consider providing a 5-foot bike lane with a 2-foot buffer.
- Buffered bike lanes allow bicyclists to ride side by side or to pass slower moving bicyclists. A larger buffer and/or bike lane is acceptable in cases where sufficient/excess pavement width is available.
- Preferable to a conventional bike lanes when used as a contra-flow bike lane on one-way streets.
- As noted in the Bicycle Facility Selection section earlier in this chapter, where the preferred bikeway facility may not be feasible (such as a street with a posted speed greater than 30 mph and existing Class II bike lanes that cannot accommodate Class IV separated bike lanes), consider reducing the posted speed limit, consistent with state law, and/or installing traffic calming features to reduce roadway speed or volumes in order match the bicycle facility to road conditions. In this example, enhancing the existing bike lanes to Class II buffered bike lanes can be paired with reducing the posted speed limit to 30 mph.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. DIB-94: Complete Streets Contextual Design Guidance. 2024.

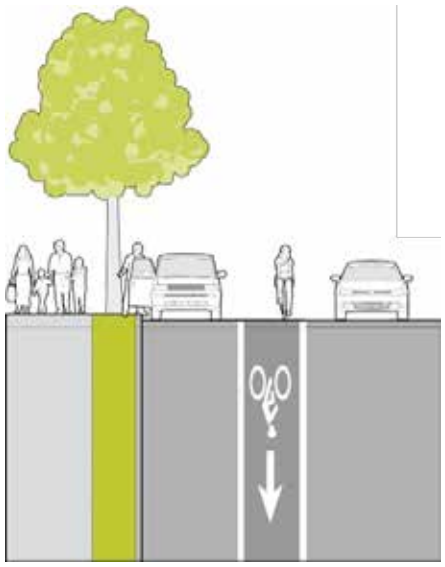
NACTO. Urban Bikeway Design Guide. 2014.

BIKE LANES (CLASS II)

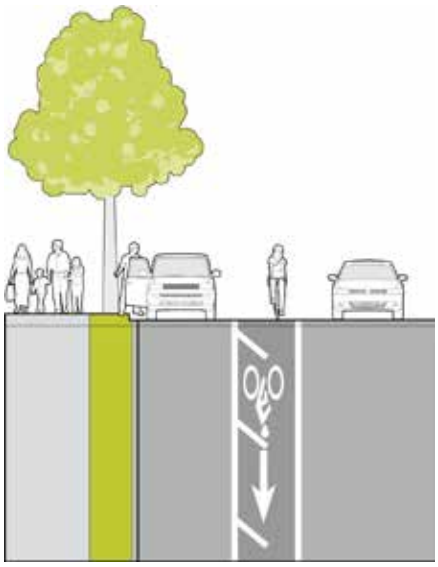
Bike lanes provide an exclusive space for bicyclists in the roadway. Bike lanes are established through the use of lines and symbols on the roadway surface. Bike lanes are for one-way travel and are normally provided in both directions on two-way streets or on one side of a one-way street. Bicyclists are not required to remain in a bike lane when traveling on a street and may leave the bike lane as necessary to make turns, pass other bicyclists, or to properly position themselves for other necessary movements.



Bike lane adjacent to a curb



Bike lane adjacent to parking



Bike lane with door zone marking

GUIDANCE

- Place bike lanes next to travel lane where speeds are 25 mph or slower and when traffic volume are fewer than 6,000 vehicles per day.
- Bike lanes must be a minimum of 4' wide, but ideally should be 5-6' wide. When adjacent to on-street parking, bike lanes should be a minimum of 5' wide. Consistent with AASHTO guidance, where bike lanes are located adjacent to a gutter or pan that is less than 5 feet wide, the gutter area should not be counted toward the effective bike lane width, as it does not provide usable operating space for bicyclists.
- Parking T's or hatch marks can highlight the door zone on constrained corridors with high parking turnover to guide bicyclists away from doors. (See rightmost graphic above.)

CONSIDERATIONS

- Can be used on one-way or two-way streets.
- Bike lanes may be enhanced with consistent use of conflict area striping, preferably with green-colored pavement, including right turn lanes & major driveways. More details can be found in the "Bikeway Intersection and Spot Treatments" section.
- Word/Symbol markings should be applied before & after intersections.
- Stopping, standing and parking in bike lanes may be problematic in areas of high parking demand and deliveries, especially in commercial areas. Use of sign R7-9 (or R7-9a) and/or red curbs may be used to discourage parking in bike lanes.
- Wider bike lanes or buffered bike lanes are preferable at locations with high parking turnover or higher volumes of bicyclists during peak hours.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. DIB-94: Complete Streets Contextual Design Guidance. 2024.

NACTO. Urban Bikeway Design Guide. 2014.

BICYCLE BOULEVARD (CLASS III)

Bicycle boulevards are applied on quiet streets, often through residential neighborhoods. These treatments are designed to prioritize bicycle through-travel, while calming motor vehicle traffic and maintaining relatively low motor vehicle volumes. Treatments vary depending on context, but often include elements of traffic calming and measures to discourage cut-through traffic, including traffic diverters, speed attenuators such as speed humps or chicanes, pavement markings, and signs. Bicycle boulevards are also known as neighborhood greenways or neighborhood bikeways, among other locally-preferred terms.



GUIDANCE

- Bicycle boulevards can generally be considered on any road with one or more of the following characteristics:
  - Maximum Average Daily Traffic (ADT): 3,000
  - Preferred ADT: up to 1,000
- Target speeds for motor vehicle traffic are typically around 20-25 mph; there should be a maximum 15 mph speed differential between bicyclists and vehicles.
- Bicycle boulevards feature regularly spaced traffic calming treatments to slow vehicles and meet target vehicle speeds. See "Traffic Calming" section.
- Refer to State Bill 1216 for new Class III bicycle facility requirements beginning January 1, 2025.
- Provide clear wayfinding to help users navigate to and along bike boulevards, supporting connectivity within the broader bicycle network (see Wayfinding page 52).

CONSIDERATIONS

- Many cities already have Class III bike routes along neighborhood streets that provide an alternative to traveling on high-volume, high-speed arterials. Applying bicycle boulevard treatments to these routes makes them more suitable for bicyclists of all abilities and can reduce crashes.
- Stop signs or traffic signals (where possible and allowed by warrant) should be placed along the bicycle boulevard in a way that prioritizes the bicycle movement, minimizing stops and delays for bicyclists whenever possible.
- Agencies may consider implementing bicycle boulevard treatments on one pilot corridor to measure the impacts and gain community support. The pilot program should include before-and-after crash studies, motor vehicle counts, and bicyclist counts on both the bicycle boulevard and parallel streets. Findings from the pilot program can be used to justify bicycle boulevard treatments on other neighborhood streets.
- Additional treatments for major street crossings may be needed, such as median refuge islands, rectangular rapid flashing beacons, bicycle signals, or Pedestrian Hybrid Beacons.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. DIB-94: Complete Streets Contextual Design Guidance. 2024.

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Bikeway Design Guide. 2014.

RURAL BICYCLE ROUTES (CLASS III)

Rural bike routes accommodate bicyclists on roadways without dedicated facilities, either on shoulders or by sharing the travel lane with vehicles. This type of facility is applicable in rural areas where dedicated bikeways either will not fit on the street or would not be appropriate given the surrounding context.



GUIDANCE

- Refer to State Bill 1216 for new Class III bicycle facility requirements beginning January 1, 2025.
- Where present, shoulder width should be at least 5' if the roadway is curbless and there are no vertical obstructions. If curbs, gutter, or vertical obstructions are present, shoulder width should be 5' minimum exclusive of obstructions. See table on Page 8 for recommended shoulder width based on roadway speed and volume.
- When posted speed limits or 85th percentile speeds exceed 50 mph and/or if heavy vehicles frequently use the road, shoulders should exceed minimum widths to enhance bicyclist comfort.
- Edge line rumble strips can provide additional bicyclist protection on paved shoulders. The width of a shoulder with rumble strips should be measured from the rightmost side of the rumble strip. Periodic gaps should be provided to allow bicyclists to move across the strip pattern.
- On rural roadways with higher traffic volumes (e.g., ADT above approximately 6,000–7,000 vehicles per day, depending on context) and/or higher speeds (45 mph or greater), shared use paths are often preferred over on-road bike facilities to improve bicyclist comfort and safety.

CONSIDERATIONS

- On roads used by bicyclists that lack shoulders, the BICYCLE warning sign (W11-1) or BICYCLES ALLOWED USE OF FULL LANE (R9-20) may be used. It may be supplemented with an IN LANE, ON ROAD, or ON ROADWAY plaque. A fluorescent yellow-green background may be used for these sign assemblies.
- Signs W11-1 or R9-20 should be spaced every 1-2 miles. They should also be placed prior to approaches to curves, hills, or other places with limited sight distances.
- The SHARE THE ROAD sign (W16-1P) is not recommended as it does not provide a clear message to users.
- For roads that are unable to provide consistent and standard size bikeable shoulders in both directions, provide a wider shoulder on:
  - The uphill direction on hilly roads to reduce conflicts between slow-moving bicyclists and fast-moving motor vehicles.
  - The inside of a horizontal curve and/or the downgrade of a vertical curve where sight distance is restricted.
- In rural areas, paved shoulders may provide space for pedestrians on roadways without sidewalks. In situations where a shoulder is intended for pedestrian use, it must meet Americans with Disabilities Act requirements.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. Manual on Uniform Traffic Control Devices. 2014.

FHWA. Achieving Multimodal Networks: Applying Design Flexibility and Reducing Conflicts. 2016.

FHWA. Small Town and Rural Multimodal Networks. 2016.

UNCLASSIFIED BIKE ROUTES

Unclassified Bike Routes are paths, trails, or roadways that provide readily apparent transportation options to users, but which are not consistent with minimum standards established for Class I-IV facilities due to material type, width, or other characteristics. Unclassified Bike Routes are almost always existing facilities that preclude identification as a future Class I–IV facility without substantial reconstruction.



CONSIDERATIONS

- On roads used by bicyclists that lack shoulders, the BICYCLE warning sign (W11-1) or BICYCLES ALLOWED USE OF FULL LANE sign (R9-20) may be used. It may be supplemented with an IN LANE, ON ROAD, or ON ROADWAY plaque. A fluorescent yellow-green background may be used for these sign assemblies.
- Signs W11-1 or R9-20 should be spaced every 1-2 miles. They should also be placed prior to approaches to curves, hills, or other places with limited sight distances.
- The SHARE THE ROAD sign (W16-1P) is not recommended as it does not provide a clear message to users.
- California state law requires motorists to provide at least 3' clearance when passing bicyclists. The Bicycle Passing Clearance sign, R117(CA), may be used to specify this.
- Speed reduction markings, ideally placed upstream of unexpected horizontal curves, may be particularly useful on rural roads with higher volumes of bicyclists. (See Speed Reduction Markings section in Chapter 6 for more information.)
- Paved shoulders are particularly important for improving comfort and safety for bicyclists on roadways that meet any or all of the following conditions:
  - Inadequate sight distances for the typical operating speed,
  - Grades in excess of 5 percent, or
  - High percentages (> 10 percent) of heavy vehicles.
- When it is not possible to install paved shoulders on both sides of the roadway, climbing lanes (paved shoulders on one side of the roadway in the uphill direction) provide dedicated space for people to bicycle uphill allowing faster vehicular traffic to pass comfortably.
- On roadway sections with vertical or horizontal curves that limit sight distance, it can be helpful to provide shoulders over the crest and on the downgrade of a vertical curve or on the inside of a horizontal curve.
- Refuge areas are paved or unpaved locations adjacent to the roadway where bicyclists may pull over to stop for rest or allow traffic to pass. Refuge areas should have adequate visibility for bicyclists pulling in and out to avoid conflicts with moving traffic. It may also be necessary to restrict parking in refuge areas to ensure that parked vehicles do not inhibit the use of the space by bicyclists or create sight distance obstructions.

REFERENCES

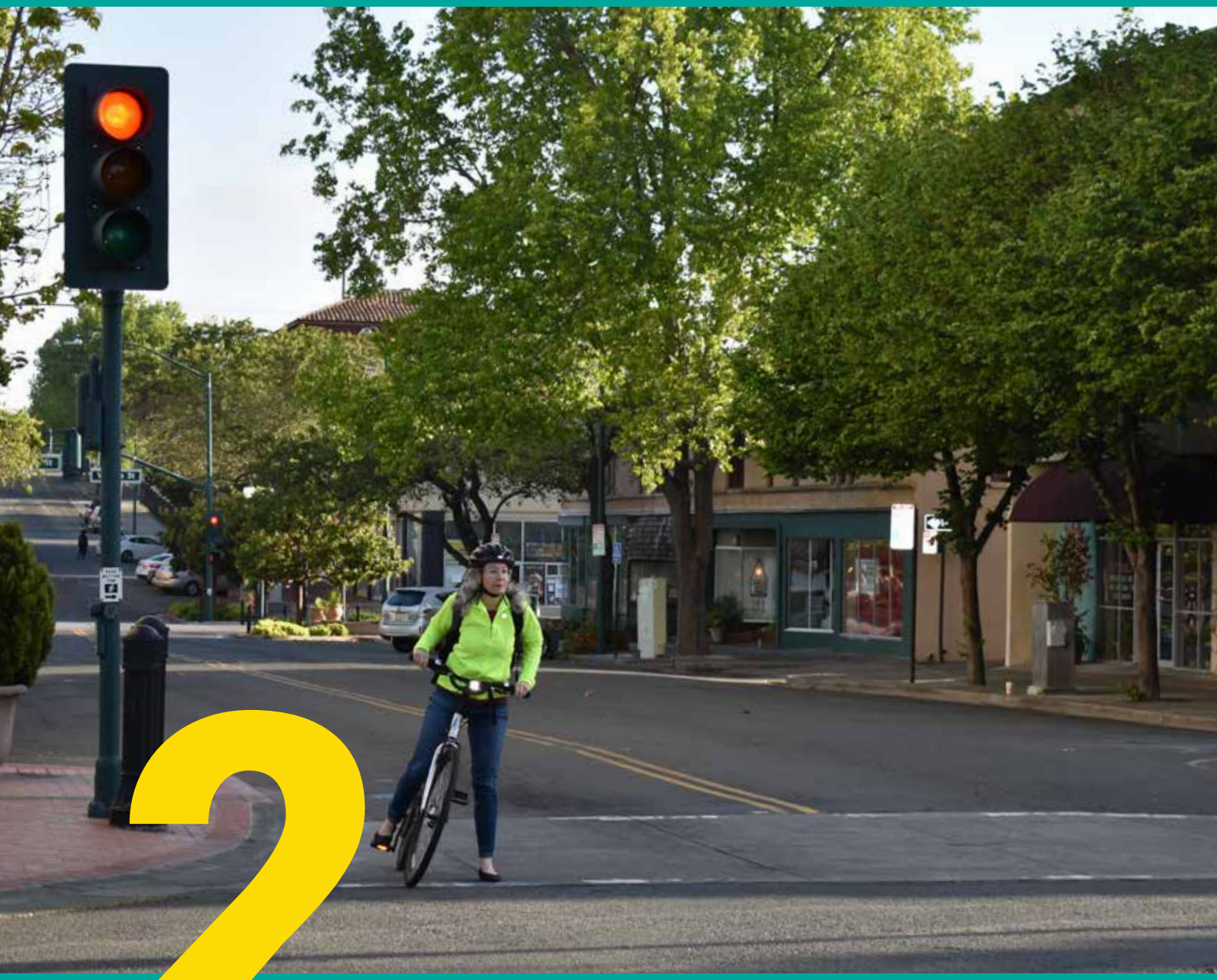
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BIKEWAY INTERSECTION & SPOT TREATMENTS



2

BIKE BOXES

SINGLE

A bike box provides dedicated space between the crosswalk and vehicle stop line where bicyclists can wait in front of motor vehicles during the red light at signalized intersections. Bike boxes are primarily used to mitigate conflicts between through bicyclists and right-turning motorists and to reduce conflicts between motorists and bicyclists at the beginning of the green signal phase.



GUIDANCE

- Bike boxes should be a minimum of 10 ft in depth and may be larger depending on anticipated bicyclist volumes.
- The bike box should connect directly to the approaching bike lane. At least 50 ft of bike lane should be provided on the approach to a bike box so bicyclists will not need to ride between lanes to enter the box. The approaching bike lane, and the bike box, may be colored green.

CONSIDERATIONS

- Install advance stop bar where crosswalk serves as limit line for existing facilities; also consider pavement marking or signage (such as MUTCD R10-6).
- Applicable at signalized intersections with high bicycle or motor vehicle volumes, especially those with frequent bicyclist left turns and/or motorist right turns.
- Recommended where a left turn is required to follow a designated bike route, access a shared-use path, or when the bicycle lane moves to the left side of the street.
- When a bike box is implemented in front of a vehicle lane that previously allowed right turns on red, the right turn on red movement must be restricted using signage and enforcement once a bike box is installed.
- A bicycle box should only extend across one travel lane. In limited situations, bike boxes may be used to facilitate left turns for bicycles when there is an unusually heavy left turn volume, such as near the entrance to a popular shared use path, although the preferred treatment for bicylist left turns is a two-stage bicycle turn box.
- See Bicycle Signals (Chapter 5) for use of dedicated bike signal or hybrid signal with advance green for bicycles.

REFERENCES

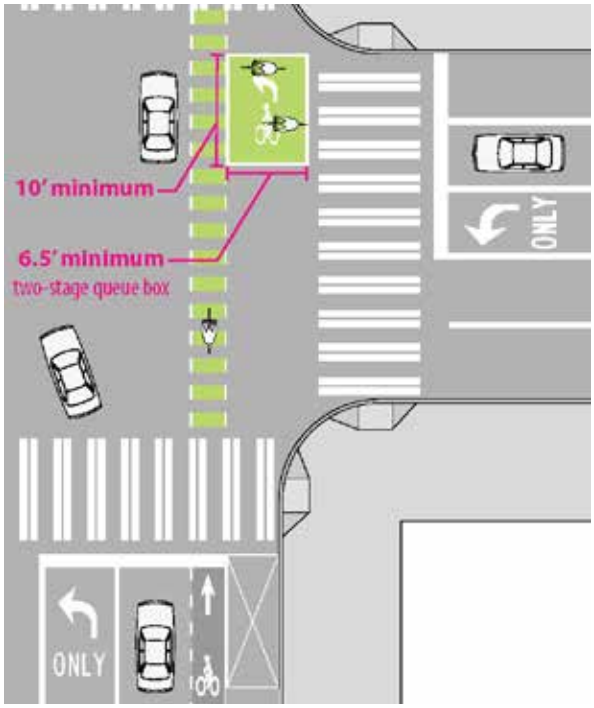
FHWA. Separated Bike Lane Planning and Design Guide. 2015.

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Bikeway Design Guide. 2014.

TWO-STAGE

A two-stage turn box designates a space for bicyclists to wait for traffic to clear before proceeding in a different direction of travel. Two-stage turn queue boxes may be used with any type of bicycle facility. A two-stage turn queue box should be considered where separated bike lanes are continued up to an intersection and a protected intersection is not provided.



GUIDANCE

- A two-stage bicycle turn box:
  - Must be located outside of the path of through and turning traffic.
  - Should be located adjacent to the direct path of bicyclist travel.
  - Should be located downstream of the crosswalk and downstream of the stop line.
  - Must include a bicycle symbol oriented in the direction in which the bicyclists enter the box, along with an arrow showing the direction of the turn.
  - May include green-colored pavement.
- A NO RIGHT TURN ON RED sign, R13-A(CA), must be installed where a two-stage turn queuing box is not located outside the path of right-turning traffic to prevent motorists from entering the bicycle queuing area.

CONSIDERATIONS

- Two stage turn boxes are applicable at locations where a left turn movement is expected by bicyclists.
- A two-stage bicycle turn box may be used at signalized intersections per FHWA Interim Approval IA-20, though experimental approval from FHWA is required to use this pavement marking at unsignalized intersections.
- May be used at any signalized intersection but are preferable on high-volume and multilane roads to reduce the need for bicyclist weaving across motor vehicle traffic.
- Two-stage bicycle turn boxes should be placed in a logical location that aligns with the receiving bicycle facility. They can be placed in front of a through lane, in front of a turn lane, or entirely outside of a motor vehicle lane.
- Dashed bike lane extension markings may be used to indicate the path of travel across the intersection.
- Passive detection of bicycles in the two-stage bicycle turn box must be provided if detection is required to actuate a traffic signal.
- Both driver and bicyclists public education is recommended to support greater understanding of purpose and correct use of two stage bike boxes.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

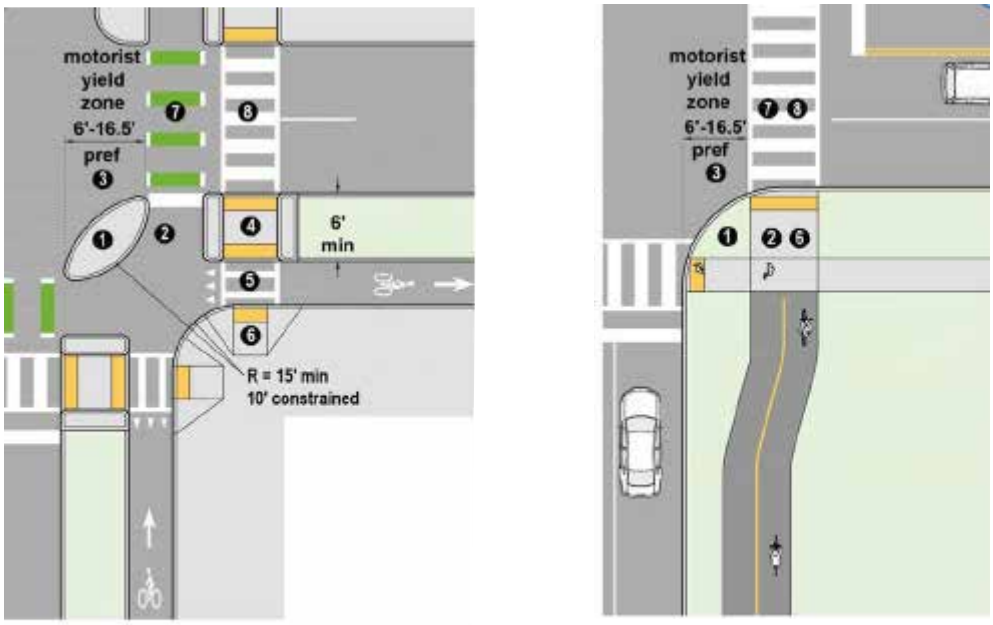
Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

FHWA. Separated Bike Lane Planning and Design Guide. 2015.

NACTO. Urban Bikeway Design Guide. 2014.

PROTECTED INTERSECTIONS

Separated bike lanes provide an exclusive travel way for bicyclists alongside roadways that is separate from motor vehicle travel lanes, parking lanes, and sidewalks. Separated bike lane designs at intersections should manage conflicts with turning vehicles and increase visibility for all users.



1. corner island
2. forward bicycle queuing area
3. motorist yield zone
4. pedestrian refuge island
5. pedestrian crossing of the separated bike lane
6. pedestrian curb ramp
7. bicycle crossing of travel lanes
8. pedestrian crossing of travel lanes

GUIDANCE

+ Protected intersections have eight key elements, as noted in the above image.

CONSIDERATIONS

+ At major intersections where space is available, protected intersection designs are preferred because they are intuitive and comfortable, provide clear right-of-way assignment, promote predictability of movement, and allow eye contact between motorists, bicyclists, and pedestrians.
+ Where two-way separated bike lanes are installed on one side of the street, the contra-flow direction of bicycle travel introduces an unexpected movement at the intersection and requires more complex signal operations.
+ Corner refuge islands allow the bike lane to be physically separated up to the intersection crossing point where potential conflicts with turning motorists can be controlled more easily. They serve an important purpose in protecting the bicyclist from right-turning motor vehicle traffic.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Separated Bike Lane Planning and Design Guide. 2015.

NACTO. Urban Bikeway Design Guide. 2014.

MIXING ZONES

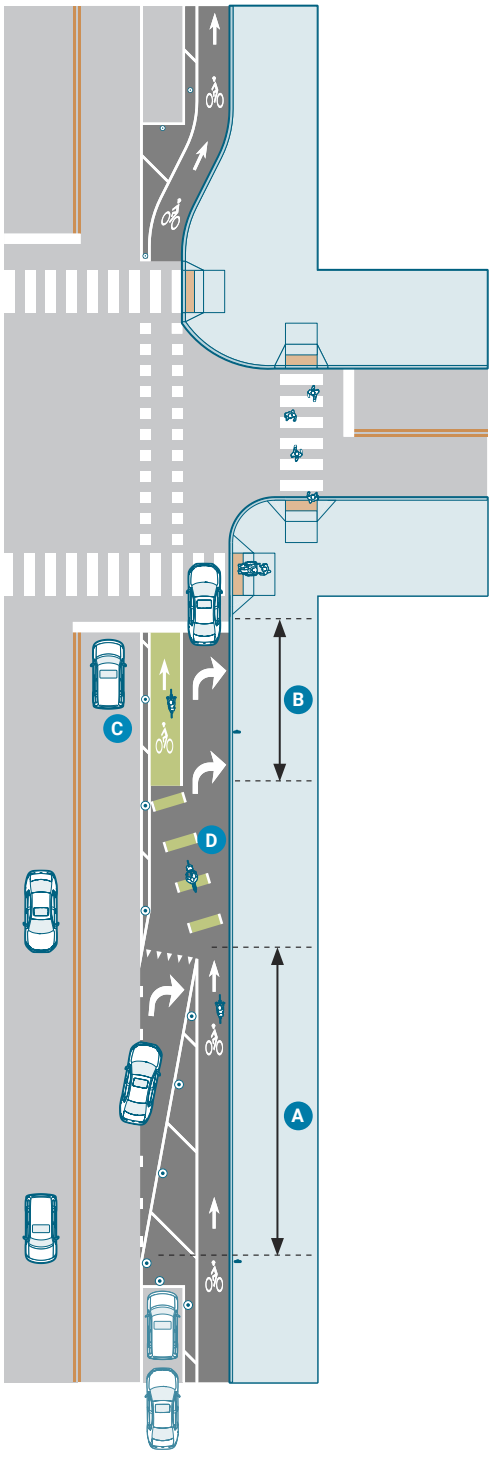
A mixing zone designates space for turning motorists to merge across a separated bike lane at a defined location in advance of an intersection. The mixing zone design limits bicyclists' exposure to motor vehicles by defining a limited merge area for the turning motorist. Mixing zones are compatible only with one-way bike lanes.

GUIDANCE

- **A** Locate merge points where the entering speeds of motor vehicles will be 20 mph or less by (a) minimizing the length of the merge area and (b) locating the merge point as close as practical to the intersection.
- **B** Minimize the length of the storage portion of the turn lane
- **C** Provide a buffer and physical separation (e.g. flexible delineator posts) from the adjacent through lane after the merge area, if feasible.
- **D** Highlight the conflict area with green surface coloring and dashed bike lane markings, as necessary, or shared lane markings placed on a green box.
- \+ Provide a BEGIN RIGHT (or LEFT) TURN LANE YIELD TO BIKES sign (R4-4) at the beginning of the merge area.
- \+ Restrict parking within the merge area

CONSIDERATIONS

- \+ At locations where raised separated bike lanes approach the intersection, the bike lane should transition to street elevation at the point where parking terminates.
- \+ Where posted speeds are 35 mph or higher, or at locations where it is necessary to provide additional storage for queued vehicles, it may be necessary to provide a deceleration/storage lane in advance of the merge point.
- \+ Protected intersections with phase separation between bicyclists and right-turning motorists are preferable to mixing zones. Mixing zones are generally appropriate as an interim solution or in situations where severe right-of-way constraints make it infeasible to provide a protected intersection.
- \+ Mixing zones are only appropriate on street segments with one-way separated bike lanes. They are not appropriate for two-way separated bike lanes due to the contra-flow bicycle movement.



REFERENCES

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

FHWA. Separated Bike Lane Planning and Design Guide. 2015.

NACTO. Urban Bikeway Design Guide. 2014.

DYNAMIC WARNING SYSTEMS

Bicycling on narrow, rural roads can present unique hazards, particularly in areas of Napa County with steep topography, blind curves, and presence of large agricultural or recreational vehicles. Dynamic Warning Systems utilize active detection (via in-ground inductive loops or other technologies) to activate flashing beacons, alerting drivers to the presence of bicyclists on a roadway.



Source: FHWA. Western Transportation Institute, Montana State University. Dynamic Warning Systems: A Review of Applications and Effectiveness. 2021.

GUIDANCE

- Dynamic Warning Systems are best utilized along existing popular bicycling routes that lack dedicated bicycle facilities.
- Beacons should be combined with BICYCLE (W11-1) sign and AHEAD (W16-9P) sign.

CONSIDERATIONS

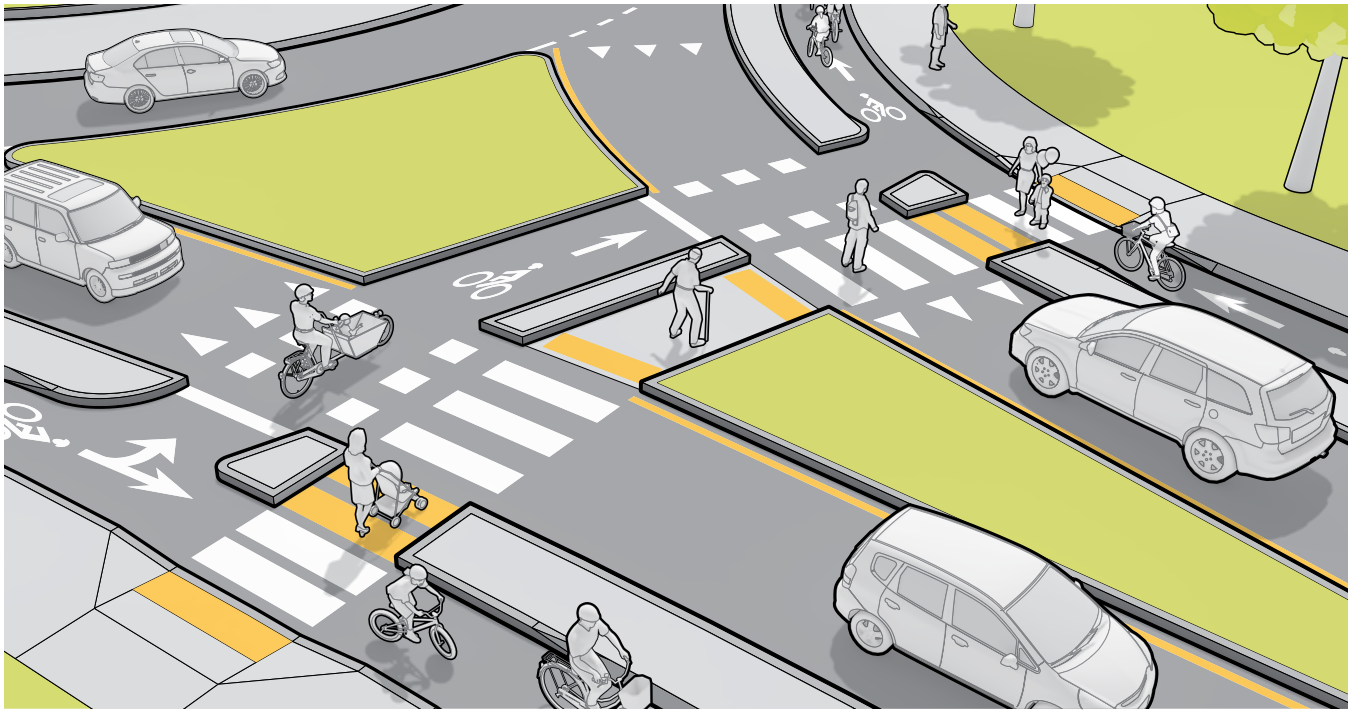
- Systems should be located strategically at locations near blind curves, steep grades, or other locations where bicyclists using the roadway may not be readily apparent to other road users.
- Installation locations should avoid areas where roadway congestion may exist (eg: near intersections or major driveways) or where pullouts or other road design features may result in less accurate system operation.
- As a relatively new safety treatment, conducting pre- and post-project vehicle and bike volume and speed counts will help inform future use of this technology.

REFERENCES

FHWA. Western Transportation Institute, Montana State University. Dynamic Warning Systems: A Review of Applications and Effectiveness. 2021.

SEPARATED BIKE LANES AT ROUNDABOUTS

When separated bike lanes are provided at roundabouts, they should be continuous around the intersection and parallel to the sidewalk. Separated bike lanes should generally follow the contour of the circular intersection.



GUIDANCE

- Separated bike lanes are applicable at all roundabouts. This treatment reduces conflict and places bicyclists in more predictable and visible positions.
- Separated bike lanes at roundabout crossings should provide:
  - Yield control for motorists at the bicycle crossing,
  - Detectable surface materials to maintain separation between bicyclists and pedestrians; and
  - Bicycle/pedestrian warning signs (W11-15) at the bicycle and pedestrian crossings.

CONSIDERATIONS

- It may be advisable to install RRFBs (Rectangular Rapid Flashing Beacons) or apply geometric design changes to support motorist yielding.
- The bicycle crossing should be immediately adjacent to and parallel with the pedestrian crossing, and both should be at the same elevation.
- The separated bike lane approach to the bicycle crossing should result in bicyclists arriving at the queuing area at a perpendicular angle to approaching motorists.
- Consider providing supplemental yield lines at roundabout exits to indicate priority at these crossings.
- Channelizing islands are preferred to maintain separation between bicyclists and pedestrians, but may be eliminated if different surface materials are used.
- On- and off-ramps should be provided when a Class I shared-use path is employed to allow bicyclists to safely enter and exit the facility from the roadway.
- Where separated bike lanes are provided at a roundabout, the use of Class III pavement markings (sharrows) within the roundabout is encouraged to provide an on-street alternative for bicyclists who prefer to travel with motor vehicle traffic.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

BICYCLE LANE EXTENSION MARKINGS

Where a bicycle facility crosses an intersection or higher volume driveway, the delineation of bicycle space through the intersection using dashed line increases the legibility of the bikeway and raises awareness of bicyclists to other roadway users. Bicycle lane extension markings, also called conflict area markings, may be used with any Class II or Class IV bike lane across driveways, through intersections, or in separated bike lane mixing zones. See Protected Intersections graphic for illustration of extension markings at an intersection.





GUIDANCE

- Dashed white lane lanes should conform to the latest edition of the CA MUTCD. These can be used through different types of intersections based on engineering judgment.
- Green pavement markings, where utilized, may be applied in a solid or dashed pattern within a dashed bicycle lane to indicate conflict areas and where merging maneuvers are permitted, such as across intersections, driveways, and at STOP or YIELD-controlled cross-streets.
- Green pavement markings shall be placed before the stop bar at the intersection and continue through the intersection. Dashed marking should be aligned with the approaching/receiving bike lane.
- Green dashed pavement markings are typically 4' by 5'-2" with a 6" white edge.
- The colored markings should be skid-resistant and retroreflective, made from durable liquid pavement.
- Extension markings should be used to guide vehicle and bicycle movements and clarify travel paths through intersections or interchanges with complex geometry or reduced visibility. These conditions may include offset, skewed, multi-legged, or curved intersections; locations with multiple turn lanes; or offset turn lanes that could create driver confusion.

CONSIDERATIONS

- A variety of pavement marking symbols can enhance intersection treatments to guide bicyclists and warn of potential conflicts.
- Symbol placement within intersections should consider vehicle wheel paths to minimize maintenance.
- Driveways with higher volumes may require additional pavement markings and signage.
- Consideration should be given to using intersection pavement markings as spot treatments or standard intersection treatments. A corridor wide treatment can maintain consistency; however, spot treatments can be used to highlight conflict locations.

REFERENCES

AASHTO Guide for the Development of Bicycle Facilities. 2024.

Caltrans. DIB 89-02: Class IV Bikeway Guidance. 2022.

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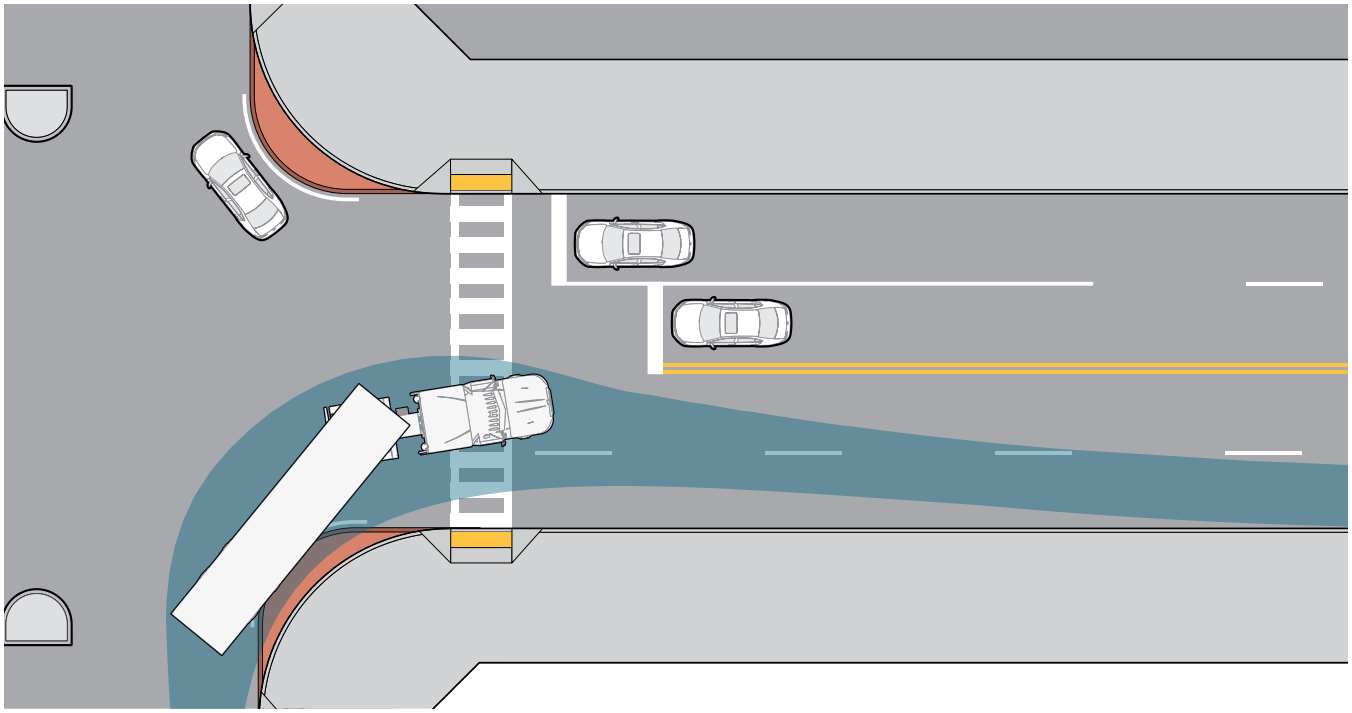
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NACTO. Urban Bikeway Design Guide. 2014.

TRUCK APRONS

In locations where large vehicles make occasional turns, designers can consider mountable truck aprons. Mountable truck aprons reduce turning speeds for passenger vehicles, yet accommodate the occasional large vehicle without encroachment or off-tracking into pedestrian waiting areas.



GUIDANCE

- The mountable surface should be visually distinct from the adjacent travel lane, sidewalk and separated bike lane.
- The heights of mountable areas and curbs should be no more than 3 inches above the travel lane to accommodate lowboy trailers.
- Mountable truck aprons have a preferred corner radius of 15'.

CONSIDERATIONS

- Truck aprons are typically constructed with asphalt or concrete but may also be constructed with pavement markings and bolt-down speed bumps aligned perpendicular to the roadway edge as an interim strategy.
- Mountable truck aprons are part of the traveled way and should be designed to discourage pedestrian or bicycle refuge.
- Bicycle stop bars, detectable warning surfaces, traffic signal equipment and other intersection features must be located behind the mountable surface area.
- While bicyclist and pedestrian safety is negatively impacted by wide crossings, bicyclists and pedestrians are also at risk if the curb radius is too small. Curb radii that are too small for large vehicles to navigate can result in the rear wheels of a truck tracking over queuing areas at the corner. Maintenance problems are also caused when trucks must regularly drive over street corners to make turns.
- For related information, see Corners and Curb Radii and Curb Extensions sections in Chapter 3.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Achieving Multi-modal Networks: Applying Design Flexibility and Reducing Conflicts. 2016.

AT-GRADE RAILROAD CROSSINGS

Railroad tracks that interface with bicycle facilities can be hazardous. Tracks running along bike facilities create hazards for bicyclists traveling parallel to the tracks as well as when turning across the tracks.



GUIDANCE

- Railroad crossings should be designed to allow bicyclists to cross at an angle between 60 and 90 degrees to minimize their risk of crashing. This may require wider paved shoulders to accomplish.
- Provide clear delineation with pavement markings indicating to bicyclists where they should travel to cross railroad tracks at an optimum location.
- Provide adequate sight lines for approaching bicyclists to see approaching trains at rail crossings.
- Provide warning signs to alert bicyclists of the crossing ahead.

CONSIDERATIONS

- Railroad crossings may require supplemental traffic control devices approved by the rail authority; in unique situations, design solutions may include a separate bridge structure to avoid at-grade crossings.
- Provide, as practicable, the best track surface treatment for bicyclists. Concrete produces the smoothest ride for bicyclists, even under wet conditions. This is preferred to rubber, which can become slippery when wet and degrade over time; asphalt, which can deform or heave over time; and timber, which wears down relatively rapidly and can be slippery when wet.
- Reduce the flangeway width to minimize the possibility of bicycle wheels getting caught in the opening.
- Alternative crossing facilities (eg., Class I) may be appropriate (as opposed to shared roadway/shoulder) in locations where higher volumes or bicycle or pedestrian users are expected, or where a history of incidents is present.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

PEDESTRIAN FACILITIES & AMENITIES



3

ELEMENTS OF A SIDEWALK

Sidewalks play a critical role in the character, function, enjoyment, and accessibility of neighborhoods, main streets, and other community destinations. In addition to providing space for pedestrians separated from motor vehicles, sidewalks also accommodate street trees and other plantings, stormwater infrastructure, street lights, and bicycle racks. This section defines sidewalk zones and provides considerations for better activating the streetscape to enhance peoples' experiences.

ZONES

Frontage Zone:

The Frontage Zone is the area of sidewalk that immediately abuts buildings along the street. In residential areas, the Frontage Zone may be occupied by front porches, stoops, lawns, or other landscape elements that extend from the front door to the sidewalk edge. The Frontage Zone of commercial properties may include architectural features, outdoor displays, café seating, awnings, signage, etc. Frontage Zones may vary in width from just a few feet to several yards.

Pedestrian Through Zone:

Also known as the "walking zone," the Pedestrian Zone is the portion of the sidewalk space used for active travel. For it to function, it must be kept clear of any obstacles and be wide enough to comfortably accommodate expected pedestrian volumes (as anticipated by density and adjacent land use) including those using mobility assistance devices, pushing strollers, or pulling carts.

Amenity Zone:

The Amenity Zone, or "landscape zone," lies between the curb and the Pedestrian Zone. This area is occupied by fixtures such as street lights, trees, bicycle racks, utility poles, transit shelters, parking meters, signposts, signal boxes, benches, trash and recycling receptacles, and other amenities. In commercial areas, it is typical for this zone to be hardscape pavement, pavers, or tree grates. In residential, or lower intensity areas, it is commonly a planted strip.



Frontage, Pedestrian and Amenity Zones

CONSIDERATIONS

- Where demand is highest, it may be appropriate to re-allocate street width to provide amenities that cannot be accommodated within the existing sidewalk width, such as bicycle parking or outdoor dining. Outdoor dining opportunities contribute to a lively street environment and add economic value by enabling private commercial activity to spill into the public environment of the street.
- While there are some exceptions, most street furniture installation is installed in the Amenity Zone. For example, bicycle parking may be installed in the frontage zone if it is sufficiently wide enough to accommodate it. Regardless, street furniture should not impede movement in the Pedestrian Zone.
- Seating is most commonly located in the Amenity Zone of the street, but may also be placed in the Frontage Zone. Seating in the Amenity Zone should generally face away from the street and toward the sidewalk or be aligned perpendicular to the curb. Seating in the Frontage Zone should face the street.
- Stormwater facilities are commonly located in the Amenity Zone.
- Where demand is highest, it may be appropriate to re-allocate street width to provide amenities that cannot be accommodated within the existing sidewalk width, such as bicycle parking or outdoor dining.

PREFERRED WIDTHS FOR SIDEWALK ZONES

The width of the various sidewalk zones will vary given the street type, the available right-of-way, scale of the adjoining buildings and the intensity and type of uses expected along a particular street segment. A balanced approach for determining the sidewalk width should consider the character of the surrounding area and the anticipated pedestrian activities. For example, is the street lined with retail that encourages window shopping or does it connect a residential neighborhood to a commercial area where pedestrians frequently need to pass one another? Does the scale of the buildings and the character of the street indicate a need for a wider sidewalk?



GUIDANCE

- Sidewalk width must be a minimum of 4' of clear space for path of travel (not including the curb which is typically 6") and a passing space of minimum 5'x5' is required every 200' or more.
- Pedestrian Through Zone width recommendations:
  - School Zones (8-12ft)
  - Downtown, Urban Centers, Main Streets (6-12ft)
  - Suburban Commercial (6-10ft)
  - Suburban Residential (6ft)
  - Rural (4-6ft), where applicable

CONSIDERATIONS

- In locations with constrained rights-of-way, it is possible to provide a narrower Frontage Zone and Pedestrian Zone. Sidewalk width is based on local context, therefore in retrofit locations where development is not occurring and where existing building are anticipated to remain, 5-foot-wide sidewalks may be adequate.
- Frontage Zones used for sidewalk cafés are a special condition and should generally be no less than 6 feet in width.
- The provision of tree wells or landscape strip within the Amenity Zone will be based on the existing or planned character of the neighborhood.
- Sidewalk stormwater facilities (including rain gardens) are generally located in the Amenity Zone and may indicate a need for a wider zone than what is identified in the table above.

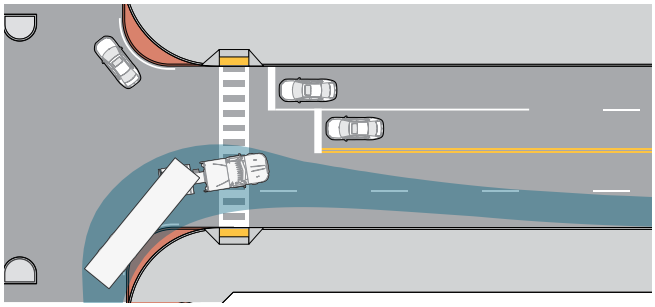
REFERENCES

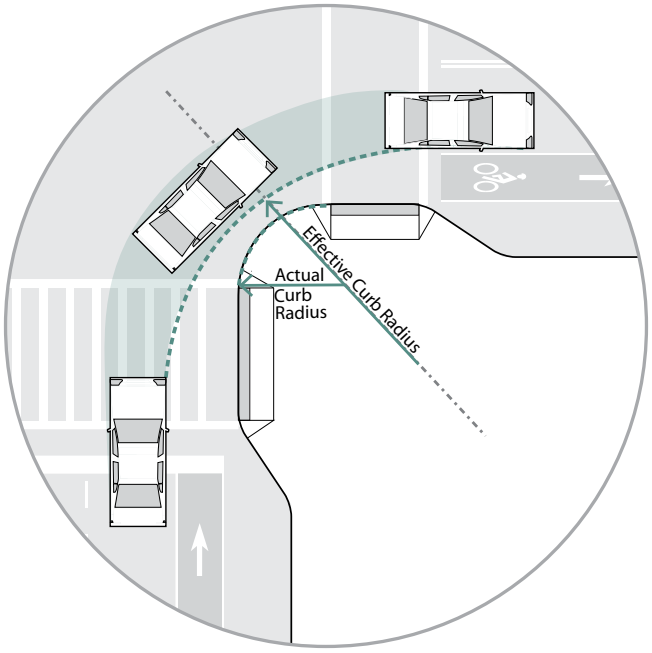
NACTO. Urban Street Design Guide. 2013.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

CORNERS AND CURB RADII

Pedestrian safety and comfort is enhanced by smaller curb radii, which shorten crossing distances for pedestrians and reduce vehicle turning speeds. However, streets must accommodate large turning vehicles, including school buses and transit vehicles, which require larger turning radii. One of the most challenging aspects of intersection design is to determine methods of accommodating large vehicles while keeping intersections as compact as possible. This requires engineering judgment, as each intersection is unique in terms of the number of travel lanes, presence of a median, and a number of other features that fundamentally impact corner design.





GUIDANCE

+ Curb radii should be designed to accommodate the intended design vehicle, or the most frequent user of a given street, turning using one approach lane and one receiving lane, as well as the intended control vehicle, or an infrequent larger vehicle, turning using multiple lane spaces.

CONSIDERATIONS

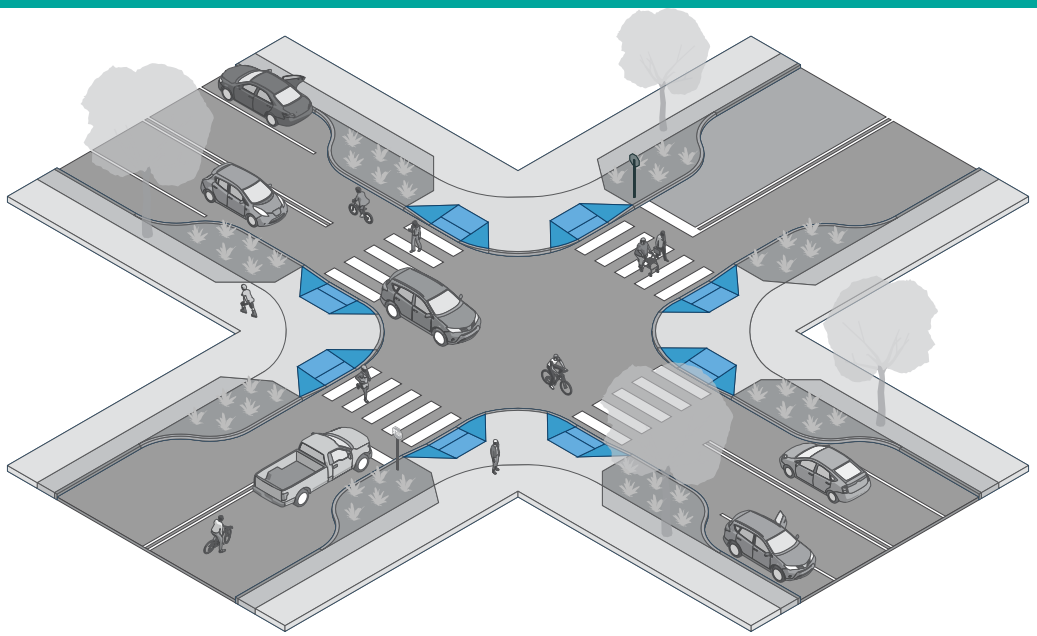
+ The design and control vehicle are context-dependent. Common design vehicles include a DL-27 for local streets, SU-30 for downtown and commercial streets, and BU-40 for designated bus routes. Control vehicles are often larger trucks like a WB-50.
+ At signalized intersections, corner design should assume that a large vehicle will use the entire width of the receiving lanes on the intersecting street.
+ Depending on an agency's encroachment policy, it may be possible to allow a large turning vehicle to encroach on the adjacent travel lane on the departure side (on multi-lane roads) to make the turn.
+ Mountable truck aprons can be implemented to deter design vehicles from making higher-speed turns, while accommodating control vehicles without encroachment or off-tracking into pedestrian areas. Mountable truck aprons should be visually distinct from the adjacent travel lane and sidewalk. (For more information, refer to Truck Aprons section).

REFERENCES

NACTO. Urban Street Design Guide. 2013.

CURB RAMPS

The transition for pedestrians from the sidewalk to the street is provided by a curb ramp. The designs of curb ramps are critical for all pedestrians, but particularly for people with disabilities. The ADA Standards require all pedestrian crossings be accessible to people with disabilities by providing curb ramps at intersections and midblock crossings as well as other locations where pedestrians can be expected to enter the street. Curb ramps also benefit people pushing strollers, grocery carts, suitcases, or bicycles.



GUIDANCE

- Curb ramps are part of the accessible Pedestrian Access Route (PAR) and must be provided at all intersections where pedestrians are permitted and expected to cross the street, i.e., all street corners in California.
- Separate, perpendicular curb ramps should be provided for each crosswalk at an intersection (as shown in graphic above) rather than a single ramp at a corner for both crosswalks. The separate curb ramps improve orientation for visually impaired pedestrians by directing them toward the correct crosswalk. Blended transitions may be provided instead of perpendicular curb ramps. Diagonal curb ramps are not recommended.

CONSIDERATIONS

- Curb ramps must meet PROWAG requirements for running slope, cross slope, grade breaks, clear area, side treatments, and detectable warning surfaces.
- Furnishing zones (the space between the curb and sidewalk) of 7' in width provide just enough space at intersections for curb ramps to gain sufficient elevation to a sidewalk.
- Consider providing wider curb ramps in areas of high pedestrian volumes and crossing activities.
- The side of the curb ramp shall be flared when the surface adjacent to the ramp's sides is walkable. However, when the surface adjacent to a ramp is landscaped or otherwise not walkable, the side is not required to be flared, and can be a vertical curb.

REFERENCES

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

PEDESTRIAN CROSSING TREATMENTS

The treatments described on the following pages provide guidance, not standards or requirements, to support context-sensitive planning and design. The information illustrates commonly used treatments and typical applications but does not replace requirements in the MUTCD, PROWAG, or other adopted state and local standards. The table below is not a set of crosswalk marking warrants; it is intended to inform treatment selection after a crossing location is deemed appropriate based on engineering judgment, traffic operations, accessibility needs, and site-specific conditions. Marked crosswalks and related treatments should be considered as part of a broader pedestrian safety approach. The table below indicates when each treatment is applicable.

CROSSING TREATMENT	APPLICATION	APPROPRIATE AT…			
		SIGNALIZED INTERSECTIONS	STOP-CONTROLLED INTERSECTIONS	UNCONTROLLED INTERSECTIONS	MID-BLOCK CROSSINGS
HIGH-VISIBILITY CROSSWALK	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
DIRECTIONAL CURB RAMPS	MANDATORY AT ALL LOCATIONS, PER PROWAG	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
PEDESTRIAN-SCALE LIGHTING	ALWAYS APPROPRIATE, ESPECIALLY AT AREAS WITH COMMON NIGHTTIME PEDESTRIAN ACTIVITY	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
DAYLIGHTING	TYPICALLY APPLIED AT CROSSING LOCATIONS WITH ON-STREET PARKING	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED	ALWAYS RECOMMENDED
CROSSING ISLAND (MEDIAN, PEDESTRIAN REFUGE ISLAND)	TYPICALLY APPLIED AT CROSSINGS OF THREE TRAVEL LANES, WITH THE CROSSING ISLAND LOCATED IN THE TWO-WAY LEFT-TURN LANE	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
CURB EXTENSIONS (BULB OUTS)	TYPICALLY APPLIED AT CROSSING LOCATIONS WITH ON-STREET PARKING	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
RAISED CROSSING	REFER TO TABLE ON FOLLOWING PAGE	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
RECTANGULAR RAPID FLASHING BEACON (RRFB)	REFER TO TABLE ON FOLLOWING PAGE	N/A	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
PEDESTRIAN HYBRID BEACON (PHB)	REFER TO TABLE ON FOLLOWING PAGE	N/A	N/A	SOMETIMES RECOMMENDED	SOMETIMES RECOMMENDED
LEADING PEDESTRIAN INTERVAL (LPI)	MANDATORY AT SIGNALIZED INTERSECTIONS WITH PEDESTRIAN SIGNAL HEADS, PER PROWAG	ALWAYS RECOMMENDED	N/A	N/A	N/A

REFERENCES

FHWA Crosswalk Selection Guide. 2023.

Public Right-of-Way Accessibility Guidelines. (PROWAG). 2023.

California Assembly Bill 413 (Daylighting).2024/2025.

FHWA. STEP Guide. 2018.

PEDESTRIAN CROSSING TREATMENTS AT UNCONTROLLED INTERSECTIONS

Treatments for uncontrolled crossings should be selected based on the FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (STEP Guide), which recommends appropriate design treatments based on the number of lanes, posted speed limit, and daily traffic volume on a given street.

To promote consistency across jurisdictions, agencies should apply crosswalk marking warrants and evaluation criteria uniformly and document decisions regarding where marked crossings are provided or omitted, particularly at uncontrolled and midblock locations.

ROADWAY CONFIGURATION	POSTED SPEED LIMIT AND AADT																									
	VEHICLE AADT <9,000									VEHICLE AADT 9,000–15,000									VEHICLE AADT >15,000								
	≤30 MPH			35-40 MPH			45 MPH			≤30 MPH			35-40 MPH			45 MPH			≤30 MPH			35-40 MPH			45 MPH		
2 LANES (1 LANE IN EACH DIRECTION)	1	2		1			1			1			1			1			1			1			1		
	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6		5	6
				7		9	7		9				7		9	7		9	7		9	7		9			9
3 LANES WITH RAISED MEDIAN (1 LANE IN EACH DIRECTION)	1	2	3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
	4	5			5			5		4	5			5			5		4	5			5			5	
				7		9	7		9	7		9	7		9	9		9	7		9	7		9			9
3 LANES W/O RAISED MEDIAN (1 LANE IN EACH DIRECTION WITH A TWO-WAY LEFT-TURN LANE)	1	2	3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6	5	6	
	7		9	7		9			9	7		9	7		9			9	7		9			9			9
4+ LANES WITH RAISED MEDIAN (2 OR MORE LANES IN EACH DIRECTION)	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
		5			5			5			5			5			5			5			5			5	
	7	8	9	7	8	9		8	9	7	8	9	7	8	9		8	9	7	8	9		8	9		8	9
4+ LANES W/O RAISED MEDIAN (2 OR MORE LANES IN EACH DIRECTION)	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3	1		3
		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6		5	6
	7	8	9	7	8	9		8	9	7	8	9	7	8	9		8	9	7	8	9		8	9		8	9

Given the set of conditions in a cell,

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

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 crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.

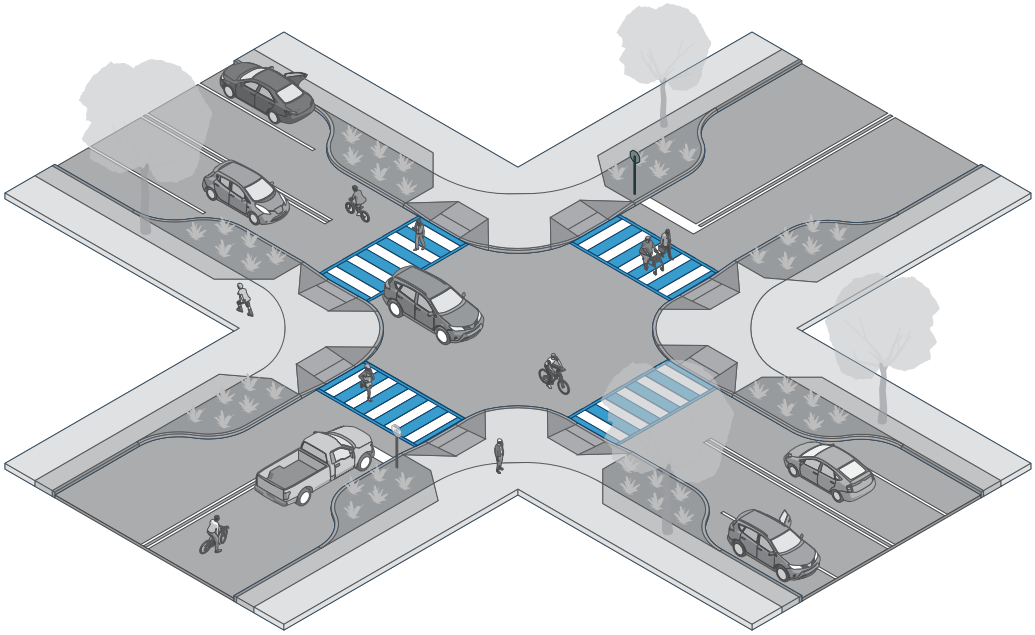
1 High-Visibility Crosswalk Markings, Parking Restrictions on Crosswalk Approach, Adequate Nighttime Lighting Levels, and Crossing Warning Signs
2 Raised Crosswalk
3 Advance Yield Here To (Stop Here For) Pedestrians Sign and Yield (Stop) Line
4 In-Street Pedestrian Crossing Sign (Not Permanent)
5 Curb Extension
6 Pedestrian Refuge Island
7 Rectangular Rapid-Flashing Beacon (RRFB)*
8 Road Diet
9 Pedestrian Hybrid Beacon (PHB)*
* PHB and RRFB are not both installed at the same crossing location.

REFERENCES

FHWA. STEP Guide. 2018.

MARKED CROSSWALKS

Legal crosswalks exist at all locations where sidewalks meet the roadway, regardless of whether pavement markings are present. Drivers are legally required to yield to pedestrians at intersections, even when there are no pavement markings. Providing marked crosswalks communicates to drivers that pedestrians may be present, and helps guide pedestrians to locations where they should cross the street. In addition to pavement markings, crosswalks may include signals/beacons, warning signs, and raised platforms.



GUIDANCE

- Crosswalks should be marked on all legs of signalized intersections, in school zones, and across streets with more than minimal levels of traffic.
- Marked crosswalks should be oriented perpendicular to streets, minimizing crossing distances and therefore limiting the time that pedestrians are exposed.
- Marked crosswalks should be at least 10 feet wide or the width of the approaching sidewalk if it is greater. Crosswalks within 600' of school grounds must be painted yellow.
- Stop lines at stop-controlled and signalized intersection approaches should be striped no less than 4 feet and no more than 30 feet from the edge of marked crosswalks.
- Advance yield lines ("shark teeth") at mid-block crossings should be located 20 to 50 feet from the edge of the marked crosswalk.

CONSIDERATIONS

- There are many different styles of marked crosswalk striping and some are more effective than others. High-visibility crosswalks with striping parallel to the direction of travel for drivers are more visible to drivers, and are recommended in all cases, especially near schools. The graphic above shows continential striping, but other types of high-visibility striping include ladder style, zebra, and triple four.
- In areas of heavy pedestrian volumes (such as transit station areas, school zones, and main streets), marked crosswalks can be up to 25 feet wide.
- Crosswalks may need to be restriped after pavement work.

REFERENCES

FHWA. Crosswalk Marking Selection Guide. 2023.

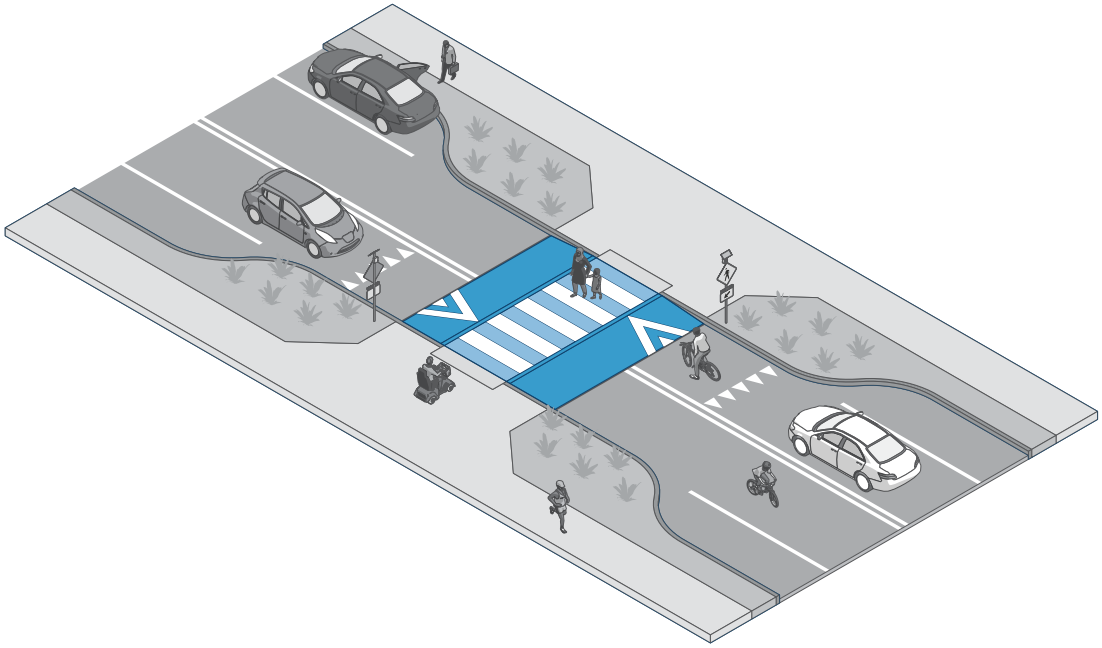
FHWA. Manual on Uniform Traffic Control Devices. 2023.

NACTO. Urban Street Design Guide. 2013.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

RAISED CROSSWALKS

Raised crosswalks are used for traffic calming and to improve motorist yielding to people walking, rolling and biking at intersections and midblock crossings. In this design, crosswalks are elevated to reduce or eliminate the transition from the sidewalk to the street crossing. Transition aprons on each approach to the raised crossing are marked with pavement markings to alert drivers of the grade change.



GUIDANCE

- Ensure a raised crosswalk is at least as wide as the connecting sidewalk or path of travel.
- Provide detectable warning surfaces at the edge of the sidewalk to indicate to pedestrians that they are exiting the sidewalk and entering the street. Ensure that raised crossing meets accessible slope requirements.
- On-street parking and loading must be restricted 20 feet before the marked crosswalk to provide adequate sight distance between people crossing and people driving.
- Yield lines ("shark teeth") should be located 20 to 50 feet from the edge of the crosswalk.
- Include warning pavement markings for drivers on transition aprons and "Raised Crosswalk" signs at the crossing. Transition aprons should be 5 to 8 percent (relative to the street) on streets, and 5 to 15 percent (relative to the driveway/alley) on driveways and alleys.

CONSIDERATIONS

- Raised crosswalks may be beneficial at:
  - Unsignalized collector and local street crossings.
  - Crossings of driveways and alleys.
  - Crossings of channelized right turn lanes and roundabouts.
  - Intersections where a large corner radius is required to accommodate large vehicles.
- Use trail-level and sidewalk-level bikeway crossings and locations where increased visibility, priority or accessibility for people walking, riding bicycles or using dockless mobility vehicles is desired or needed, including school zones.
- Raised crossings may be used as midblock crossings with the appropriate infrastructure, such as rectangular rapid flashing beacons (RRFBs), pedestrian hybrid beacons (PHB)s, median refuges, warning signage, and other elements as appropriate.
- Raised crosswalks are not appropriate on streets with steep roadway grades higher than 8%.
- Ensure that drainage and maintenance needs are accounted for in raised crossing design.

REFERENCES

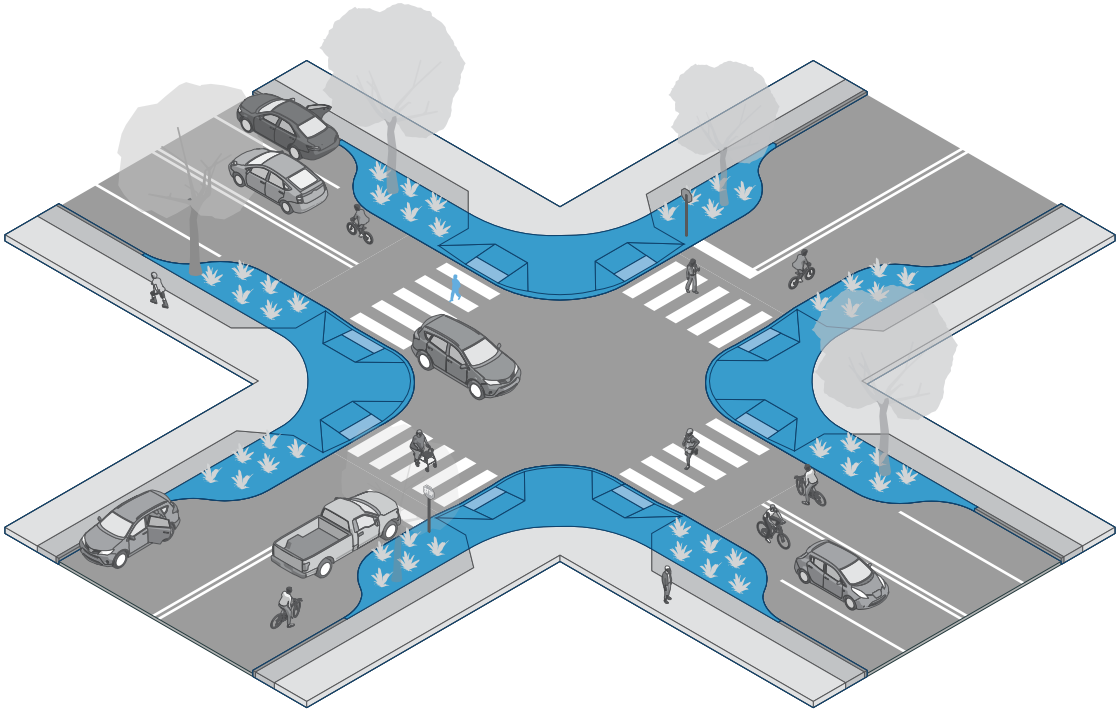
AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Manual on Uniform Traffic Control Devices. 2023.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

CURB EXTENSIONS

Curb extensions, also known as neckdowns, bulb-outs, or bump-outs, are created by extending the sidewalk at corners or mid-block. In addition to shortening crossing distances, curb extensions can be used to change the geometry of intersections resulting in smaller corner radii and slowing turning motor vehicles.



GUIDANCE

- Curb extensions should be considered where parking is present or where motor vehicle traffic deflection is provided through other curbside uses such as bicycle share stations or parklets. They cannot be installed where the curbside lane is a vehicle travel lane.
- Curb extensions are particularly valuable in locations with high volumes of pedestrian traffic, near schools, at unsignalized pedestrian crossings, or where there are demonstrated pedestrian safety issues.

CONSIDERATIONS

- The turning needs of emergency, transit, and other large vehicles must be considered in curb extension design.
- Care should be taken to maintain direct routes across intersections by aligning pedestrian desire lines on either side of the sidewalk. Curb extensions often make this possible as they provide extra space for grade transitions.
- Consider providing a 20' long curb extension to restrict parking within 20' of an intersection to enhance visibility.
- When curb extensions conflict with turning movements, reducing the width and/or length of the curb extension should be prioritized over elimination.
- Emergency access is often improved through the use of curb extensions because intersections are kept clear of parked cars.
- Where feasible, curb extensions may be used to support stormwater management and green infrastructure, street beautification, bicycle parking, and other amenities that enhance the function and comfort of the street.
- Curb extensions may be implemented using temporary or quick-build materials, such as pavement markings or tape, modular curb elements, planters, flexible delineators, or similar hardware, to pilot designs, respond to near-term safety concerns, or support phased implementation prior to permanent construction.

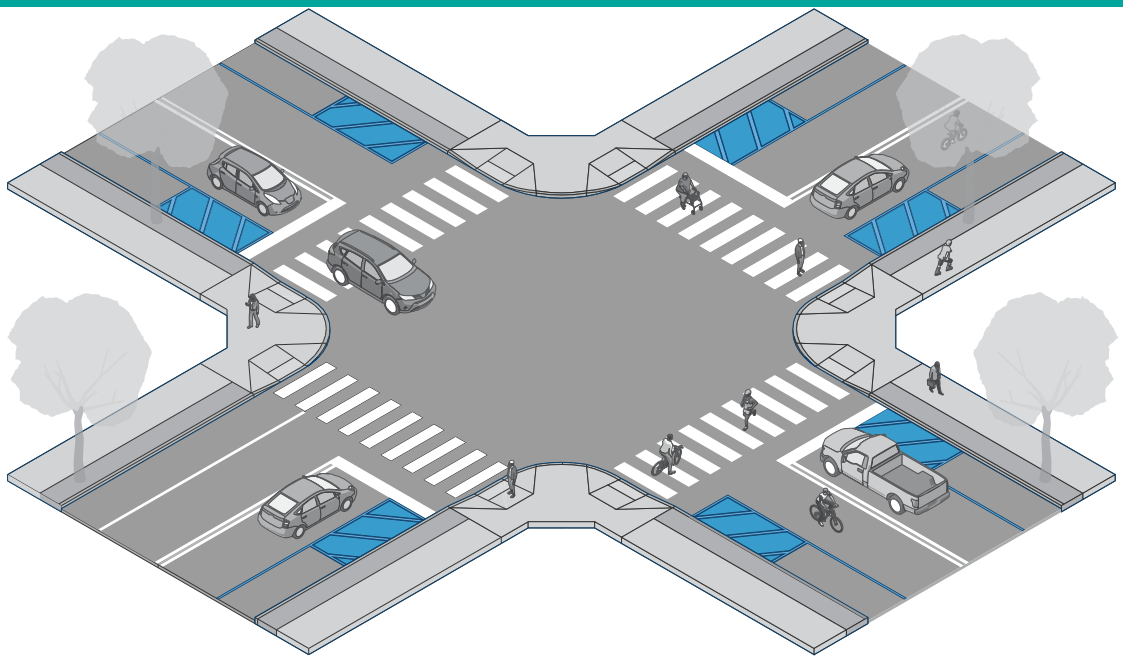
REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

NACTO. Urban Street Design Guide. 2013.

DAYLIGHTING

Improves visibility at intersections and mid-block crossing locations by removing visual obstructions near the crossing. Daylighting often includes the spot removal of parking spaces, accomplished via red curb, signage, and removal of parking space pavement markings.



GUIDANCE

- Use at all crossing approaches.
- Daylighting should be implemented via signage and striping at all crossing approaches (including unmarked crossings) on streets with on-street parking.
- California Assembly Bill 413 prohibits the stopping, standing, or parking of a vehicle within 20' of an intersection approach (including any marked or unmarked crosswalk) or within 15' of a crosswalk with a curb extension, effective January 1, 2025. This law applies to all intersections, even where formal daylighting treatments or signs have not been installed.

CONSIDERATIONS

- In addition to red-painted curb, the parking-restricted area can be defined using curb extensions, planters, or flexible delineators. Additionally, this space can be repurposed for green infrastructure or bicycle parking.
- A "No Parking" sign (MUTCD R7 series) can additionally be installed.
- Enforcement may be necessary to ensure compliance with new restrictions, particularly in residential or commercial areas with high demand for on-street parking or locations where drivers have historically utilized this area of the street for parking.
- The prioritization of daylighting treatments, including signage, curb markings, and enforcement, should be based on location, such as proximity to schools, parks, transit stops, and other locations with higher pedestrian volumes or vulnerable users, as well as documented collision history, turning movement conflicts, and visibility constraints.

REFERENCES

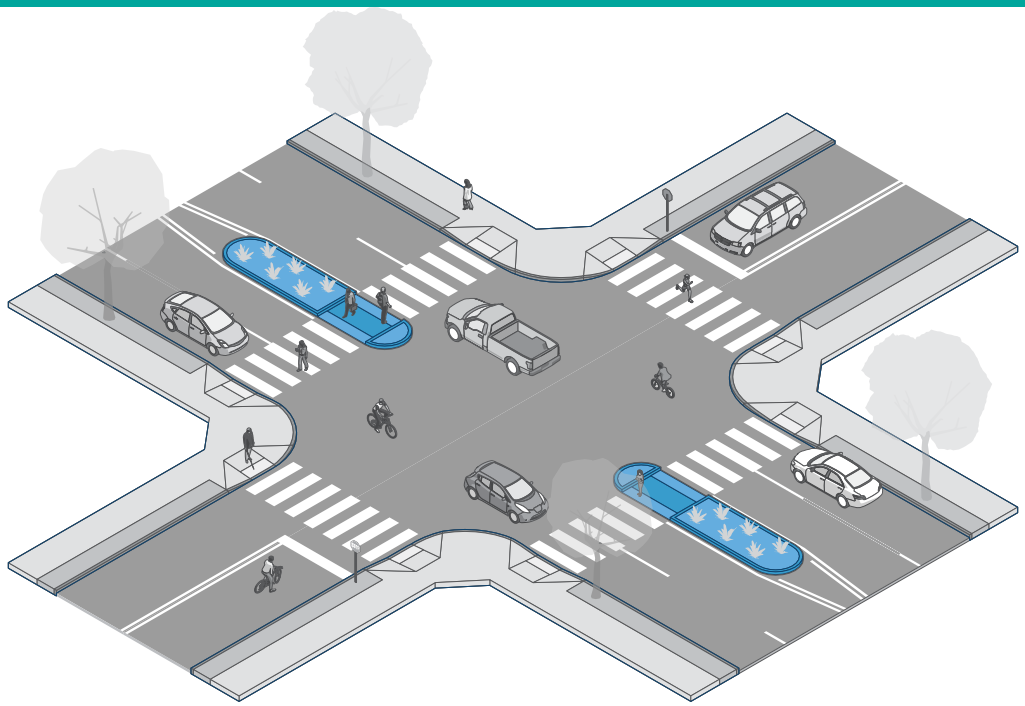
Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Street Design Guide. 2012.

California Vehicle Code § 22500

CROSSING ISLANDS

Crossing islands, also known as pedestrian refuge islands, are raised islands that provide a protected waiting area and allow pedestrians to cross one direction of motor vehicle traffic at a time. They can be located at intersections or mid-block.



GUIDANCE

- There are two primary types of crossing islands:
  - The first provides a cut-through of the island, keeping pedestrians at street-grade. These islands must be at least 6' in width in order to integrate detectable warning surfaces and be considered a true pedestrian refuge island.
  - The second type ramps pedestrians up above street grade and may present challenges to constructing accessible curb ramps unless they are more than 17' wide (accommodating for ramp width and landing area).
- Crossing islands should always be considered on collector or arterial roadways with moderate-to-high traffic speeds and volumes and multiple lanes, as well as where crossing distances are greater than 50 feet.

CONSIDERATIONS

- Crossing islands can be coupled with other traffic calming features, such as partial diverters and curb extensions at mid-block and intersection locations.
- At mid-block crossings where width is available, islands should be designed with a stagger, or in a "Z" pattern, encouraging pedestrians within the median to face oncoming traffic before crossing.
- Should a midblock crossing be provided along a multilane arterial, a raised median or crossing island and supplementary traffic control devices are desirable.
- On a local road with relatively low traffic speeds and volumes, placing a raised median or crossing island might be done for aesthetic considerations or special pedestrian crossing characteristics and volumes.
- Crossing islands require minimum depth of 6', with preferred depth of 8-10' in locations where significant pedestrian or bicycle volumes are present/expected, or to accommodate cargo bikes & wheelchairs more effectively.
- May be implemented as a quick build treatment through use of temporary materials.

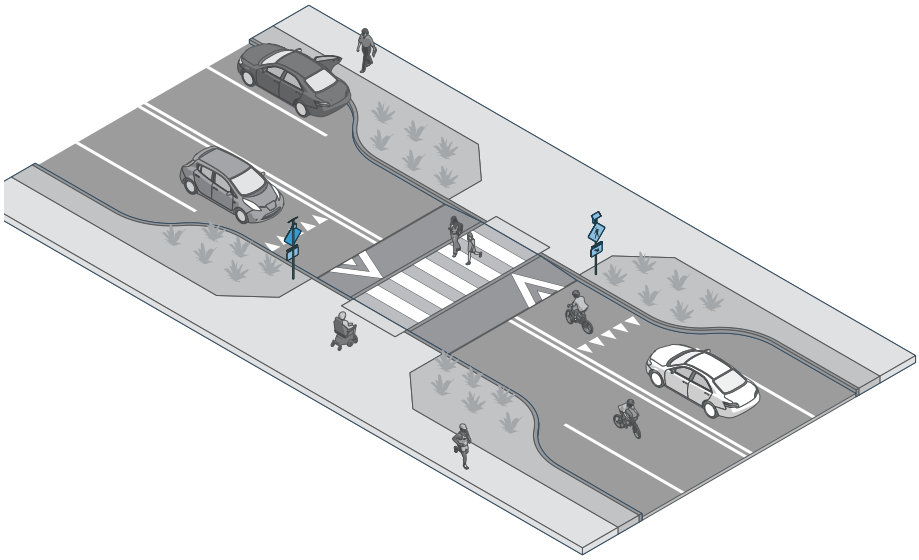
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FHWA. Manual on Uniform Traffic Control Devices. 2023.

RECTANGULAR RAPID FLASHING BEACON

Uncontrolled multi-lane crossings decrease pedestrian visibility and can decrease motor vehicle yielding compliance. Rectangular Rapid Flash Beacons (RRFBs) can be implemented to improve yielding compliance at these locations. RRFBs combine a pedestrian crossing sign with a bright flashing beacon that is activated only when a pedestrian is present.





GUIDANCE

- RRFBs can be used when a signal is not warranted at an unsignalized crossing. They are not appropriate at intersections with signals or STOP signs.

CONSIDERATIONS

- RRFBs are considerably less expensive to install than mast arm-mounted signals. They can also be installed with solar power panels to eliminate the need for an external power source.
- RRFBs should be limited to locations with critical safety concerns, and should not be installed in locations with sight distance constraints that limit the driver's ability to view pedestrians on the approach to the crosswalk.
- RRFBs should be used in conjunction with advance stop or yield bars and signs.
- RRFBs are usually implemented at high-volume pedestrian crossings, but may also be considered for priority bicycle route crossings or locations where bike facilities cross roads at mid-block locations.
- RRFBs may be installed at roundabout crossings.

REFERENCES

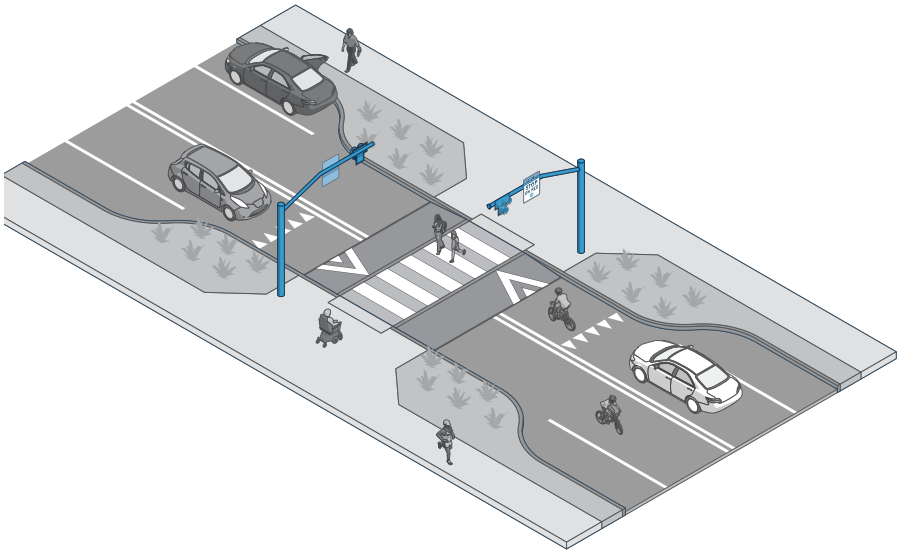
FHWA. Manual on Uniform Traffic Control Devices. 2023.

NACTO. Urban Street Design Guide. 2013.

Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations. 2005.

PEDESTRIAN HYBRID BEACON

Pedestrian hybrid beacons (PHBs), including the High-intensity Activated Crosswalk Beacon (HAWK), are a type of hybrid signal intended to allow pedestrians and bicyclists to stop traffic to cross high-volume arterial streets. This type of signal may be used in lieu of a full signal that meets any of the traffic signal control warrants in the MUTCD.





GUIDANCE

- This type of device should be considered for all arterial crossings in a bicycle network and for path crossings if other engineering measures are found inadequate to create safe crossings.
- The MUTCD recommends minimum volumes of 20 pedestrians or bicyclists an hour for major arterial crossings (volumes exceeding 2,000 vehicles/hour).
- PHBs may also be used at locations which do not meet traffic signal warrants but where assistance is needed for pedestrians or bicyclists to cross a high-volume street.

CONSIDERATIONS

- While this type of device is intended for pedestrians, it would be beneficial to retrofit it for bicyclists as the City of Portland, Oregon has, using bicycle detection and bicycle signal heads on major cycling networks. Depending upon the detection design, the agency implementing these devices may have the option to provide different clearance intervals for bicyclists and pedestrians. The provision of bicycle signal heads would require permission to experiment from FHWA.

REFERENCES

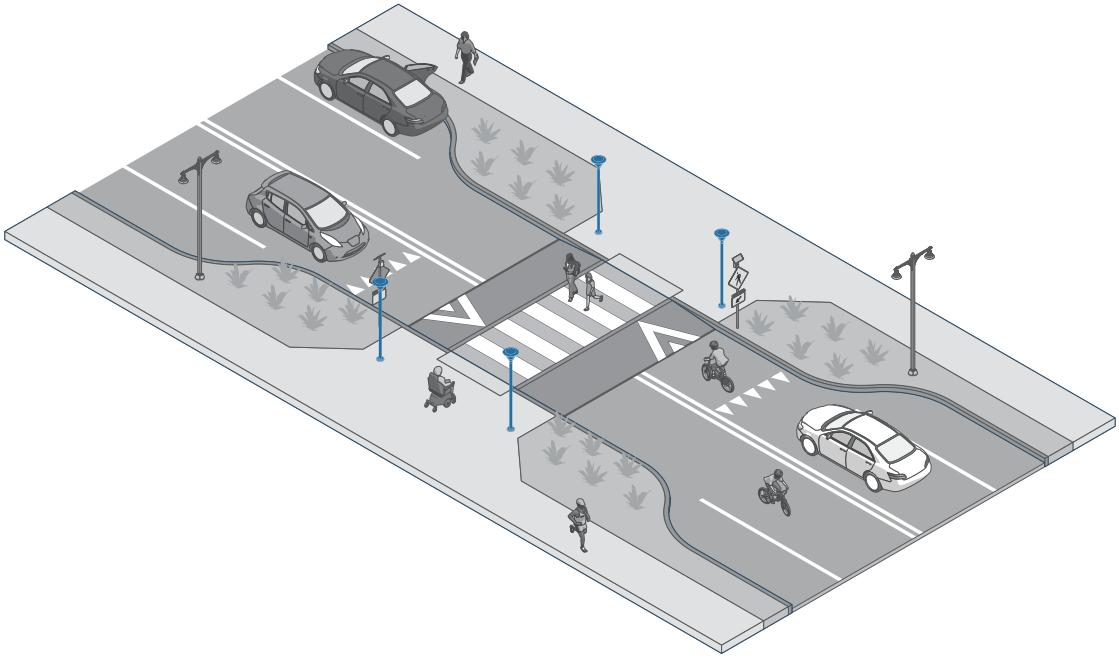
FHWA. Manual on Uniform Traffic Control Devices. 2023.

NACTO. Urban Street Design Guide. 2013.

Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Location. 2005.

PEDESTRIAN-SCALE LIGHTING

Illuminates sidewalks and crossings at night or low-light conditions using light fixtures that are shorter than roadway-scale light fixtures.



GUIDANCE

Pedestrian-scale lighting should be provided:

- At controlled and uncontrolled intersections at crossing approaches
- Along sidewalks, especially along arterials and near schools, parks, commercial and recreation centers
- Along Class I facilities in urban areas that serve as a primary active transportation facility

CONSIDERATIONS

- Lighting should be uniform, with consistent light levels that avoid dark spots, sharp contrasts, and glare to support pedestrian visibility and safety.
- Lighting should be provided on approaches to pedestrian crosswalks, including those serving Class I shared-use paths and other pedestrian or bicycle facilities, such that users are illuminated from the driver's perspective and not silhouetted. Where crossings include a crossing island or median, supplemental lighting may be provided.
- Consider energy usage, environmental impacts, and impacts on residential neighborhoods. Also consider applicability of pedestrian-scale lighting to crime reduction efforts such as Crime Prevention through Environmental Design (CPTED).
- Install lighting to Illuminating Engineering Society and DarkSky standards.

REFERENCES

FHWA. Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). 2013 (with ongoing updates).

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IMPLEMENTATION STRATEGIES

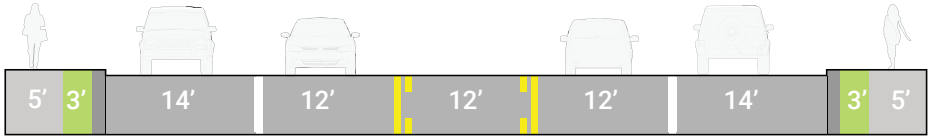


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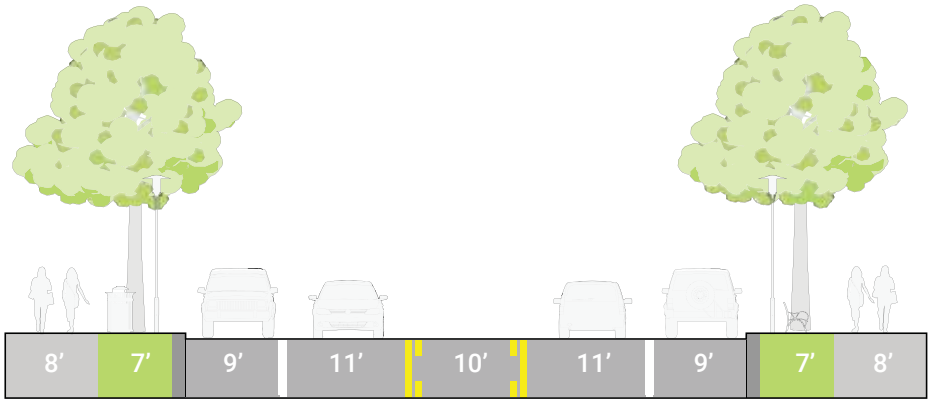
LANE NARROWING

Lane narrowing can improve comfort and safety for vulnerable road users. Narrowing lanes creates space that can be reallocated to other modes, in the form of wider sidewalks, bike lanes, reduced crossing distances, and buffers between cyclists, pedestrians and motor vehicles. Space can also be dedicated to plantings and amenity zones.

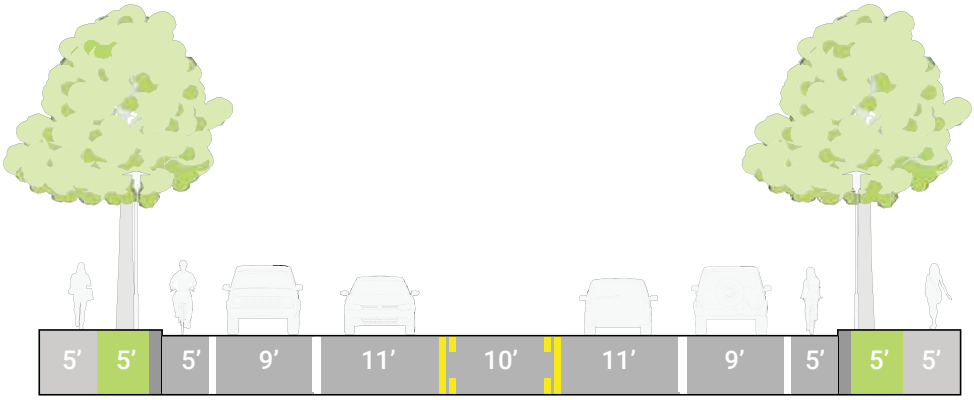
Roadway before narrowing



Narrowing motor vehicle lanes to increase sidewalk and amenity zones



Narrowing motor vehicle lanes to increase amenity zone and add bicycle lanes



GUIDANCE

- Motor vehicle travel lanes as narrow as 10’ are allowed in low and moderate-speed environments (45 mph or less) according to the AASHTO Green Book. Caltrans allows lane widths of 10.5’ on Caltrans roadways, per DIB-94.
- 10’ travel lanes are not recommended on 4-lane undivided arterial roadways, but may be considered where speeds are 30 mph or less and truck use is low.
- 11’ travel lanes are considered minimum safe width for fixed route transit vehicles per NVTA.

CONSIDERATIONS

- Narrowing existing motor vehicle lanes may result in enough space to create separated bicycle lanes, widened sidewalks and buffers, or a combination of on-street bike lanes and enhancements to the pedestrian corridor.
- Narrower lanes can contribute to lower operating speeds along the roadway, which may be appropriate in dense, walkable corridors.

REFERENCES

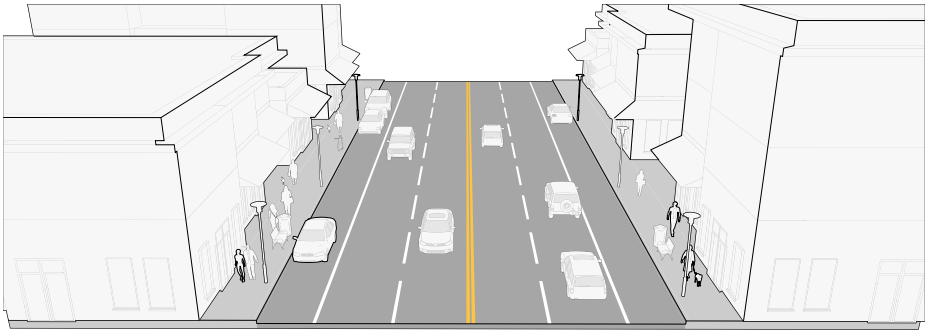
AASHTO. Green Book. 2011.

FHWA. Achieving Multi-modal Networks: Applying Design Flexibility and Reducing Conflicts. 2016.

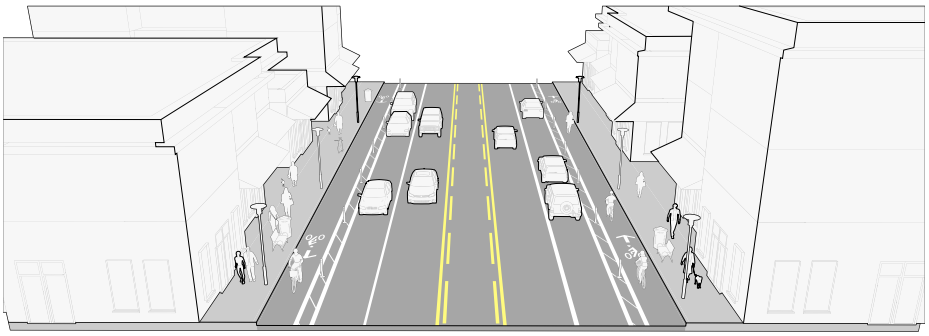
LANE RECONFIGURATION

Lane reconfiguration involves modifying one or more travel lanes to improve the safety performance of a roadway segment and provide space for bicycle lanes, turn lanes, streetscapes, wider sidewalks, and other purposes. Four- to three-lane conversions are most common, however, there are numerous types (e.g., three- to two-lanes, or five- to three-lanes).

Typical 4-lane road with on-street parking



Three-lane road diet (with center two-way left-turn lane), with on-street parking and separated bicycle lanes



GUIDANCE

- Four-lane streets with volumes less than 15,000 vehicles per day are generally good candidates for four- to three-lane conversions.
- Four-lane streets with volumes between 15,000 to 20,000 vehicles per day may be good candidates for four- to three-lane conversions. A traffic analysis is needed to determine feasibility.
- Six-lane streets with volumes less than 35,000 vehicles per day may be good candidates for six- to five-lane (including two-way center turn lane) conversions. A traffic analysis is needed to determine feasibility.

CONSIDERATIONS

- Lane reconfiguration is a great tool for reducing collisions and injuries, improving pedestrian crossings and providing designated space for bicyclists. Road diets improve safety as they reduce conflict points and lead to fewer and less severe collisions.
- Robust public engagement is often required for successful lane reconfiguration projects.

REFERENCES

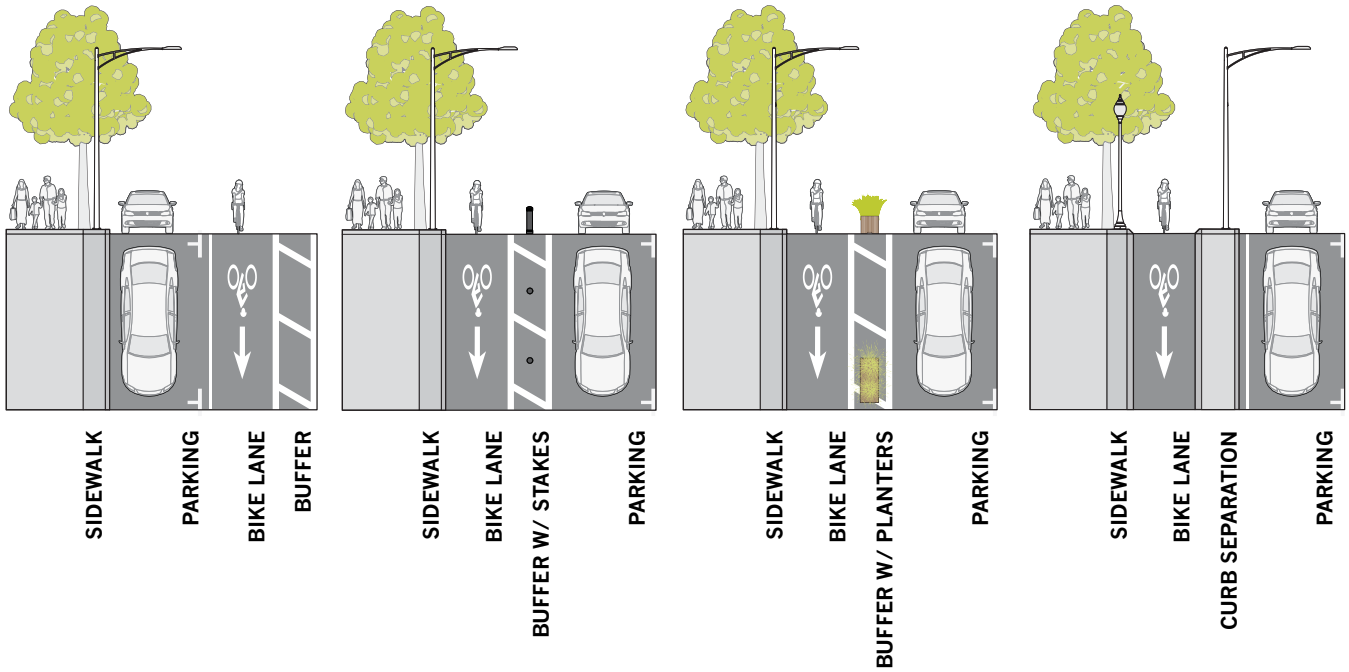
AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA Road Diet Guide. 2014.

NACTO Urban Street Design Guide .2013.

QUICK-BUILD

Quick-build projects allow for faster and lower-cost implementation using temporary materials. Many bicycle and pedestrian facilities can be implemented as quick-build projects, including separated bike lanes, curb extensions, mini-roundabouts, and crossing islands. This profile focuses on the quick-build implementation of separated bike lanes, using flex posts and paint to retrofit existing Class II buffered bike lanes. More permanent forms of separation, such as curb-protected bike lanes, cost more and are less flexible once implemented. A phased implementation approach, where quick-build "pilot" projects transition to permanent, protected bike lanes allow for public input and evaluation before investing in a permanent design.



Progression from pilot project to separated bike lane

CONSIDERATIONS

- Lower-cost retrofits or pilot projects allow for quick implementation, responsiveness to public perception and ongoing evaluation. Separation types for short-term separated bike lane designs often include non-permanent separation, such as flexible delineator posts, planters or parking stops. Pilot projects allow the agency to:
  - Test the separated bike lane configuration for bicyclists and traffic operations
  - Evaluate public reaction, design performance, and safety effectiveness
  - Make changes if necessary
  - Transition to permanent design
- Permanent separation designs provide a high level of protection and often have greater potential for placemaking, quality aesthetics, and integration with features such as green stormwater infrastructure. Agencies often implement permanent separation designs by leveraging private development (potentially through developer contribution), major capital construction, and including protected bike lanes in roadway reconstruction designs. Examples of permanent separation materials include rigid bollards, raised medians and grade-protected bike lanes at an intermediate or sidewalk level.

REFERENCES

FHWA. DIB-89-02: Separated Bike Lane Planning and Design Guide. 2015.

NACTO. Urban Street Design Guide. 2013.

MAINTENANCE OF SIDEWALKS AND SHARED-USE PATHS

Maintenance is a crucial component of a well-functioning active transportation network. A timely response to maintenance issues will encourage more people to use the infrastructure and boost confidence in the network.



The table below describes the frequency for various shared-use path and bikeway maintenance activities.

Frequency	Maintenance Activity
More Frequently	Tree/brush sweeping, mowing, and clearing, and regular trash cleanup and removal
	Patching/minor regrading/concrete panel replacement
	Planting/pruning/beautification/removing leaves
	Culvert/drainage cleaning and repair
	Surface evaluation/pavement assessment to determine need for patching/regrading/ re-striping
	Repaint or repair trash receptacles, benches, signs, and other amenities, if necessary
	Sealcoat asphalt shared-use paths
	Resurface/regrade/re-stripe shared-use paths
Less Frequently	Assess/replace sidewalks and shared-use paths
	Sign replacement

CONSIDERATIONS

- Conduct routine inspections of high-volume sidewalks and apply temporary measures to maintain functionality and repair heaving (such as patching, grinding, mudjacking).
- Shared-use paths should meet a baseline pavement condition index (PCI) of 70 or greater, with 80 or greater preferred. Pavement should also provide enough stability to prevent substantial wear and cracking with regular maintenance vehicle traffic (typically, 6" thick concrete or asphalt).
- Provide surface repairs such as crack repair, concrete stone replacement, and/or joint sealing as soon as the issue is identified. These problems grow worse over time and can continue to provide opportunity for conflict or injury.
- Regular sweeping and trash removal of shared-use paths and sidewalks enhance the user experience and minimize opportunities for conflict or injury.
- Cut back vegetation that is encroaching on paths and sidewalks. Cut back tree roots and/ or install root barriers where appropriate.
- Inspect signs and markings regularly, replacing and repairing them as soon as possible. Consider upgrading old signs or markings with newer materials, if available.
- Ensure drainage swales and structures are kept free of silt and debris and are functioning appropriately.
- For any construction project that may impact an existing sidewalk or shared-use path, an appropriate detour and signage plan should be proposed by the contractor to ensure continuous and safe service.
- Check, repair, and maintain all lights and lighting systems, particularly underpass lighting.
- Natural surface paths may need regrading, weeding, or the repair of ruts.

MAINTENANCE OF ON-STREET FACILITIES

Maintenance is a crucial component of a well-functioning active transportation network. A timely response to maintenance issues will encourage more people to use the infrastructure and boost confidence in the active transportation network. The considerations below apply to all on-street bicycle facilities, as well as crosswalks.



CONSIDERATIONS

- Maintenance of bike lanes and crosswalks is the responsibility of the public or private agency that is responsible for maintaining the roadway. This practice may contrast with responsibility for maintaining the adjacent sidewalk, which in some cases will be that of the abutting landowner.
- Designated bike lanes, bicycle boulevards, and routes should be maintained through routine sweeping to remove debris and maintain usability. A regular sweeping schedule, such as monthly sweeping, is recommended, along with proactive spot-checks conducted by the contractor or responsible jurisdiction.
- Pavement markings may require regular maintenance. Deteriorated bike lane markings, buffers, crosswalks, or sharrows may reduce perceived safety on facility.
- When roadway pavement condition is assessed, the entire roadway including bicycle facilities and shoulders must be included in the PCI score.
- The general public, public works staff, and contractors should be trained to place garbage bins in the street buffer zone to avoid obstructing the bike lane. Sidewalk buffers may be used to store bins where street buffers are too narrow.
- For Class IV separated bikeways: Bike lane widths of 8 feet or more are compatible with smaller sweepers, but responsible parties may have larger and incompatible maintenance fleets. Narrower sweepers (approximately 4 feet to 5 feet minimum operating width) may be required to clear one-way separated bike lanes.
- For Class IV street-level separated bike lanes without raised medians, debris can collect in the street buffer area between vertical objects and can migrate into the bike lane if not routinely collected.
- Landscaped areas, including green stormwater infrastructure, can also collect debris and require regular attention.
- As noted in the previous section, seasonal maintenance activities such as frequent removal of leaves in the fall should be considered.

REFERENCES

NACTO. Urban Street Design Guide. 2013.

DESIGNING AN ACTIVE MODES NETWORK



5

WAYFINDING

Wayfinding helps identify the best routes to destinations, helps bicyclists overcome a barrier of not knowing where to ride, and reminds motorists to anticipate the presence of bicyclists and pedestrians. Wayfinding systems often combine signage and pavement markings to guide bicyclists and pedestrians along preferred routes to destinations across the community, county, or region. Routes may or may not be numbered, named, or color-coded. Signs may also indicate distances or travel time to destinations.





GUIDANCE

- Basic bicycle route signs consist of a MUTCD-style "Bike Route" sign (D11-1 shown above, right) placed every half mile on a bike route and on the approach to bike routes at decision points.
- Bike route signs can be supplemented with panels showing destinations, directions, and distances (MUTCD D1 series, shown in photo above, left).
- Unique numbered or named routes can be designated and can incorporate a route name or agency logos also shown in photo above, left.
- Place directional signs on the near side of intersections and confirmation signs on the far side of intersections.

CONSIDERATIONS

- A bicycle wayfinding protocol should coordinate with bicycle route maps and provide three general forms of guidance:
  - Decision assemblies, which consist of Bike Route identification and optional destination panels, placed at decision points where routes intersect or on the approaches to a designated bike route.
  - Turn assemblies, which consist of Bike Route panels and arrow plaques, placed where a designated bike route turns from one street to another.
  - Confirmation assemblies, which consist of Bike Route optional destination panels, placed on the far side of intersections to confirm route choice and the distance (and optionally, time) to destinations.
- Sign design can be customized to add distinct community branding, but the clarity and accuracy of the information must be the top priority.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Bikeway Design Guide. 2014.

PEDESTRIAN SIGNALS

Pedestrian signal heads display the three intervals of the pedestrian phase: (1) The Walk Interval, signified by the WALK indication (or the walking person symbol) alerts pedestrians to begin crossing the street; (2) The Pedestrian Change Interval, signified by the flashing DON'T WALK indication (or the flashing hand symbol accompanied by a countdown display; shown on following page) alerts pedestrians approaching the crosswalk that they should not begin crossing the street; and (3) The Don't Walk Interval, signified by a steady DON'T WALK indication (or the steady upraised hand symbol) alerts pedestrians that they should not cross the street.

CONSIDERATIONS

Intersection geometry and traffic controls should encourage turning vehicles to yield the right-of-way to pedestrians. Traffic movements should be analyzed at intersections in order to utilize non-conflicting phases to implement one or more WALK intervals per cycle.

Signal design should also minimize the time that pedestrians must wait. Requiring pedestrians to wait for extended periods can encourage crossing against the signal. The 2010 Highway Capacity Manual states that pedestrians have an increased likelihood of risk-taking behavior (crossing against the signal) after waiting longer than 30 seconds.

Free-flowing right-turn lanes are discouraged at signalized intersections. Where they are present and unsignalized, the pedestrian signal and pushbutton should be located on the channelization ("pork chop") island. A yield or crosswalk warning sign should then be placed in advance of the crosswalk.

TIMING & ACTIVATION

- Pedestrian signals should allocate enough time for pedestrians of all abilities to safely cross the roadway. The MUTCD specifies a pedestrian walking speed of 3.5 feet per second to account for an aging population.
- Countdown pedestrian displays inform pedestrians of the amount of time in seconds that is available to safely cross during the flashing DON'T WALK (or upraised hand) interval. All pedestrian signal heads should contain a countdown display provided with the DON'T WALK (or upraised hand) indication.
- In areas with higher pedestrian activity, such as near transit stations, Main Streets, and school zones, push button actuators may not be appropriate. People should expect to get a pedestrian cycle at every signal phase, rather than having to push a button to call for a pedestrian phase.

REF.

FHWA. Manual on Uniform Traffic Control Devices. 2023.

NACTO. Urban Street Design Guide. 2013.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

ACCESSIBLE PEDESTRIAN SIGNALS (APS)

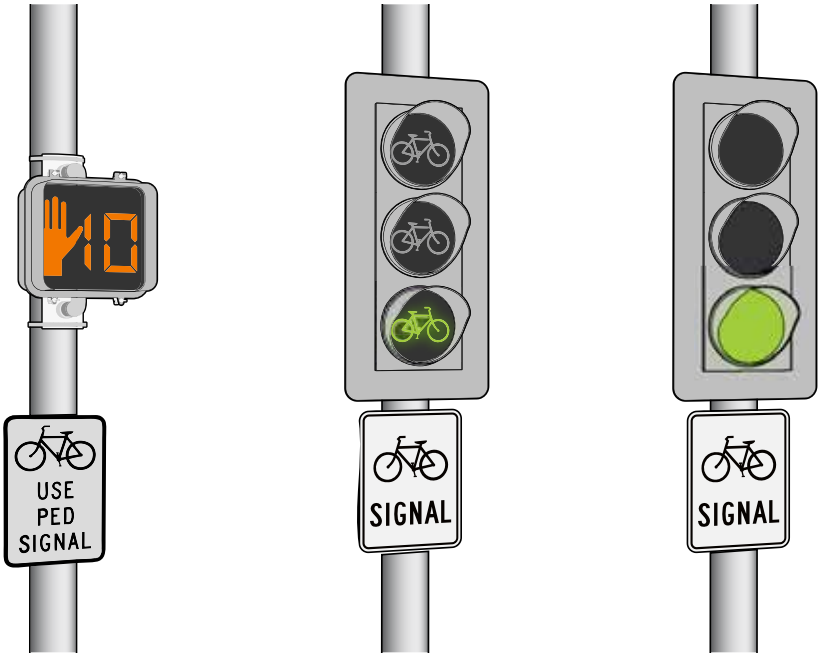
- Accessible pedestrian signals and accessible detectors are devices that communicate information in non-visual formats about the pedestrian phase to pedestrians with visual and/or hearing disabilities. APS and detectors may include features such as audible tones, speech messages, detectable arrow indications and/or vibrating surfaces.
- Pushbutton locator tones are used for locating the pedestrian pushbutton needed to actuate the WALK interval. Detectable arrows should be located on pushbuttons to point in the same direction as the crosswalk. At corners of signalized locations where two pushbuttons are present, they should be separated by at least 10'.
- Audible walk indications should have the same duration as the pedestrian walk indication unless the pedestrian signal rests during the pedestrian phase, in which case the audible indication should be provided in the first seven seconds of the Walk interval.
- For automatically-called pedestrian phases, pushbuttons can be used to activate accessible pedestrian signal features such as detectable arrow indications and/or speech messages.
- When new pedestrian signals are installed, APS with pushbuttons are required. For existing pedestrian signals, the APS and pedestrian pushbuttons should be provided when the signal controller and software are altered, or the signal head is replaced.

LEADING PEDESTRIAN INTERVAL (LPI)

- The Leading Pedestrian Interval initiates the pedestrian WALK indication three to seven seconds before motor vehicles traveling in the same direction are given the green indication. This signal timing technique allows pedestrians to enter the intersection prior to turning vehicles, increasing visibility between all modes.
- The LPI should be used at intersections with high volumes of pedestrians and conflicting turning vehicles and at locations with a large population of elderly or school children who tend to walk slower.
- A lagging protected left arrow for vehicles should be provided to accommodate the LPI.

BICYCLE DETECTION & DEDICATED SIGNALS

Bicyclists have unique needs at signalized intersections. Bicycle movements may be controlled by the same indications that control motor vehicle movements, by pedestrian signals, or by bicycle-specific traffic signals. The introduction of separated bike lanes creates situations that may require a leading bicycle interval or protected phases for bicycle traffic, or place bicyclists outside the cone of vision of existing signal equipment. In these situations, provision of signals for bicycle traffic will be required.



GUIDANCE

- A stationary, or "standing", cyclist entering the intersection at the beginning of the green indication can typically be accommodated by increasing the minimum green time on an approach per the 2024 AASHTO Guide for the Development of Bicycle Facilities.
- A moving, or "rolling", bicyclist approaching the intersection towards the end of the phase can typically be accommodated by increases to the red times (change and clearance intervals) per the 2024 AASHTO Guide for the Development of Bicycle Facilities.
- Set loop detectors to the highest sensitivity level possible without detecting vehicles in adjacent lanes and field check.
- All signalized intersections should aim to integrate passive detection of bicycles, such as inductive loops designed for bicycle detection or similar technologies, to reduce reliance on manual actuation.

CONSIDERATIONS

- Bicycle-specific signals may be appropriate to provide additional guidance or separate phasing for bicyclists per the 2024 AASHTO Guide for the Development of Bicycle Facilities.
- It may be desirable to install advanced bicycle detection on the intersection approach to extend the phase, or to prompt the phase and allow for continuous bicycle through movements.
- Video detection, microwave and infrared detection can be an alternate to loop detectors.
- Another strategy in signal timing is coordinating signals to provide a "green wave" timed to align with the travel speed of bicyclists (often 15 mph) such that bicycles will receive a green indication and not be required to stop. Several cities including Portland, OR and San Francisco, CA have implemented "green waves" for bicycles.

REFERENCES

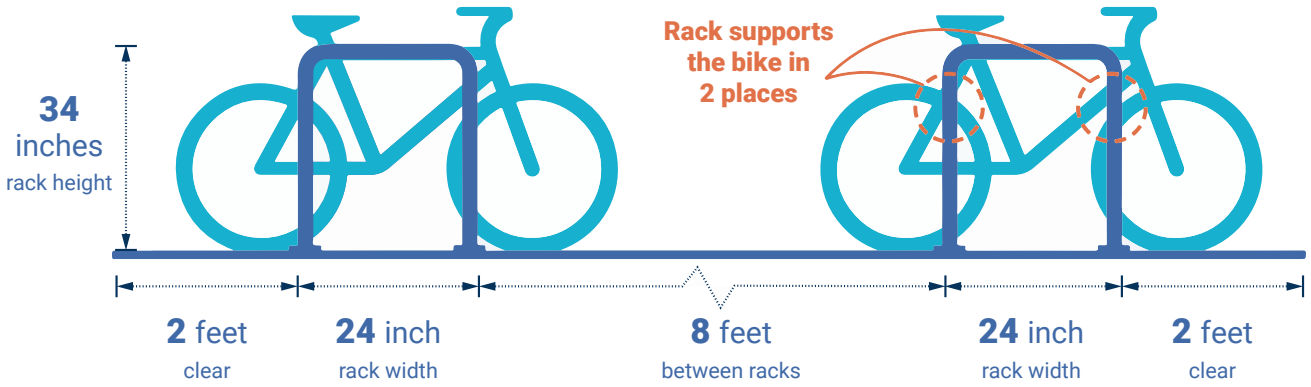
AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Manual on Uniform Traffic Control Devices. 2023.

NACTO. Urban Bikeway Design Guide. 2014.

SHORT-TERM BICYCLE PARKING

Bicycle parking enhances the effectiveness of bicycle networks by providing locations for the secure storage of bicycles during a trip. Sometimes called visitor parking, short-term parking is intended for shorter stays at locations such as shops, recreational facilities, businesses and other institutions. Bicycle parking requires far less space than automobile parking; in fact, 10 bicycles can typically park in the area needed for a single car.



GUIDANCE

- Bicycle parking consists of a rack that supports the bicycle upright in two places and provides a secure place for locking. Bicycle racks should be permanently affixed to a paved surface. Movable bicycle racks are only appropriate for temporary use, such as at major community gatherings.
- Bicycle parking facility should not obstruct pedestrian traffic or interfering with the use of the pedestrian areas.
- Each parked bicycle should be accessible without moving another bicycle.
- Add 2' from curb face.
- Add 4' from curb for perpendicular installations.
- Short-term bicycle parking should be located near and clearly visible from the destination it serves, with a target distance of 50' or less from building entrances.
- Short-term bicycle parking is required under the California Green Building Standards Code (CALGreen) for new nonresidential buildings expected to generate visitor traffic. At a minimum, projects must provide bicycle parking equivalent to 5 percent of new motor vehicle parking spaces added, with at least one rack accommodating two bicycles.

CONSIDERATIONS

- Racks should be located in a well lit, high visibility location to reduce potential for theft or vandalism.
- Bicycle parking should be provided at all publicly accessible buildings, parks, and other destinations, and included in roadway, streetscape, and transit projects, as well as wherever car parking is required.
- Multiple types of racks exist, but all should adhere to guidance pictured above regarding providing two points of contact for bike frame to prevent bikes from falling.
- Wave-style racks are not to be utilized as they do not allow for two points of contact.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

APBP. Bicycle Parking Guidelines, 2nd Ed. 2010.

California Green Building Standards Code (CALGreen), Title 24, Part 11. 2022.

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Street Design Guide. 2013.

LONG-TERM BICYCLE PARKING

Long-term bike parking is intended for residents in multi-unit buildings, employees, transit users, and others not attending to their bicycle for longer periods of time (generally several hours or days). Typically used for long-term bicycle parking, bicycle lockers are secure, locked boxes that store a single bicycle.



GUIDANCE

Lockers should be:

- Clearly marked as a long-term bicycle parking space.
- Located no lower than the first complete parking level below grade, and no higher than the first complete parking level above grade.
- Available and accessible to all building tenants during the buildings hours of operation and at all times for residents in residential contexts.
- Located in a well-lit, visible location near the main entrance or elevators.
- Separated from vehicle parking by a barrier that minimizes the possibility of a parked bicycle being hit by a car.
- Securely anchored.
- Well-maintained and well lit.

CONSIDERATIONS

- In lieu of lockers, long-term bicycle parking can also be provided indoors. This can be located within businesses or offered as a locked public facility, accessible with the same key card technology as bicycle lockers.
- Long-term bicycle parking should provide:
  - Direct or indirect access to the street or sidewalk depending on whether it is located in a parking garage or at street level.
  - Varying amount of conflict with automobiles depending on whether it is located in a parking garage or at street level.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

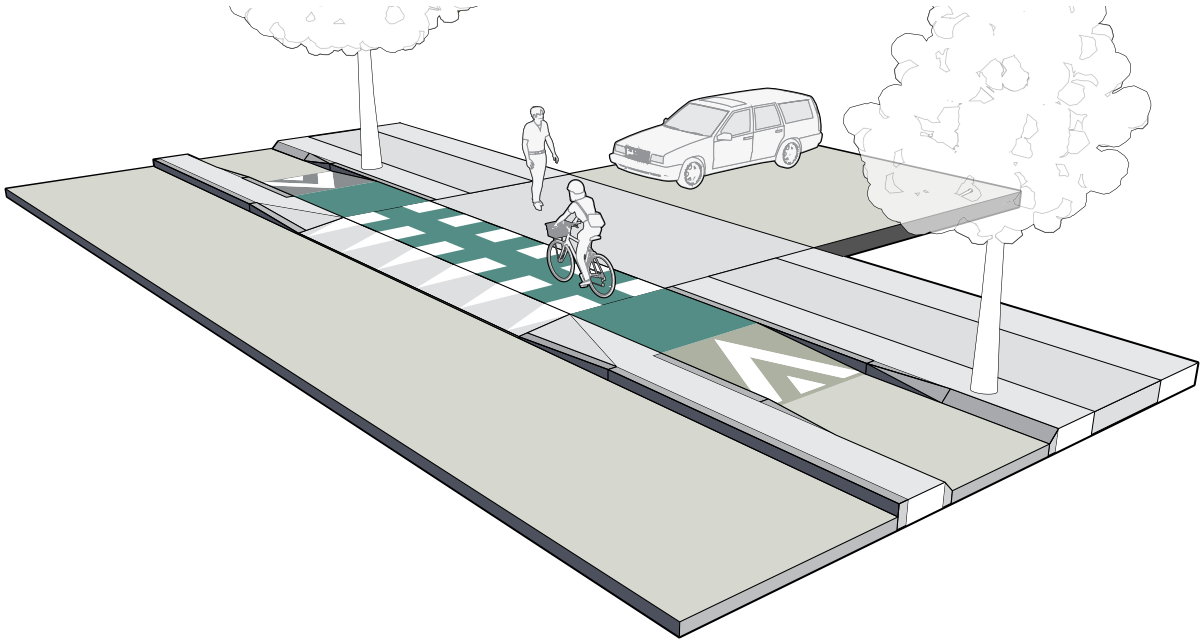
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NACTO. Urban Street Design Guide. 2013.

DRIVEWAYS

Most bicycle and pedestrian facilities will need to cross streets, driveways, or alleys at multiple locations along a corridor. At these locations, the crossings should be designed to 1) delineate a preferred path for people bicycling through the intersection and 2) to encourage driver yielding behavior, where applicable. Bicycle crossings may be supplemented with green pavement, yield lines, and/or regulatory signs.



GUIDANCE

- The bicycle crossing should be a minimum of 6 feet wide for one-way travel and 10 feet wide for two-way travel, as measured from the outer edge of the elephant's feet. Bicycle lane symbol markings should be avoided in bicycle crossings. Directional arrows are preferred within two-way bicycle crossings. Two-way crossings should also be indicated with warning signage for drivers entering and exiting the driveway.
- Though the graphic above shows a Class IV Separated Bike Lane, bicycle driveway crossings are also applicable to Class II bicycle facilities.
- Regardless of whether a driveway crossing is commercial or private, property owners must maintain a "visibility triangle" that ensures adequate sightlines as a motorist exits a driveway. Requirements vary based on jurisdiction.
- Refer to the AASHTO Green Book and AASHTO BIke Guide for guidance on establishing clear sight triangles that should remain free of visual obstructions such as parked vehicles, vegetation, and fences

CONSIDERATIONS

- Advance stop bars may be used in advance of driveway crossings to alert motorists to bicyclists and pedestrians crossing.
- Supplemental yield lines ("shark's teeth") may be used in advance of unsignalized crossings at driveways, at signalized intersections where motorists may turn across a bicycle crossing during a concurrent phase, and in advance of bicycle crossings located within roundabouts.
- Raised bicycle crossings further promote driver yielding behavior by slowing their speed before the crossing and increasing visibility of people bicycling.
- Dashed green-colored pavement may be used in a bicycle crossing to increase the visibility of the crossing where permitted conflicts occur. Green color may be desirable at crossings where concurrent vehicle crossing movements are allowed and where sightlines are constrained, or where motor vehicle turning speeds exceed 10 mph.
- Whenever a bicycle lane intersects with a high traffic driveway special treatment should be taken to reduce conflict.
- Consider installing signage for drivers entering roadway, particularly relevant for commercial driveways (eg: fast food restaurants) where drivers' attention may challenged.

REFERENCES

FHWA. Separated Bike Lane Planning and Design Guide. 2015.

TRANSIT STOPS

Any marked or signed location where transit vehicles stop and service passenger boarding and alighting is a transit stop. The most basic transit stops have only a pole-mounted "header" sign indicating the transit provider and route(s). High frequency routes and higher volume stops generally have more passenger amenities such as benches, shelters, traveler information, trash receptacles, bicycle parking, and other features.



Landing Zone on Natural Curb Line



Transit Island

GUIDANCE

+ Landing zones should be provided at all doors of the transit vehicle. Buses can vary in length and will have different door configurations. Landing zones should be designed in coordination with all transit providers.

CONSIDERATIONS

+ All transit stops must be ADA compliant, and should be safe, convenient, well-illuminated, and clearly visible. Transit stops should be connected to the larger pedestrian network with continuous sidewalks, curb ramps, and safe pedestrian crossings. Mid-block stops should provide access to mid-block crosswalks.
+ Transit stops on urban streets are typically located at the natural curb line or on a bus bulb or transit island.
+ Bus bulbs may be considered where additional pedestrian space is needed or to provide an in-lane spot where it is challenging for transit vehicles to reenter traffic. Transit islands are recommended on streets with separated bicycle facilities.
+ Transit stops may be located on the near-side of an intersection before a signal or cross street, on the far-side after a bus has passed through an intersection, or at a mid-block location between intersections.
+ Generally, transit agencies prefer far-side stops since they provide better visibility between transit riders and motor vehicles. Near-side bus stops may be appropriate where traffic flow is lower or where transit riders can more easily transfer without crossing the street. Stops can also be placed mid-block where there are major passenger generators or where space next to an intersection is insufficient.
+ Transit stop locations are determined based on a number of factors including intersection operations, bus routing, curbside conditions, transfer points, intersection geometry and sightlines, consideration of other street users, and major generators or destinations. The location of a transit stop can affect transit travel time, passenger safety, and roadway operations.
+ Seating at or near transit stops can improve passenger comfort, as can shade in the form of street trees or awnings. Seating need not be a unique and dedicated element, but may include leaning rails, planters, ledges, or other street elements.

REFERENCES

AASHTO. Guide for Geometric Design of Transit Facilities on Highways and Streets. 2014.

NACTO. Urban Street Design Guide. 2013.

U.S. Access Board. Final Rule on Public Right-of-Way Accessibility Guidelines, 2025.

DRAINAGE AND STORMWATER MANAGEMENT

Providing proper drainage enhances the safety and comfort of all users by reducing water ponding on the street and bike lane surfaces as well as the accumulation of debris. Proper drainage also protects the longevity of the roadway infrastructure and ensures that drainage features are adequate to accommodate state and local requirements to manage stormwater and minimize erosion.



CONSIDERATIONS

- In urban areas, stormwater may need to be directed toward the sidewalk buffer. In suburban and rural areas, the preferred practice is to direct runoff onto adjacent vegetated areas, where soils and slopes allow for runoff to naturally infiltrate. For uncurbed roadways, the preference is to locate drainage swales between the roadway and separated bike lane or side path, which may require street buffer widths wider than the minimum recommended widths to provide sufficient capacity in the swale.
- For locations where curbs do not include a gutter, curb inlets located within or adjacent to the bike lane zone should be designed to minimize steep elevation changes or slopes that could cause a bicyclist to crash. If a steep elevation change is provided, it should be designed as a gutter, the steep slope width may not be counted as part of the bike lane, and the area may be demarked with a surface material change and/or a white edge line to guide bicyclists away from the hazard.
- Drainage grates should be located outside of the bike lane whenever feasible to maintain a comfortable riding surface. When their placement in the bike lane cannot be avoided, drainage grates must be bicycle-compatible, with openings small enough to prevent a bicycle wheel from falling into the slots of the grate or with bar designs which are perpendicular to the path of travel.
- A hard surface cross slope of 1 percent typically provides adequate conveyance of drainage while meeting accessibility requirements.
- Rectangular grates should be considered in place of square designs where the grate design can result in bicycle wheels being caught if installed in the wrong direction. Where grates are located within a bicycle facility or adjacent to bicyclists' operating space, the gap between the drainage grate and its frame should be 0.5 in. or less. Another bicycle friendly option is to place the grate entirely within a gutter rather than extending it into the bicycle facility.
- Grates and other utility covers should remain flush with the pavement surface after a pavement overlay to within 0.25" of the new surface. If this is not possible or practicable, the pavement edge should slope to the drainage grate so it does not have an abrupt edge at the inlet.
- Pedestrian accessibility guidelines limit openings on ground surfaces, such as grates, to a width of 0.5". or less to prevent wheelchair castors from becoming wedged into the opening. Pedestrian accessibility guidelines also limit vertical deviations in surfaces of more than 0.25". To minimize risks to pedestrians, drainage grates, utility covers, and gutters should not be located within bicycle facilities where pedestrians are traveling unless they meet pedestrian accessibility guidelines.



REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

DRAINAGE AND STORMWATER MANAGEMENT



- Any infrastructure located in low-lying areas may need special attention due to larger scale drainage and flooding issues. Designers may need to capture excess stormwater to prevent standing water or erosion on a bicycle facility.
- When stormwater management features such as filtration/infiltration measures or permeable pavements are considered in conjunction with a bike facility project, designers should give special consideration to the location of existing utilities and placement of relocated utilities. Utilities are generally incompatible with stormwater infiltration measures and should be relocated outside of the zone of influence of those facilities.
- The addition of separated bike lanes to a roadway presents an opportunity to introduce green infrastructure strategies, including continuous treatments (e.g., permeable hardscape surfaces, linear bioretention areas, and linear water quality swales) as well as those that may only be implemented at spot locations (e.g., bioretention areas, bioretention curb extension areas, and tree boxes).
- Permeable hardscape surfaces for bicycle and pedestrian zones can also reduce stormwater flows.
- Curb extensions can be designed to direct stormwater runoff from bike lanes and adjacent roadways into green infrastructure systems like bioswales or rain gardens, where the water can be filtered and absorbed. These extensions also provide space for permeable surfaces, such as permeable pavement or plantings. Additionally, bulb-outs can improve safety by slowing vehicle speeds and increasing visibility for cyclists and pedestrians.





TRAFFIC CALMING



6

CHICANES AND CHOKERS

Chicanes slow traffic by creating a serpentine travel path by alternating street features from one side of the street to the other. Chokers narrow the road in midblock locations through the application of curb extensions (or on-street parallel parking) on both sides of the street. Chicanes and chokers both can be designed to integrate stormwater drainage catchments, street tree planting, benches, bicycle parking, and other amenities.



GUIDANCE

- Use chicanes on low-volume, local streets. Use chokers on arterials, collector, and local streets. Engineering judgment should be used to determine when the need is met for each treatment.
- Chicanes must meet requirements for horizontal tapers per the California MUTCD.
- Avoid use of chicanes on streets with higher volumes of bus, freight, or emergency service activity. Use mountable curbs to accommodate larger motor vehicles while maintaining tight turn radii to slow people driving.
- Use vertical elements like plantings in combination with chicanes to warn drivers of traffic pattern.

CONSIDERATIONS

- Use for stormwater infiltration with bioretention areas or appropriately sized tree filter boxes.
- Consult with fire department to ensure that designs minimize impacts to emergency services.
- If needed to maintain existing drainage patterns, consider constructing with a 2' drainage channel between the chicane island and curb.

REFERENCES

Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

NACTO. Urban Street Design Guide. 2013.

SPEED CUSHIONS

Vertical deflection treatments like speed cushions are some of the most effective treatments for slowing motor vehicle speeds. These treatments can reduce higher-speed motor vehicle cut-through traffic on local streets. Speed cushions are similar to speed humps, but include gaps to allow vehicles with wider wheelbases, such as fire apparatus, to pass through unimpeded. Speed cushions also provide bicyclists an opportunity to subvert verticle deflection.



GUIDANCE

- Use on local and shared streets at midblock locations where lower motor vehicle speeds and volumes are desired, such as on bike boulevards.
- Locate speed cushions periodically along the corridor every 250 to 500 feet to accomplish speed control. Do not locate in front of driveways, close to intersections, or on a sharp curve.

CONSIDERATIONS

- To minimize emergency response delay even further, consider offset speed tables instead, which are speed tables split in half down the street centerline with longitudinal separation between the halves.
- Speed cushions may be constructed out of asphalt or rubber vertical deflections.
- Design should consider the ability to withstand the weight of fire apparatus and outriggers.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Traffic Calming E-Primer. (N.D.)

NACTO. Urban Street Design Guide. 2013.

SPEED REDUCTION MARKINGS

Speed Reduction Markings (also known as Optical Speed Bars) are transverse pavement markings placed with progressively reduced spacing on both edges of the traveled way to create the perception of increased speed. This illusion encourages drivers to slow down as they pass by the markings.



GUIDANCE

- Use on collector or local roads with any volume, ideally placed upstream of horizontal cuves or other locations where roadway design or street context change unexpectedly.

CONSIDERATIONS

- Speed reduction markings may be particularly useful on rural roads, such as identified Rural Class III facilities, which have higher volumes of bicyclists. See Chapter 1 for more information on Rural Class III facilities and Class III unclassified bike routes.
- Durable marking materials, such as thermoplastic, should be used as markings are exposed to increased wear from tires.
- Do not install on lanes that do not have a longitudinal line (center line, edge line, or lane line) on both sides of the lane.

REFERENCES

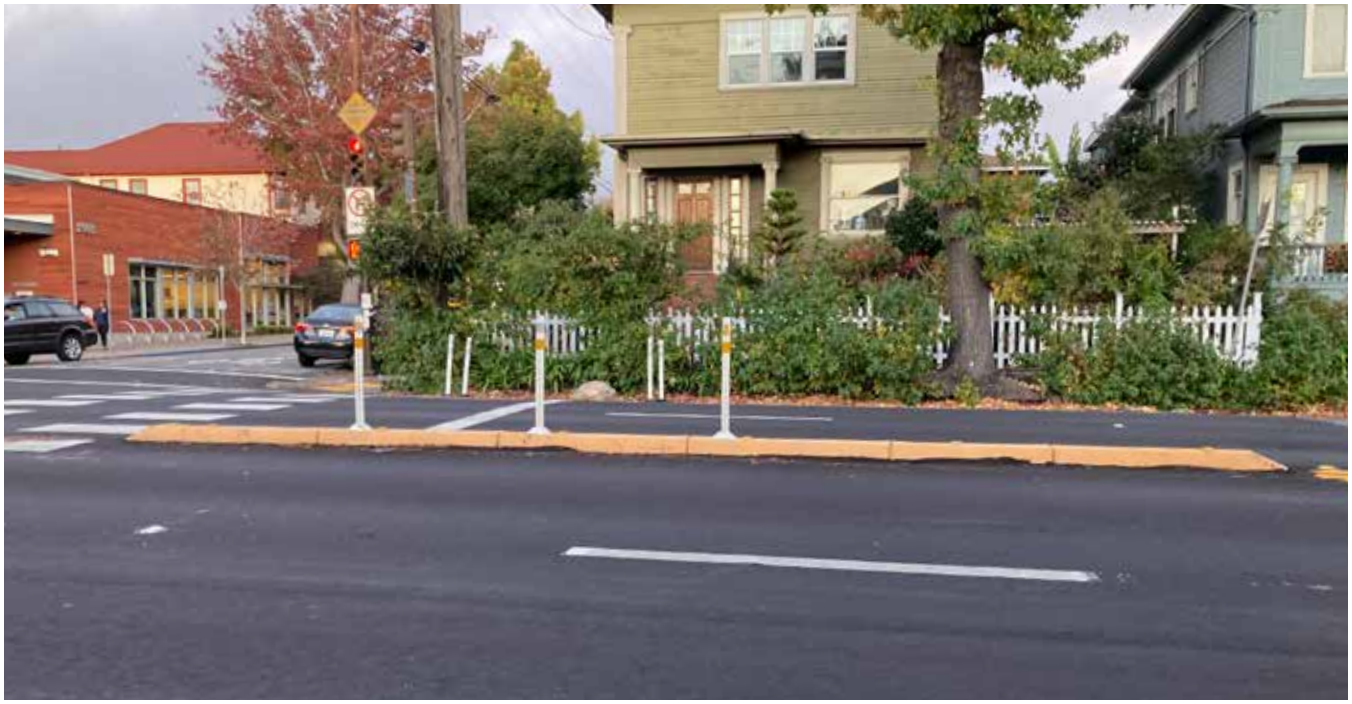
Caltrans. California Manual on Uniform Traffic Control Devices. 2014.

Caltrans. Traffic Calming Guide. 2023.

ITE. Traffic Calming Fact Sheets. (N.D.)

HARDENED CENTERLINES

Hardened centerlines feature vertical elements such as mountable curb or flex posts that force turning drivers to slow down and keep them from crossing the centerline when making turning movements. They have been shown to reduce motorist-pedestrian conflicts and reduce the speed of left-turning vehicles.



GUIDANCE

Use at:

- Intersections with a history of collisions involving people walking or rolling and left-turning motor vehicles; or
- Intersections with high volumes of people walking, rolling, and biking across the street; or
- Intersections where motor vehicles are frequently turning across double yellow lines at high speeds.

- Designs can include any combination of plastic curbing, rubber speed bumps, and flex posts, depending on turning radii, lane width, and needs to accommodate large motor vehicle turning movements.
- Where space allows, install rubber speed bump "nose" extending into the intersection.

CONSIDERATIONS

- On roadways where trucks and emergency vehicles frequently make turning movements, consider using mountable curbs to allow larger motor vehicles to make turns while slowing smaller motor vehicles.
- Intersection design including hardened centerlines must consider vehicular turning paths to prevent head-on collisions between opposing left-turning motorists.
- Can be used in conjunction with turn wedges and at protected intersections

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

TRANSVERSE RUMBLE STRIPS

Transverse rumple strips are raised areas across the surface of an approach lane to produce an audible and tactile warning of the impending intersection.



GUIDANCE

- Use in combination with Intersection Warning (W2-1 through W2-8), Advance Traffic Control (W3-1 or W3-2), or Pedestrian Crossing (W11-2) signs.

CONSIDERATIONS

- Noise generated from vehicles traversing the rumble strips can be an issue when residences are in close proximity to the intersection.
- Can require significant maintenance activities, especially on approaches characterized by high volumes of truck traffic.

REFERENCES

Caltrans. Manual on Uniform Traffic Control Devices. 2014.

ITE. Traffic Calming Fact Sheets. (N.D.)

TRAFFIC CIRCLES

Traffic circles are circular raised center islands at the intersection of two neighborhood streets installed to slow vehicle approach speeds. Unlike a mini-roundabout, a residential traffic circle is typically characterized by (1) a non-traversable center island, (2) no splitter islands on the intersection approaches, and (3) either yield control or no control.



GUIDANCE

- Use at intersections in primarily residential areas where daily motor vehicle volumes for all approaching legs of the intersection is less than 15,000 ADT. In particular, these may be used at intersections along bike boulevards.
- Design the circles to be visible at night with reflective materials and/or ensure adequate street lighting exists.
- Provide adequate signage (see FHWA MUTCD for details).

CONSIDERATIONS

- Neighborhood traffic circles are most effective when paired with other traffic calming treatments.
- Where large vehicles are infrequent, design to allow larger trucks to turn left in front of the circle.Where trucks are frequent, include mountable truck aprons around the outside of the circle to allow large motor vehicles to use the intersection without encouraging high speeds by smaller motor vehicles.
- If the circle geometry precludes turning movements for larger vehicles, consider turning restrictions if the adjacent street network is adequate.
- Traffic circles also provide opportunities for plantings, special identifying signage for neighborhoods, or public art. Consider planting native and/or seasonal vegetation in the center of the circles to provide neighborhood beautification, traffic calming elements, and stormwater infiltration.
- Traffic circles can be constructed as a quick-build project using temporary materials. See the Quick-Build section of Chapter 4 for more details.

REFERENCES

AASHTO. Guide for the Development of Bicycle Facilities. 2024.

FHWA. Manual on Uniform Traffic Control Devices. 2023.

ITE. Traffic Calming Fact Sheets. (N.D.)

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RESOURCES & CITATIONS



7

RESOURCES & CITATIONS

The bicycle and pedestrian facilities and amenities included in this Toolkit are based on the recommendations from the following state and national standards and resources:

American Association of State Highway and Transportation Officials (AASHTO)
Guide for the Development of Bicycle Facilities, 2024

California Department of Transportation (Caltrans)
DIB 82-06: Pedestrian Accessibility Guidelines for Highway Projects, 2017
DIB 89-02: Class IV Bikeway Guidance, 2022
DIB 94: Complete Streets Contextual Design Guidance, 2024
Highway Design Manual, 7th Edition, 2020
California Manual on Uniform Traffic Control Devices, Revision 8, 2014

California Legislature
Assembly Bill 413 (AB 413), Daylighting Law. (full enforcement beginning January 1, 2025)

California Building Standards Commission
California Green Building Standards Code (CALGreen), Title 24, Part 11. 2022

Federal Highway Administration (FHWA)
Crosswalk Selection Guide. 2023.
Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations, 2018
Dynamic Warning Systems: A Review of Applications and Effectiveness. Western Transportation Institute, Montana State University. 2021
Manual on Uniform Traffic Control Devices, 11th Edition, 2023
Pedestrian Safety Guide and Countermeasure Selection System (PEDSAFE). 2013 (with ongoing updates)
Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations, 2005
Safe Transportation for Every Pedestrian (STEP) Guide. 2018
Separated Bike Lane Planning and Design Guide, 2015
Small Town and Rural Multimodal Networks, 2016

Institute of Transportation Engineers (ITE)
Traffic Calming Fact Sheets, (N.D.)

National Association of City Transportation Officials (NACTO)
Urban Street Design Guide, 2013
Transit Street Design Guide, 2017
Urban Bikeway Design Guide, 2014

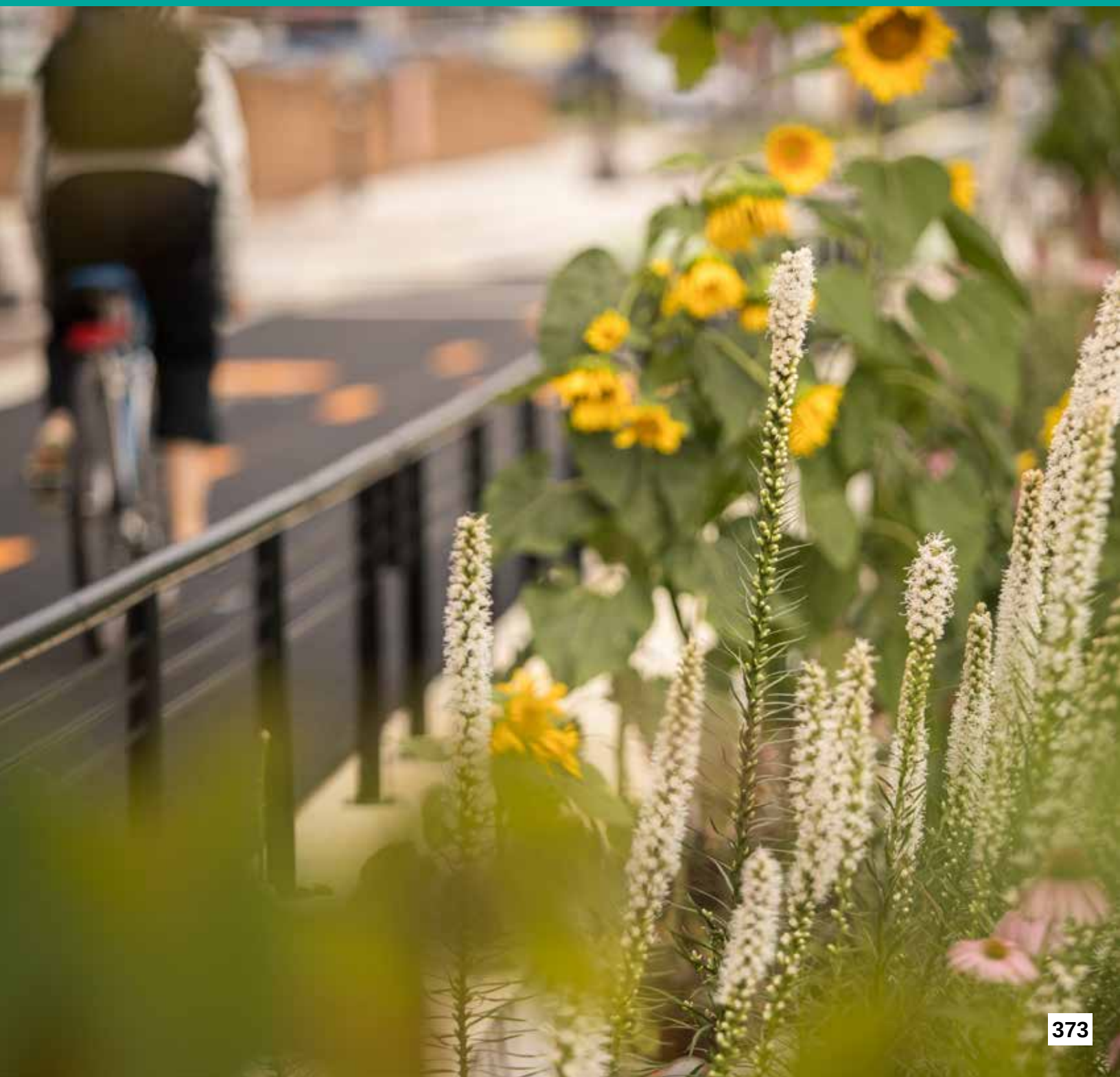
Transportation Research Board (TRB)
Highway Capacity Manual, 2010

United States Access Board
Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, 2004
Final Rule on Public Right-of-Way Accessibility Guidelines, 2025
Public Right-of-Way Accessibility Guidelines (PROWAG). 2023

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NAPA COUNTY ACTIVE TRANSPORTATION PLAN TREATMENT TOOLKIT

2024



Appendix E
Bicycle Network Recommendations

NAPA VALLEY TRANSPORTATION AUTHORITY

Table E.1: Bicycle Network Recommendations – City of Calistoga

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
702	Greenwood Avenue	Napa River	SR 29	1.0	Rural Bicycle Route (Class III)	$74,600	7	9,975	$165,900	0	1	1	1	0	3	
703	Grant Street	Greenwood Avenue	N Oak St	1.0	Shared Use Path (Class I)	$3,838,100	11	15,797	$378,000	0	1	1	1	1	4	Y
705	Grant Street	N Oak Street	Lake Street	0.1	Bicycle Boulevard (Class III)	$266,000	9	13,735	$228,600	0	1	0	0	0	1	Y
706	Grant Street	Lake St	Stevenson Street	0.3	Bike Lanes (Class II)	$46,800	9	13,373	$451,100	1	1	1	0	1	4	Y
707	Money Ln	Mora Avenue	Lake Street	0.4	Bicycle Boulevard (Class III)	$765,400	8	12,014	$200,000	0	1	1	1	0	3	
708	Lake Street	Washington Street	Fisher Street	0.2	Bicycle Boulevard (Class III)	$437,300	9	13,493	$224,600	0	1	1	1	0	3	Y
710	Lincoln Street	Silverado Trail	Fair Way	0.6	Bike Lanes (Class II)	$93,200	9	14,068	$317,600	1	1	1	1	0	4	Y
711	Lincoln Street	Fair Way	Foothill Boulevard	0.4	Bike Lanes (Class II)	$52,900	8	12,576	$410,300	1	1	1	1	1	5	Y
712	Foothill Boulevard	Western City Limit	Eastern City Limit	2.0	Bike Lanes (Class II)	$296,100	10	15,091	$311,900	1	1	1	1	0	4	Y
713	3rd Street	Fair Way	Washington Street	0.1	Bicycle Boulevard (Class III)	$289,700	8	12,202	$203,100	1	1	1	1	0	4	
714	Washington Street	Lake Street	Lincoln Avenue	0.3	Bicycle Boulevard (Class III)	$592,400	9	13,789	$229,500	1	1	1	0	1	4	Y
715	Fair Way	Lake Street	Lincoln Avenue	0.3	Bicycle Boulevard (Class III)	$541,400	9	13,394	$223,000	1	1	1	1	0	4	
717	Berry Street	Cedar Street	Washington Street	0.1	Bicycle Boulevard (Class III)	$183,600	7	10,827	$180,200	0	1	1	0	0	2	
1100	Rosedale Rd	Rickett Rd	Silverado Trail	0.8	Bike Lanes (Class II)	$111,800	0	93	$103,100	0	1	1	1	0	3	
1102	Brannan St	Lincoln Ave	Silverado Trail	0.3	Bicycle Boulevard (Class III)	$643,600	4	6,185	$185,000	1	1	1	1	0	4	
1105	Carli Dr	Aurora Dr	Money Ln	0.1	Bicycle Boulevard (Class III)	$110,100	0	59	$161,300	0	1	1	1	0	3	
1106	Aurora Dr	N Oak St	Carli Dr	0.0	Bicycle Boulevard (Class III)	$51,700	7	9,691	$155,800	0	1	1	1	0	3	
1107	N Oak St	Grant St	Aurora Dr	0.2	Bicycle Boulevard (Class III)	$458,100	6	9,361	$210,100	0	1	0	1	0	2	
1108	Berry St	Cedar St	Foothill Blvd	0.1	Bicycle Boulevard (Class III)	$224,800	8	12,624	$176,400	1	1	1	1	0	4	
1109	Silver Street Trail	Silver Street (north end)	Napa River Trail	0.1	Shared Use Path (Class I)	$298,400	7	10,599	$270,600	0	1	1	1	0	3	
1111	S Oak St	Cedar St	School St	0.1	Bicycle Boulevard (Class III)	$114,400	1	970	$185,400	0	1	0	1	0	2	
1112	Mora Ave	Grant St	SR-29	0.6	Bicycle Boulevard (Class III)	$1,203,700	7	11,141	$199,700	0	1	0	1	0	2	
1113	Money Ln Trail	Proposed class I facility at Mora Ave	Mora Ave	0.1	Shared Use Path (Class I)	$218,600	8	12,002	$220,500	0	1	1	1	0	3	
1114	Oak Street Logvy Bridge	School St	Washington St	0.1	Shared Use Path (Class I)	$511,300	6	8,949	$280,500	0	1	1	1	0	3	
1119	Denise Dr	Kathy Way	Cedar St	0.1	Shared Use Path (Class I)	$203,400	1	1,006	$197,100	0	1	1	1	0	3	
1121	Napa River Trail	Greenwood Ave, Calistoga city limit	Calistoga city limit	2.1	Shared Use Path (Class I)	$8,165,400	5	7,367	$442,000	1	1	1	1	0	4	
1122	SR 29	Silverado Trail	Tubbs Lane	1.6	Bike Lanes (Class II)	$229,500	13	18,690	$252,800	1	1	1	1	1	5	Y
1125	Berry St	Berry St Bridge at Washington		0.0	Separated Bikeway (Class IV)	$27,500	8	11,855	$255,800	1	1	1	0	0	3	
1196	Kortum Canyon Rd	Foothill Blvd	City Limits	0.3	Rural Bicycle Route (Class III)	$23,300	1	1,382	$167,200	1	1	0	0	1	3	
1238	Stevenson St	Grant St	Lincoln Ave	0.1	Bicycle Boulevard (Class III)	$266,900	6	9,340	$189,600	1	1	0	0	1	3	

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

Table E.2: Bicycle Network Recommendations – City of St. Helena

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
721	Madrona Avenue	Oak Ave	Riesling Way	0.9	Bicycle Boulevard (Class III)	$1,713,600	9	13,312	$221,400	1	0	0	1	0	2	
722	Spring Street	Sylvaner Avenue	Main Street	0.6	Bicycle Boulevard (Class III)	$1,087,000	10	14,446	$240,400	0	1	1	1	0	3	
723	Valley View Street	Spring Street	Birch Street	0.2	Bicycle Boulevard (Class III)	$400,900	7	10,251	$170,700	0	1	0	1	0	2	
724	S Crane Avenue	Grayson Avenue	Sulphur Springs Avenue	0.4	Bike Lanes (Class II)	$65,100	6	8,426	$225,900	0	1	0	1	0	2	
725	Sulphur Springs	Crane Avenue	Main Street	0.5	Bike Lanes (Class II)	$72,400	4	6,185	$168,100	1	1	0	1	1	4	
726	Adams Street	Allyne Ave	Main St	0.4	Bicycle Boulevard (Class III)	$807,900	9	13,572	$225,700	1	0	1	1	0	3	
727	Hunt Avenue	Main Street and Starr Avenue		0.5	Bicycle Boulevard (Class III)	$922,300	9	13,410	$223,000	1	0	0	1	0	2	
728	Oak Ave	Hillview Place	Madrona Ave	0.1	Bicycle Boulevard (Class III)	$202,500	7	10,306	$171,300	1	0	0	1	0	2	
731	Spring Mountain Road	Madrona Avenue	Spring Mountain Ct	0.4	Bike Lanes (Class II)	$61,500	7	10,571	$252,100	1	0	0	1	0	2	
732	Grayson Avenue	SR 29	South Crane Avenue	0.4	Bike Lanes (Class II)	$61,000	7	10,250	$250,000	1	1	0	1	0	3	
869	Railroad Ave	Fulton Ln	Hunt Ave	0.3	Bicycle Boulevard (Class III)	$623,300	9	12,907	$214,600	0	0	1	1	0	2	
875	Spring St	Sylvaner Ave	Sulfur Springs Ave	0.2	Rural Bicycle Route (Class III)	$13,500	4	5,368	$89,400	0	1	0	1	0	2	
890	Hudson Ave	Madrona Ave	Spring St	0.3	Bike Lanes (Class II)	$46,200	8	11,665	$300,700	0	0	0	1	0	1	
891	Lower Reservoir Loop Trail	NW city limit	Loop around Lower Reservoir and connect	0.9	Shared Use Path (Class I)	$3,339,900	2	3,197	$82,900	0	0	0	1	0	1	
893	Starr Ave-Adams St-Railroad Ave-Fulton Ln	Hunt Ave	Railroad Ave	0.5	Shared Use Path (Class I)	$1,953,100	9	13,235	$316,900	0	0	1	1	0	2	
895	Library Lane Path	Adams St	Vine Trail (along RR corridor)	0.1	Shared Use Path (Class I)	$485,900	7	10,912	$261,200	0	0	0	1	0	1	
900	Main St	Madrona Ave	Charter Oak Ave	0.6	Rural Bicycle Route (Class III)	$47,900	10	15,135	$251,700	1	1	1	1	1	5	Y
901	McKorkle Ave	Alison Ave	Proposed class I facility 675' west of College Ave	0.3	Bicycle Boulevard (Class III)	$575,200	6	9,332	$155,200	0	1	0	1	0	2	
902	McCorkle Ave Path	Proposed class I facility 675' west of College Ave	College Ave	0.1	Shared Use Path (Class I)	$519,700	4	6,641	$163,000	0	1	0	1	0	2	
904	Main St	Fulton Ln	St Helena city limit, Deer Park Rd	1.1	Rural Bicycle Route (Class III)	$83,100	8	12,055	$200,400	1	0	1	1	0	3	
1063	Sulphur Springs Ave	Sulphur Creek	SR 29/Main St	0.9	Rural Bicycle Route (Class III)	$69,900	4	6,141	$102,300	0	1	0	1	0	2	
1064	Crane Park Path (to La Quinta Wy)	Grayson Ave	Kennedy Ct	0.5	Shared Use Path (Class I)	$1,900,300	5	7,767	$192,300	0	1	0	1	0	2	
1065	Starr Ave Path	Hunt Ave	Mills Ln	0.7	Shared Use Path (Class I)	$2,581,400	7	10,372	$253,400	0	1	1	1	0	3	
1068	Mitchell Dr	Main St	Crane Ave	0.4	Bicycle Boulevard (Class III)	$855,800	9	13,569	$225,800	1	1	1	1	0	4	
1069	Birch Ave	Crane Ave	Valley View St	0.2	Bicycle Boulevard (Class III)	$295,100	7	10,121	$168,500	0	1	0	1	0	2	
1070	N Crane Ave	Spring St	Birch St	0.2	Bicycle Boulevard (Class III)	$445,400	7	10,954	$182,300	0	1	0	1	0	2	
1071	Edwards St	Hunt Ave	Pope St	0.1	Bicycle Boulevard (Class III)	$288,400	8	11,396	$189,500	1	1	0	1	0	3	
1072	Hillview Pl	Spring Mountain Rd	Oak St	0.1	Bicycle Boulevard (Class III)	$283,700	7	9,814	$163,200	0	0	0	1	0	1	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
1073	Allyn Ave	Spring St	Madrona Ave	0.3	Bike Lanes (Class II)	$48,900	8	12,233	$227,900	0	0	0	1	1	2	
1075	White Sulfur Springs Rd to Sulfur Springs Ave Connector Bridge	Spring St	Sulphur Springs Ave	0.1	Shared Use Path (Class I)	$427,500	3	4,222	$105,500	0	1	0	1	0	2	
1076	Sulphur Springs Ave	St Helena city limit	Spring St	0.2	Rural Bicycle Route (Class III)	$12,200	3	4,215	$70,200	0	1	1	1	0	3	
1077	Sylvaner Ave	Riesling Way	Spring St	0.4	Bike Lanes (Class II)	$56,300	4	5,419	$153,000	0	1	0	1	0	2	
1078	Elmhurst Ave	Spring Mountain Rd	Main St	0.2	Bicycle Boulevard (Class III)	$450,400	7	10,005	$166,300	1	0	0	1	0	2	
1079	York Creek Path	Spring Mountain Rd	Vine Trail	0.7	Shared Use Path (Class I)	$2,592,800	6	8,189	$199,700	0	0	0	1	0	1	
1128	Mariposa Ln	McCorkle Ave	Pope St	0.1	Bicycle Boulevard (Class III)	$270,300	6	8,980	$149,400	0	1	1	0	0	2	
1129	Crinella Drive Connector	Existing City Park	future Vine Trail	0.0	Shared Use Path (Class I)	$119,000	5	7,958	$193,700	0	0	0	0	0	0	
1172	Spring Mountain Rd	W St Helena city limit	Spring Mtn Court	0.3	Rural Bicycle Route (Class III)	$21,000	2	3,036	$50,500	0	0	0	1	0	1	
1173	Sulphur Creek Path	Sulphur Springs Ave	Napa River Trail	1.4	Shared Use Path (Class I)	$5,334,500	11	16,412	$390,300	1	1	1	1	0	4	
1181	Napa Valley Vine Trail	Pratt Ave	Chaix Ln	2.3	Shared Use Path (Class I)	$8,696,000	12	17,854	$424,500	1	1	1	0	1	4	Y
1219	Crinella Dr	Park St	Existing city park	0.1	Shared Use Path (Class I)	$523,600	6	8,274	$201,300	0	0	0	0	0	0	
1224	Napa River Trail	St Helena city limit near wastewater treatment plant	SE edge Wappo Park	1.1	Shared Use Path (Class I)	$4,335,100	2	3,627	$92,400	0	1	0	1	0	2	
1225	Napa River Trail	Pope St (Napa River Trail-Wappo Park)	St Helena city limit (Deer Park Rd / Lower Reservoir Trail)	1.9	Shared Use Path (Class I)	$7,209,700	6	8,607	$212,300	0	1	1	1	1	4	Y
1246	Howell Mountain Rd	Silverado Trail	Conn Valley Rd	0.7	Bike Lanes (Class II)	$101,700	3	5,153	$139,500	0	1	1	1	0	3	
1251	Mills Ln	SR 29	Proposed Path	0.5	Bike Lanes (Class II)	$71,600	6	9,461	$213,500	0	1	1	1	0	3	
1252	College Ave	McCorkle Ave	Pope St	0.2	Bicycle Boulevard (Class III)	$346,600	4	6,165	$102,600	0	1	1	0	0	2	
1253	Church St	Pope St	Hunt Ave	0.1	Bicycle Boulevard (Class III)	$257,600	8	12,170	$202,400	1	1	0	1	0	3	

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

Table E.3: Bicycle Network Recommendations – Town of Yountville

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
733	Webber Avenue	Vine Trail	Yount Street	0.1	Bicycle Boulevard (Class III)	$197,000	7	10,350	$171,500	0	0	1	1	0	2	
734	Washington Street	Oak Circle	Weber Avenue	0.8	Bicycle Boulevard (Class III)	$1,556,100	9	13,717	$227,300	1	0	1	0	0	2	
737	Jefferson Street	Washington Street / Humboldt Street	Monroe Street	0.4	Study Corridor	N/A	N/A	N/A	N/A	0	0	1	0	1	2	
738	Yount Street	Washington Street	Yountville Cross Road	0.5	Study Corridor	N/A	N/A	N/A	N/A	1	0	1	0	0	2	
1019	Monroe St	Lincoln Ave	Jefferson St	0.1	Bicycle Boulevard (Class III)	$126,500	5	8,147	$135,000	0	0	0	1	0	1	
1020	Jefferson St	path entrance	Monroe St	0.1	Bicycle Boulevard (Class III)	$114,700	6	8,584	$142,300	0	0	1	1	0	2	
1021	Lincoln Ave	Monroe	Grant	0.0	Bike Lanes (Class II)	$7,100	5	7,977	$132,400	0	0	1	1	0	2	
1022	Yount Mill Rd	Yountville Cross Rd	NE city limit	0.3	Rural Bicycle Route (Class III)	$24,800	6	9,340	$154,800	0	1	0	1	0	2	
1169	Webber Avenue	Vine Trail	Yount Street	0.1	Unclassified Bicycle Route	$4,700	7	9,765	$161,800	0	0	1	1	0	2	
1234	Hopper Creek Path – South Extension to Washington St	Hopper Creek	Washington St.	0.1	Shared Use Path (Class I)	$305,700	6	8,356	$195,600	0	0	0	0	0	0	Y

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

Table E.4: Bicycle Network Recommendations – City of Napa

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
8	Napa River Trail (Copia)	Oxbow North Lot	Trail Closure at Copia	0.3	Shared Use Path (Class I)	$1,017,500	22	33,242	$847,400	0	0	0	0	0	0	
17	Coombsville Rd	Silverado Trail	Silverado Middle School	0.8	Buffered Bike Lanes (Class II)	$175,600	24	35,969	$858,800	0	1	0	0	0	1	
131	Dry Creek Rd	Redwood Rd	NW city limit	1.0	Buffered Bike Lanes (Class II)	$227,600	35	51,546	$1,131,700	0	0	0	0	0	0	
739	Orchard Avenue	Western city limits	Solano Ave	0.3	Bike Lanes (Class II)	$46,000	5	6,815	$189,800	0	1	1	1	0	3	
740	Salvador Avenue	Hwy 29	Hahnemann Ave	0.2	Bike Lanes (Class II)	$33,000	16	23,154	$444,100	0	1	1	0	0	2	
741	Wine Country Avenue	Hwy 29	Linda Vista Avenue	0.5	Bike Lanes (Class II)	$73,300	28	41,977	$755,600	0	1	1	1	0	3	
742	Redwood Road	Solano Avenue	Dry Creek Road	1.0	Study Corridor	N/A	N/A	N/A	N/A	1	1	1	1	0	4	Y
743	West Lincoln Avenue	Solano Ave	Lone Oake Ave	0.5	Bicycle Boulevard (Class III)	$947,500	38	56,057	$934,400	0	0	1	1	0	2	
744	Linda Vista Ave	City Boundary	Trower Ave	0.6	Bicycle Boulevard (Class III)	$1,216,900	33	49,695	$826,800	0	1	0	1	1	3	
745	Linda Vista Ave	Trower Ave	Redwood Ave	0.6	Bicycle Boulevard (Class III)	$1,172,500	47	69,607	$1,158,600	1	1	1	1	0	4	
746	Linda Vista Avenue	Redwood Avenue	W. Pueblo Avenue.	0.5	Bike Lanes (Class II)	$75,000	45	66,771	$1,174,200	1	1	1	1	0	4	
747	Linda Vista Avenue	W. Pueblo Avenue.	Lone Oak Avenue	0.4	Bike Lanes (Class II)	$54,900	32	47,531	$839,200	0	1	1	1	0	3	
748	Redwood Creek Bridge	Lone Oak	Kingston Avenue	0.1	Shared Use Path (Class I)	$369,900	28	41,752	$1,038,900	0	0	1	1	1	3	
749	Robinson Ln - Linda Vista Ave	Kingston Avenue	Browns Valley Road.	0.2	Bicycle Boulevard (Class III)	$443,000	15	22,868	$381,500	1	0	0	1	0	2	
751	Browns Valley Road	Patrick Road	Buhman Avenue	0.2	Bike Lanes (Class II)	$22,200	11	16,881	$822,000	0	0	1	1	0	2	
752	Trower Avenue	Solano Avenue	Linda Vista Avenue	0.5	Separated Bikeway (Class IV)	$293,300	41	61,263	$1,489,700	0	0	1	0	0	1	
753	Trower Avenue	SR 29	Jefferson Street	0.5	Buffered Bike Lanes (Class II)	$115,800	40	59,068	$1,398,800	0	0	1	0	0	1	
755	Kilburn Avenue	Laurel Street	Freeway Drive	0.8	Bicycle Boulevard (Class III)	$1,579,600	32	48,145	$803,900	0	1	0	1	0	2	
756	Laurel Street	Foothill Drive	Freeway Drive	0.4	Bicycle Boulevard (Class III)	$804,700	28	40,998	$684,800	0	1	0	1	0	2	
757	Foothill Boulevard	Laurel Street	Old Sonoma Drive	0.4	Bike Lanes (Class II)	$61,600	26	39,331	$951,800	0	0	1	1	0	2	Y
758	Foster Road	Old Sonoma Road	West Imola Avenue	0.4	Bike Lanes (Class II)	$59,600	25	36,726	$879,400	1	1	0	1	0	3	
759	California Boulevard	Clay St	Trancas Street	1.6	Study Corridor	N/A	N/A	N/A	N/A	1	0	1	0	0	2	
761	Imola Avenue	Hunt Street	SR-29	0.1	Shared Use Path (Class I)	$355,600	18	26,581	$662,000	0	0	1	1	0	2	
762	Imola Avenue	South Freeway Drive	Foster Road	0.2	Bicycle Boulevard (Class III)	$367,300	15	22,883	$382,100	1	0	0	1	0	2	Y
763	Imola Avenue	Eastern end of bridge	SR 121	1.3	Separated Bikeway (Class IV)	$860,800	40	59,040	$1,444,900	1	1	1	0	1	4	
764	James Diemer Drive	From Magnolia Drive	Administration Library Parking entrance	0.3	Bike Lanes (Class II)	$44,400	10	14,886	$533,400	0	1	0	0	1	2	
765	James Diemer Drive	From Administration Library Parking entrance	Streblow Dr.	0.3	Bike Lanes (Class II)	$46,800	5	7,353	$355,700	0	1	0	0	0	1	
766	Shurtleff Avenue	Imola Avenue	Terrace Drive	0.9	Bicycle Boulevard (Class III)	$1,852,300	23	34,957	$582,600	1	1	0	1	1	4	Y
767	Terrace Drive	Imola Avenue	Coombsville Rd	1.2	Bicycle Boulevard (Class III)	$2,312,600	31	45,925	$764,900	1	1	1	1	0	4	
768	Elm Street / S Seminary St	Ash St	Riverside Dr	0.6	Bicycle Boulevard (Class III)	$1,180,300	33	49,799	$830,000	0	0	1	0	0	1	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
769	Seminary St	Oak St	Pine St	0.2	Bicycle Boulevard (Class III)	$466,300	34	50,519	$841,800	0	1	1	0	0	2	
770	Birkdale Drive	Wyatt Ave	Tamarisk Dr	0.3	Bicycle Boulevard (Class III)	$541,100	17	25,853	$430,600	0	0	0	0	0	0	
771	Trail between Forest Drive, Camilla Drive, and Westminster Ct	Forest Dr south	Camilla Dr and then south	0.1	Shared Use Path (Class I)	$389,800	14	21,210	$530,200	0	0	0	0	0	0	
772	River Park Blvd	Jefferson St	Newport Dr	0.6	Bicycle Boulevard (Class III)	$1,078,700	13	19,645	$327,400	0	0	0	0	0	0	
773	Silverado Trail	Hagen and Lincoln		0.8	Separated Bikeway (Class IV)	$504,000	18	27,360	$701,300	1	0	1	1	1	4	
774	Montecito Blvd	East Avenue	Lakeview Dr	0.4	Bicycle Boulevard (Class III)	$820,300	17	24,819	$412,700	0	0	0	0	0	0	
775	East Avenue	Silverado Trail	1st Street	0.4	Bicycle Boulevard (Class III)	$849,200	23	34,477	$573,500	1	0	1	0	0	2	
776	Beckworth Drive	Tallac Street	Palomar Wy	0.6	Bicycle Boulevard (Class III)	$1,145,200	46	68,807	$1,145,700	0	0	0	0	0	0	
777	El Capitan Way	Willis Dr	Baxter Avenue	0.4	Bicycle Boulevard (Class III)	$789,800	42	62,612	$1,042,700	0	0	0	0	0	0	
779	Yount Street	Seminary Street	Yajome Street	0.2	Bicycle Boulevard (Class III)	$424,100	35	52,380	$872,800	1	0	0	0	0	1	
780	Yajome Street	Pearl Street	Jackson St	0.5	Bicycle Boulevard (Class III)	$886,400	41	61,743	$1,028,300	0	0	1	0	0	1	
781	Vallejo Street	Yajome Street	Soscol Avenue	0.1	Bicycle Boulevard (Class III)	$263,600	33	48,825	$813,200	0	0	1	0	0	1	
782	Jackson Street	Yajome Street	Soscol Avenue	0.3	Bicycle Boulevard (Class III)	$526,700	35	52,733	$878,500	0	0	1	0	0	1	
783	Myrtle Avenue	California Blvd	Marin Street	0.1	Bicycle Boulevard (Class III)	$203,300	25	37,565	$626,000	0	0	0	0	0	0	
784	Marin Street	Lincoln Street	Myrtle Avenue	0.4	Bicycle Boulevard (Class III)	$864,700	43	63,536	$1,058,900	1	0	0	0	0	1	
785	3rd Street	California Boulevard	Jefferson Street	0.4	Bike Lanes (Class II)	$53,600	39	58,397	$1,396,900	1	0	1	1	0	3	Y
814	Hagen Road	Silverado Trail	City Border	0.4	Bike Lanes (Class II)	$63,000	5	7,786	$146,600	1	0	1	1	0	3	
831	Imola Avenue	Hunt Street	South Freeway Drive	0.2	Buffered Bike Lanes (Class II)	$49,100	24	35,407	$778,200	1	0	1	0	0	2	Y
834	Hahnemann Ln	Salvador Ave	Wine Country Ave	0.3	Bicycle Boulevard (Class III)	$536,400	20	29,785	$495,400	0	1	0	1	0	2	
835	Lone Oak Ave	W Lincoln Ave	Linda Vista Ave	0.0	Bicycle Boulevard (Class III)	$66,800	21	31,537	$525,500	0	0	0	1	0	1	
841	Redwood Rd	Browns Valley Rd	Western City Limits	0.2	Rural Bicycle Route (Class III)	$14,900	9	13,920	$231,600	0	0	1	1	0	2	
842	Old Sonoma Rd	Old Sonoma Rd (near Playground Fantastico)	Jefferson St	0.3	Bike Lanes (Class II)	$39,500	35	52,286	$1,098,700	1	1	1	1	0	4	Y
843	Old Sonoma Rd	Western City Limits	Foster Rd	0.5	Bike Lanes (Class II)	$70,900	25	37,797	$823,600	0	1	1	1	1	4	Y
844	Tulocay Creek Trail	Soscol Ave	Vine Trail	0.2	Shared Use Path (Class I)	$605,700	21	30,570	$755,000	0	1	0	1	0	2	
846	Terrace Dr	Imola Ave	Coombsville Rd	1.2	Study Corridor	N/A	N/A	N/A	N/A	1	1	1	1	0	4	
848	Laurel St	California Blvd	Franklin St	0.7	Bicycle Boulevard (Class III)	$1,408,000	43	64,073	$1,068,000	1	1	1	1	0	4	
850	Vine Trail - S Kennedy Park to Napa Pipe	Napa city limit (Adjacent to Kaiser Road) to Existing Bay Trail	Kaiser Road	0.3	Shared Use Path (Class I)	$1,267,100	0	556	$13,300	0	1	0	1	0	2	
861	Thompson Rd	Napa City Limits	Browns Valley Rd	0.5	Bike Lanes (Class II)	$71,400	13	20,067	$715,600	1	0	1	1	1	4	
867	SR 221	Imola Ave	Kaiser Rd	1.3	Shared Use Path (Class I)	$4,823,600	17	25,447	$635,100	0	1	1	1	0	3	Y
874	Bay Trail (Stanly Crossroad)	Cuttings Wharf Rd	Stanly Ln	0.9	Shared Use Path (Class I)	$3,542,200	1	1,545	$37,000	0	0	0	1	0	1	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
878	Railroad Bridge	3rd St	1st St	0.2	Shared Use Path (Class I)	$739,300	30	44,059	$1,105,700	1	0	0	1	1	3	
883	Solano Ave	Coffield Ave	W Lincoln Ave	0.1	Shared Use Path (Class I)	$338,500	31	46,178	$1,155,400	0	0	1	1	0	2	
886	SR 221	Kaiser Rd	Magnolia Dr	1.4	Bike Lanes (Class II)	$208,400	13	18,790	$569,900	1	1	1	1	0	4	Y
887	River Trail Bridge	River Trail West	Oxbow Preserve	0.1	Shared Use Path (Class I)	$256,700	2	2,250	$55,400	0	0	0	1	0	1	
888	River Trail West	Lincoln Ave	existing River Trail terminus (near River Terrace)	0.4	Shared Use Path (Class I)	$1,521,500	3	4,530	$106,800	1	0	0	1	1	3	
892	Coombs St	First St	Division St	0.3	Bike Lanes (Class II)	$39,500	33	49,537	$979,200	1	1	0	1	0	3	
896	Vine Trail (undercrossing)	Existing Vine Trail (near Redwood Park & Ride)	Existing Vine Trail (near Vine Trail SR 29 overcrossing)	0.3	Shared Use Path (Class I)	$1,166,300	43	64,105	$1,575,600	1	1	1	1	0	4	
919	Bordeaux Way	Napa Valley Corporate Wy	Napa Valley Corporate Dr	0.4	Bicycle Boulevard (Class III)	$840,300	0	563	$9,400	0	0	0	1	0	1	
922	Cabot Wy	S Jefferson St	W Imola Ave	0.3	Bicycle Boulevard (Class III)	$606,400	22	32,004	$533,200	1	0	1	1	0	3	
923	S Hartson St	Lernhart St	Old Sonoma Rd	0.3	Bicycle Boulevard (Class III)	$684,200	32	46,929	$782,600	1	0	1	1	0	3	
924	Lernhart St	W Imola Ave	S Hartson St	0.1	Bicycle Boulevard (Class III)	$145,200	20	29,980	$499,900	0	0	1	1	0	2	
925	Ash St	Jefferson St	Franklin St	0.3	Bicycle Boulevard (Class III)	$519,100	32	48,043	$801,000	0	0	1	1	0	2	
927	Clark St	Silverado Trail	East Ave	0.1	Bicycle Boulevard (Class III)	$232,700	16	23,584	$392,500	1	0	1	1	0	3	
929	Sousa Ln	Soscol Ave	Silverado Trail	0.1	Bike Lanes (Class II)	$20,500	20	30,226	$505,200	1	1	0	1	0	3	
930	Fairview Dr	Silverado Trail	Fairview Park	0.2	Bicycle Boulevard (Class III)	$398,500	18	26,251	$436,700	1	1	0	1	0	3	
931	Burnell St - 8th St	3rd St	Soscol Ave	0.3	Bicycle Boulevard (Class III)	$602,000	30	43,988	$732,000	1	1	1	1	0	4	
932	Juarez St	1st St	3rd St	0.2	Bicycle Boulevard (Class III)	$466,300	25	36,620	$609,200	1	0	1	1	0	3	
933	1st St	East Ave	Silverado Trail	0.2	Bicycle Boulevard (Class III)	$427,400	19	27,975	$465,400	1	0	1	1	0	3	
934	Silverado Trail	Hagen Rd	Silverado Trail (Northern City Limits)	0.1	Bike Lanes (Class II)	$12,800	6	8,554	$328,800	1	0	1	1	0	3	
937	River Trail East	Oxbow Preserve	1st St	0.2	Shared Use Path (Class I)	$812,000	21	31,144	$792,700	0	0	0	1	0	1	
938	McKinstry St	Water St	Soscol Ave	0.3	Bicycle Boulevard (Class III)	$637,300	36	53,397	$889,000	0	0	1	1	0	2	
939	River Trail West	existing trail terminus (near 1st Street)	Railroad Bridge	0.3	Shared Use Path (Class I)	$1,079,900	29	42,547	$1,070,600	0	0	0	1	0	1	
940	River Trail Bridge	River Trail West	3rd St	0.1	Shared Use Path (Class I)	$270,200	25	37,239	$936,400	0	0	0	1	0	1	
941	1st St	Soscol Ave	Vernon St	0.2	Bike Lanes (Class II)	$23,200	29	43,559	$965,600	1	0	1	1	0	3	
942	3rd St	Soscol Ave	Lawrence St	0.0	Bike Lanes (Class II)	$6,400	26	39,176	$841,400	1	0	1	1	0	3	
943	River Promenade (1st Street underpass)	Riverfront Promenade	Opera House Plaza	0.0	Shared Use Path (Class I)	$128,700	27	40,739	$1,013,800	0	0	1	1	0	2	
944	Napa Creek Connector Trail	Oxbow Commons Path	9/11 Memorial Garden	0.0	Shared Use Path (Class I)	$140,200	28	42,139	$1,050,600	1	1	1	1	0	4	
945	Brown St Corridor	Coombs St/Pearl St	3rd St	0.3	Shared Use Path (Class I)	$1,156,400	36	53,587	$1,322,400	0	1	1	1	1	4	Y
946	River Trail West	Division St	Imola Ave	1.1	Shared Use Path (Class I)	$4,007,900	30	45,081	$1,125,000	0	1	1	1	0	3	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
947	Division St - Franklin St	Brown St	Oak St	0.2	Bicycle Boulevard (Class III)	$429,200	28	41,677	$694,100	0	1	1	1	0	3	
948	Walnut St	Laurel St	Old Sonoma Rd	0.4	Bicycle Boulevard (Class III)	$837,900	40	59,011	$984,600	1	0	1	1	0	3	
949	California Blvd	3rd St	Laurel St	0.2	Bicycle Boulevard (Class III)	$441,400	35	52,623	$877,700	0	0	1	1	0	2	
950	California Blvd	3rd St	1st St	0.1	Bike Lanes (Class II)	$17,400	34	50,242	$1,093,100	0	0	1	1	0	2	
951	Laurel St	Foothill Blvd	1st St	0.1	Bike Lanes (Class II)	$16,900	19	28,823	$742,000	0	1	0	1	0	2	Y
952	W Pueblo Ave	Solano Ave	Redwood Rd	1.4	Bicycle Boulevard (Class III)	$2,756,200	50	73,911	$1,230,800	0	1	1	1	0	3	Y
953	Westview Dr	Redwood Rd	Browns Valley Rd	0.7	Bicycle Boulevard (Class III)	$1,296,700	23	34,189	$569,000	0	0	1	1	0	2	
954	Austin Way	Scenic Dr	Browns Valley Rd	0.2	Bicycle Boulevard (Class III)	$358,700	16	23,449	$390,500	0	0	1	1	0	2	
955	Scenic Dr	Larkin Wy	Browns Valley Rd	1.0	Bicycle Boulevard (Class III)	$1,910,800	24	35,680	$594,000	0	0	0	1	0	1	
956	Larkin Wy	Browns Valley Rd	Scenic Dr	0.1	Bicycle Boulevard (Class III)	$206,200	13	20,041	$333,800	1	0	1	1	0	3	
957	Partrick Rd	Browns Valley Rd	City Limits	0.8	Bicycle Boulevard (Class III)	$1,549,700	12	17,881	$297,500	0	0	0	1	1	2	
958	Clinton St	Brown St	Soscol Ave	0.2	Bicycle Boulevard (Class III)	$399,700	33	49,023	$816,400	1	0	1	1	0	3	
959	Clay St - Pearl St	Coombs St	California Blvd	0.8	Bicycle Boulevard (Class III)	$1,536,300	50	74,244	$1,237,400	1	1	1	1	0	4	
960	Lincoln Ave	California Blvd	Solano Ave	0.2	Bike Lanes (Class II)	$31,000	41	60,481	$1,465,000	1	0	1	1	0	3	
961	Georgia St	Lincoln Ave	E St	0.3	Bicycle Boulevard (Class III)	$519,700	40	58,847	$980,700	1	0	1	1	1	4	
962	Brown St	Lincoln Ave	Clinton St	0.6	Bicycle Boulevard (Class III)	$1,251,000	49	73,270	$1,220,600	1	0	1	1	0	3	
964	Park Ave	Jefferson St	California Blvd	0.4	Bicycle Boulevard (Class III)	$728,800	42	63,009	$1,049,900	1	0	0	1	0	2	
966	Central Ave	Soscol Ave	Jefferson St	0.6	Bicycle Boulevard (Class III)	$1,269,300	50	75,093	$1,251,200	1	0	1	1	0	3	
967	Main St	Pueblo Ave	Lincoln Ave	0.5	Bicycle Boulevard (Class III)	$996,000	54	79,624	$1,326,700	1	0	1	1	0	3	
968	Yajome St	Pueblo Ave	Vine Trail	0.4	Bicycle Boulevard (Class III)	$799,300	48	71,322	$1,188,200	1	0	1	1	0	3	
969	Pueblo Ave	California Ave	Soscol Ave	1.1	Bike Lanes (Class II)	$156,500	58	86,613	$1,901,400	1	0	1	1	0	3	
970	Beard Rd	Pearl Tree Ln	Pueblo Ave	0.3	Bicycle Boulevard (Class III)	$612,300	45	67,455	$1,123,600	0	0	1	1	0	2	
971	Pear Tree Ln	Soscol Ave	Beard Rd	0.6	Bicycle Boulevard (Class III)	$1,091,400	43	64,106	$1,067,700	0	0	1	1	0	2	
973	Sierra Ave	Willis Dr	Diablo St	0.5	Bicycle Boulevard (Class III)	$905,000	39	57,384	$955,400	0	0	1	1	0	2	
974	Connector Path	Industrial Way	Sheridan Dr	0.1	Shared Use Path (Class I)	$232,800	34	50,561	$1,283,000	0	0	0	1	0	1	
975	Redwood Rd	Browns Valley Rd	SR 29	0.9	Bike Lanes (Class II)	$132,900	32	47,781	$822,500	0	0	1	1	1	3	
977	Villa Ln	Firefly Ln	Pear Tree Ln	0.5	Bike Lanes (Class II)	$65,800	41	60,712	$1,460,800	1	0	1	1	0	3	
978	Salvador Creek Trail	existing trail (near Ranch Lane)	existing trail (near Serendipity Way)	0.0	Shared Use Path (Class I)	$145,900	1	997	$21,800	0	0	0	1	0	1	
979	Garfield Ln	Austin Miller Memorial Bike Path	Culbertson Ct	0.0	Bicycle Boulevard (Class III)	$44,900	3	4,173	$69,400	0	0	0	1	0	1	
980	Big Ranch Rd	Trancas St	Northern City Limits	0.9	Bike Lanes (Class II)	$125,400	32	48,079	$1,316,500	1	1	1	1	1	5	Y
981	Vine Hill Dr	Dry Creek Rd	Linda Vista Ave	0.5	Bicycle Boulevard (Class III)	$1,001,700	24	35,506	$590,700	0	0	1	1	0	2	
982	Wine Country Ave	Dry Creek Rd	Linda Vista Ave	0.5	Bicycle Boulevard (Class III)	$985,200	21	30,947	$514,800	0	1	1	1	0	3	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
983	Valle Verde Dr	Salvador Creek Trail	Trancas St	0.3	Bicycle Boulevard (Class III)	$522,900	34	50,420	$840,000	1	0	1	1	0	3	
984	Firefly Ln	Wild Rye Way	Valle Verde Dr	0.3	Bicycle Boulevard (Class III)	$511,300	33	49,366	$822,400	0	0	1	1	0	2	
985	Wild Rye Way	Rubicon St	Firefly Ln	0.0	Bicycle Boulevard (Class III)	$46,400	30	44,507	$741,300	0	0	0	1	0	1	
986	Rubicon St	Baxter Ave	Wild Rye Way	0.4	Bicycle Boulevard (Class III)	$881,700	48	70,922	$1,181,200	1	0	1	1	0	3	
987	Baxter Ave	Diablo St	Rubicon St	0.3	Bicycle Boulevard (Class III)	$600,800	47	70,232	$1,169,600	1	0	0	1	0	2	
988	Diablo St	Yellowstone St	Baxter Ave	0.4	Bicycle Boulevard (Class III)	$801,900	42	62,031	$1,032,900	0	0	1	1	0	2	
989	Yellowstone St	Lassen St	Diablo St	0.2	Bicycle Boulevard (Class III)	$329,700	30	45,373	$755,200	0	0	1	1	0	2	
990	Lassen St	Salvador Creek Trail	Yellowstone St	0.3	Bicycle Boulevard (Class III)	$629,800	31	46,492	$773,700	0	0	1	1	0	2	
991	El Centro Ave	Byway East	Jefferson St	0.6	Bicycle Boulevard (Class III)	$1,087,700	28	41,152	$684,700	0	0	1	1	0	2	
992	El Centro Ave	Jefferson St	Eastern City Limits	0.3	Bicycle Boulevard (Class III)	$496,800	21	31,083	$517,200	0	0	1	1	0	2	
993	Carol Dr	Oxford St	W Pueblo Ave	0.6	Bicycle Boulevard (Class III)	$1,183,700	48	71,776	$1,195,100	1	1	1	1	0	4	
994	Oxford St	Trower Ave	Carol Dr	0.6	Bicycle Boulevard (Class III)	$1,217,600	49	72,191	$1,201,600	0	0	1	1	0	2	
995	Fairfax Dr	Cesar St	Trower Ave	0.2	Bicycle Boulevard (Class III)	$411,600	32	47,265	$786,300	0	0	0	1	0	1	
996	Cesar St	Maher St	Fairfax Dr	0.1	Bicycle Boulevard (Class III)	$114,500	24	36,042	$599,500	0	0	0	1	0	1	
997	Maher St	Wine Country Ave	Cesar St	0.3	Bicycle Boulevard (Class III)	$651,100	28	41,094	$683,600	0	0	0	1	0	1	
999	Capitola Dr	Saratoga Dr	Saratoga Dr/Erin Wy	0.1	Bike Lanes (Class II)	$12,100	16	23,662	$649,800	0	1	0	1	0	2	
1000	Saratoga Dr	Capitola Dr/Erin Wy	Terrace Dr	0.1	Bike Lanes (Class II)	$18,400	16	24,422	$611,900	0	1	0	1	0	2	
1001	Shelter Ave	Sommer St	Soscol Ave	0.7	Bicycle Boulevard (Class III)	$1,467,000	20	29,875	$498,100	1	1	0	1	0	3	
1002	Sommer St	Muir St	Shelter Ave	0.1	Bicycle Boulevard (Class III)	$170,600	12	17,410	$290,400	0	0	0	1	0	1	
1003	Muir St	Granada St	Sommer St	0.1	Bicycle Boulevard (Class III)	$246,500	11	16,479	$274,900	0	0	0	1	0	1	
1004	Granada St	Imola Ave	Muir St	0.1	Bicycle Boulevard (Class III)	$224,300	10	14,550	$242,700	1	0	0	1	0	2	
1005	Napa Valley College Path :Roy Patrick Dr	College Wy, Magnolia Dr	Imola Ave	0.2	Shared Use Path (Class I)	$620,600	15	22,800	$572,400	0	1	0	1	0	2	
1006	Kansas Ave	Shurtleff Ave	Soscol Ave	0.6	Bicycle Boulevard (Class III)	$1,177,900	24	34,968	$582,800	1	1	0	1	0	3	
1007	Tamarisk Dr	Terrace Dr	Coombsville Rd	0.3	Bicycle Boulevard (Class III)	$676,200	16	23,776	$395,700	0	0	0	1	0	1	
1008	Pascale Pl Connector	Pascale Pl	Montecito Blvd	0.0	Shared Use Path (Class I)	$137,700	8	11,410	$282,600	0	0	0	1	0	1	
1044	Bay Trail Connector	Stanly Crossroad	Napa River	0.7	Shared Use Path (Class I)	$2,754,700	1	1,687	$40,100	0	0	0	1	0	1	
1046	Foster Rd	W Imola Ave	Hilton Dr	0.8	Bike Lanes (Class II)	$113,400	14	20,936	$507,400	0	0	0	1	0	1	
1048	Fairview Dr Pathway Connector	Aguire Wy	Terrace Dr	0.2	Shared Use Path (Class I)	$582,000	18	26,721	$672,500	0	1	0	1	0	2	
1049	Arroyo Dr	Brown St	Seminary St	0.1	Bicycle Boulevard (Class III)	$218,700	31	45,415	$756,500	0	0	0	1	0	1	
1051	Salvador Creek Trail	Byway East	Jefferson St	0.7	Shared Use Path (Class I)	$2,574,300	33	48,790	$1,202,900	0	0	1	1	0	2	
1052	Jefferson St	Salvador Ave	S Jefferson St at City Limits	5.0	Study Corridor	N/A	N/A	N/A	N/A	1	0	1	1	0	3	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
1131	Imola Ave Class I Path	Vine Trail at Imola Bridge	SR 221	0.2	Shared Use Path (Class I)	$836,300	15	22,486	$564,900	0	1	1	0	1	3	Y
1132	Wyatt Ave	Birkdale Dr	Peppergrass St	0.1	Bicycle Boulevard (Class III)	$216,200	16	23,681	$394,600	0	0	0	0	0	0	
1133	Peppergrass St	Wyatt Ave	Shurtleff Ave	0.1	Bicycle Boulevard (Class III)	$214,100	16	23,753	$395,800	0	0	0	0	0	0	
1134	East Ave	1st Street	Clark St	0.5	Bicycle Boulevard (Class III)	$946,700	20	29,821	$496,100	0	0	1	0	0	1	
1142	Silverado Trail	Soscol Ave	Lincoln Ave	1.6	Shared Use Path (Class I)	$5,982,900	43	63,524	$1,571,300	1	1	0	1	1	4	Y
1194	Vine Trail - Napa Pipe to Soscol Ferry	Riversound Way	Soscol Ferry Rd	0.5	Shared Use Path (Class I)	$1,763,900	1	1,382	$33,600	0	0	1	0	0	1	
1197	Pinewood Dr	W Pueblo Ave	Scenic Dr	0.5	Bicycle Boulevard (Class III)	$969,300	26	39,371	$655,600	0	0	1	0	1	2	
1198	Trower Ave	Dry Creek Rd	East end of Trower at Vintage High	0.9	Buffered Bike Lanes (Class II)	$204,900	45	67,606	$1,408,300	0	0	1	0	1	2	
1203	Coombs Street	Imola Avenue	Division Street	1.0	Bicycle Boulevard (Class III)	$1,874,800	40	58,946	$981,800	0	1	1	0	0	2	
1204	Oak Street	Franklin St	Seminary St	0.2	Bicycle Boulevard (Class III)	$449,300	32	47,696	$794,600	0	1	0	0	0	1	
1205	Seminary Street	Oak St	Hayes St	0.7	Bicycle Boulevard (Class III)	$1,288,700	48	71,677	$1,194,300	1	1	1	0	0	3	
1206	Hayes Street	Yount St	Jefferson St	0.2	Bicycle Boulevard (Class III)	$467,800	35	52,729	$878,700	1	0	1	0	0	2	
1207	E Street	Jefferson St	California Blvd	0.4	Bicycle Boulevard (Class III)	$753,200	42	62,111	$1,035,100	1	0	1	0	1	3	
1208	D Street Alley	York St	California Blvd	0.3	Bicycle Boulevard (Class III)	$526,200	37	54,523	$908,900	0	0	1	0	0	1	
1209	Franklin Street	Coombs St	Division St	0.8	Bicycle Boulevard (Class III)	$1,648,000	41	61,069	$1,017,400	0	1	1	0	0	2	
1210	Trancas St	City Limits	Solano Ave	1.5	Study Corridor	N/A	N/A	N/A	N/A	1	1	1	0	1	4	Y
1212	South Sosocl	Imola Ave	3rd Street	1.3	Study Corridor	N/A	N/A	N/A	N/A	1	1	1	0	0	3	
1213	Lincoln Ave	Silverado Trail	West Lincoln	1.4	Buffered Bike Lanes (Class II)	$314,400	66	97,577	$2,062,100	1	0	1	0	1	3	
1218	Beard Rd	Trancas St	Pear Tree Ln	0.2	Bicycle Boulevard (Class III)	$374,900	41	61,536	$1,024,900	0	0	0	0	1	1	
1233	Byway E	Salvador Ave	El Centro Ave	0.4	Bicycle Boulevard (Class III)	$835,900	23	34,760	$578,200	1	1	1	0	1	4	
1235	Napa River Trail	Napa River Trail	Oxbow Preserve	0.1	Shared Use Path (Class I)	$269,200	13	18,976	$497,600	0	0	0	0	0	0	

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

Table E.5: Bicycle Network Recommendations – American Canyon

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction (Miles)	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
219	Kimberly Dr	SR 29 (Broadway)	Elliot Dr	0.3	Buffered Bike Lanes (Class II)	$76,000	23	34,604	$671,700	0	0	0	0	0	0	
786	Devlin Road	South Kelly Road	Boone Road Roundabout	0.5	Shared Use Path (Class I)	$1,797,000	0	269	$6,700	0	0	1	1	0	2	
788	Class I Off-Street Multi Use path	Hess Road	Commerce Boulevard	0.6	Shared Use Path (Class I)	$2,320,500	4	5,237	$138,800	0	0	0	1	0	1	
789	Napa Junction	Broadway	Theresa Avenue	0.1	Shared Use Path (Class I)	$420,300	8	11,582	$291,200	0	0	1	1	0	2	
790	Theresa Avenue	Napa Junction	Eucalyptus Drive	0.3	Bicycle Boulevard (Class III)	$587,900	14	20,209	$337,500	0	0	1	1	0	2	
793	Rio Del Mar	Broadway	Wetlands Edge Road	0.5	Bike Lanes (Class II)	$66,200	21	30,652	$544,100	0	0	1	1	0	2	
795	Donaldson Way West	Just past Andrew Road	Broadway	0.3	Bicycle Boulevard (Class III)	$648,200	32	48,029	$801,300	0	0	1	1	0	2	
796	Kimberley Drive	Elliot Drive	Meadow Bay Drive	0.2	Bicycle Boulevard (Class III)	$459,300	19	27,846	$463,800	0	0	0	1	0	1	Y
797	Elliott Drive	Past Knightsbridge Way	City Line	0.4	Bike Lanes (Class II)	$61,500	23	34,848	$987,700	0	0	0	1	0	1	
798	Danrose Drive	American Canyon	City Line	0.7	Bicycle Boulevard (Class III)	$1,392,100	34	51,197	$853,400	0	0	1	1	1	3	
800	Napa Junction	Eastern end	Broadway	0.2	Bicycle Boulevard (Class III)	$300,200	16	24,356	$406,700	0	0	1	0	0	1	
833	Flosden Road	American Canyon	City Line	0.6	Study Corridor	N/A	N/A	N/A	N/A	0	1	1	0	0	2	
839	American Canyon Rd	Wetlands Edge Rd	SR 29	0.7	Separated Bikeway (Class IV)	$462,200	36	53,620	$1,280,900	0	0	1	1	0	2	Y
851	James Rd	Wilson Wy	American Canyon Rd	0.5	Bicycle Boulevard (Class III)	$1,000,500	38	56,528	$942,800	1	0	1	1	0	3	
855	Vine Trail (along Devlin Rd)	Middleton Way	Watson Ln	1.1	Shared Use Path (Class I)	$4,039,800	4	6,435	$170,900	1	0	1	1	0	3	Y
862	Vine Trail (along Watson Ln - American Canyon)	Paoli Loop Rd	Newell Rd Extension	0.4	Shared Use Path (Class I)	$1,582,200	3	3,861	$98,700	0	0	0	1	0	1	Y
863	Vine Trail (Newell Rd Extension)	Donaldson Way (Southern Intersection of proposed Vine and Ridge Trails)	Paoli Rd	1.1	Shared Use Path (Class I)	$4,010,400	14	21,575	$544,800	0	0	1	1	0	2	
870	Melvin Rd	James Rd	Rio Del Mar	0.0	Bicycle Boulevard (Class III)	$88,800	23	34,174	$570,200	0	0	1	1	0	2	
873	Broadway	Veterans Park	American Canyon Rd	0.2	Shared Use Path (Class I)	$900,300	31	45,724	$1,093,300	0	1	1	1	0	3	
880	Napa Ruins Loop	Main St	Vine Trail (Newell Dr extension)	0.2	Shared Use Path (Class I)	$793,300	11	16,049	$405,600	0	0	1	1	0	2	
897	Los Altos Dr	Thersea Ave	Rio del Mar	0.1	Bicycle Boulevard (Class III)	$205,400	15	21,628	$361,100	0	0	1	1	0	2	
909	Hanna St	Commerce Blvd	terminus	0.4	Rural Bicycle Route (Class III)	$27,800	0	591	$9,900	0	0	0	1	0	1	
910	Commerce Blvd	Clarke Ranch Park	Green Island Rd	0.7	Bike Lanes (Class II)	$107,200	4	5,744	$178,800	0	0	0	1	0	1	
911	Green Island Rd	Vine Trail	Commerce Blvd	0.3	Shared Use Path (Class I)	$1,267,400	0	650	$18,100	0	0	1	1	1	3	
912	Mezzetta Ct	Green Island Rd	end of street	0.2	Rural Bicycle Route (Class III)	$14,800	0	239	$4,000	0	0	0	1	0	1	
913	Green Island Rd	Northern intersection of Green Island Rd and Mezzetta Ct	Vine Trail (Class I facility intersecting at Green Island Rd 300' W of RR tracks)	0.3	Bike Lanes (Class II)	$36,800	0	481	$79,500	0	0	1	1	0	2	
914	Green Island Rd	Mezetta Ct	City Border	0.5	Rural Bicycle Route (Class III)	$34,400	0	203	$3,400	0	0	0	1	0	1	
1009	Theresa Ave	Eucayptus Dr	Los Altos Dr	0.0	Bicycle Boulevard (Class III)	$65,200	13	19,114	$319,200	0	0	1	1	0	2	
1014	Melvin Rd	James Rd	Cassayre Dr	0.3	Bicycle Boulevard (Class III)	$684,600	24	36,381	$607,100	0	0	1	1	0	2	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction (Miles)	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
1028	Cassayre Dr	Melvin Rd	Rio Del Mar	0.2	Bicycle Boulevard (Class III)	$299,700	16	24,486	$408,800	0	0	1	1	0	2	
1033	Bay Trail (Kimberly Area Segment - south of American Canyon)	Catalina Wy, Vallejo	Class I facility adjacent	0.5	Shared Use Path (Class I)	$1,964,100	12	18,160	$445,700	0	0	0	1	0	1	
1034	Bay Trail (Kimberly Area Segment)	Kimberly Dr	Kensington Wy	0.3	Shared Use Path (Class I)	$1,233,400	19	27,809	$666,500	0	0	0	1	0	1	
1035	Cartegena-Via Bellagio Connector Path	150' E of Entrada Circle	Flosden Rd	0.4	Shared Use Path (Class I)	$1,529,600	1	2,008	$44,000	0	1	1	1	0	3	
1037	American Canyon Rd	Newell Dr	City Limit	0.4	Bike Lanes (Class II)	$60,600	20	29,610	$497,100	0	1	1	1	0	3	
1038	Bay Area Ridge Trail - Eucalyptus Dr	Greenwing Street	Main St	0.8	Shared Use Path (Class I)	$1,475,500	8	12,170	$202,400	0	0	1	1	0	2	
1039	Lombard Rd	Napa Junction Rd	Hess Rd	0.2	Bike Lanes (Class II)	$31,700	15	21,605	$540,200	0	0	1	1	0	2	
1040	Hess Rd	Commerce Blvd	Lombard Rd	0.2	Shared Use Path (Class I)	$841,900	7	10,926	$185,900	0	0	0	1	0	1	
1144	Napa Ruins Loop South	Napa Ruins Loop	Rolling Hills Ln	0.1	Shared Use Path (Class I)	$526,300	43	63,524	$1,571,300	0	0	0	0	0	0	
1146	SR 29 SB	American Canyon Rd	Napa Junction Rd	1.9	Shared Use Path (Class I)	$7,381,100	12	18,482	$467,000	1	0	1	1	0	3	
1147	SR 29 NB	American Canyon Rd	Napa Junction Rd	1.8	Shared Use Path (Class I)	$6,837,100	45	67,618	$1,608,800	1	1	1	1	0	4	Y
1160	S Kelly Rd	American Canyon Path	Devlin Rd	0.4	Shared Use Path (Class I)	$1,565,000	12	17,338	$299,900	1	0	1	1	0	3	
1200	Crawford Way	James Rd	Broadway St	0.2	Bicycle Boulevard (Class III)	$296,600	45	67,606	$1,408,300	0	0	1	0	0	1	
1201	Cartegena Way	Broadway	Road End	0.4	Bicycle Boulevard (Class III)	$739,700	29	43,182	$720,200	0	1	1	0	0	2	
1215	Rolling Hills Rd	Donaldson Way	Frontier St	0.2	Bike Lanes (Class II)	$22,400	66	97,577	$2,062,100	0	0	0	0	1	1	
1216	Knightsbridge Wy	Hartford Ct	SR 29	0.1	Shared Use Path (Class I)	$310,600	17	25,291	$865,100	0	0	0	0	0	0	
1222	Hummingbird Way	Benton Way	W American Canyon Rd	0.3	Bicycle Boulevard (Class III)	$521,900	0	395	$9,600	0	0	0	0	0	0	
1241	Donaldson Way	Rio del Mar	Amarillo Dr	0.2	Bike Lanes (Class II)	$28,500	8	11,389	$189,600	0	0	0	0	0	0	
1242	Via Bellagio Connector	Via Bellagio	Via Bellagio Trail	0.1	Rural Bicycle Route (Class III)	$4,000	22	33,236	$1,696,600	0	1	0	0	0	1	

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

Table E.6: Bicycle Network Recommendations – County of Napa

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
191	Coombsville Road	City Limits	2nd Avenue	0.9	Buffered Bike Lanes (Class II)	$198,500	8	11,642	$558,700	0	0	0	0	0	0	
802	Larkmead Ln			1.3	Bike Lanes (Class II)	$187,300	0	173	$42,600	1	0	1	1	0	3	
803	Bale Lane			0.7	Bike Lanes (Class II)	$99,400	0	203	$79,100	1	0	1	1	0	3	
804	Berryessa Knoxville Road	North Smittle Creek Trail Head	SR 128	8.3	Rural Bicycle Route (Class III)	$625,200	0	48	$800	0	0	1	1	0	2	
805	Hardman Avenue	Silverado Trail	Atlas Peak Road	0.9	Rural Bicycle Route (Class III)	$68,800	1	1,221	$20,200	1	0	1	1	0	3	
806	Orchard Avenue	Napa City boundary	S-bend	0.5	Bike Lanes (Class II)	$65,400	2	2,604	$198,300	0	1	1	1	0	3	
807	Atlas Peak Road	Monticello Road to	Hillcrest Drive	0.5	Bike Lanes (Class II)	$75,100	2	2,642	$241,200	1	0	1	1	0	3	
808	Monticello Road (SR 121)*	SR 128	Atlas Peak Road	11.1	Rural Bicycle Route (Class III)	$834,600	2	3,107	$51,600	1	0	1	1	0	3	
809	Hagen Road	1st Avenue	3rd Avenue	1.0	Bike Lanes (Class II)	$151,100	1	1,889	$186,700	0	0	1	1	0	2	
810	3rd Avenue	Hagen Road	North/3rd Avenue	1.8	Rural Bicycle Route (Class III)	$135,900	1	1,323	$22,000	0	0	1	1	0	2	
811	3rd Avenue	North/3rd	Coombsville Road	0.7	Rural Bicycle Route (Class III)	$53,300	1	1,525	$25,400	0	0	1	1	0	2	
812	2nd	North	Coombsville Road	0.6	Bike Lanes (Class II)	$90,200	1	1,890	$31,700	0	0	1	1	0	2	
813	North	1st	3rd	0.9	Bike Lanes (Class II)	$130,300	1	1,676	$35,600	0	0	1	1	0	2	
815	Salvador Avenue	City boundary	Big Ranch Road	0.5	Bike Lanes (Class II)	$77,000	7	11,092	$199,600	1	1	1	1	1	5	
816	El Centro Avenue	City boundary	Big Ranch Road	0.5	Bike Lanes (Class II)	$74,400	14	21,153	$370,400	1	0	1	1	0	3	
817	Buhman Avenue	City boundary	Congress Valley Road	0.6	Rural Bicycle Route (Class III)	$46,600	4	5,548	$92,400	0	0	0	0	0	0	
818	Buhman Avenue	Congress Valley Road	Henry Road	1.3	Rural Bicycle Route (Class III)	$96,800	1	1,809	$30,100	0	0	0	0	0	0	
819	Thomson Avenue	Congress Valley Road	City boundary	0.9	Bike Lanes (Class II)	$132,900	6	9,114	$161,900	0	0	1	1	0	2	
820	Old Sonoma Road	City boundary	SR 12	2.8	Bike Lanes (Class II)	$411,700	12	17,338	$302,500	1	0	1	1	0	3	
821	SR 12*	City boundary	Ramal	4.5	Bike Lanes (Class II)	$646,000	2	2,369	$49,800	1	0	1	1	1	4	Y
822	Duhig Road	Las Amigas	SR 12	2.2	Bike Lanes (Class II)	$314,900	0	162	$64,100	1	0	0	1	0	2	
823	Milton Road	end	Las Amigas	2.9	Rural Bicycle Route (Class III)	$219,000	0	159	$2,600	0	0	1	1	0	2	
826	SR 29*	SR 221	American Canyon boundary	2.5	Separated Bikeway (Class IV)	$1,648,600	1	883	$22,300	1	0	1	1	0	3	
828	Trower Avenue	City boundary	Big Ranch Road	0.5	Bike Lanes (Class II)	$71,900	15	22,475	$413,100	0	0	1	1	0	2	
838	Vine Trail Vista Carneros (Napa San Fields)	Airport Blvd	Soscol Ferry Rd	2.0	Shared Use Path (Class I)	$7,721,700	0	681	$16,800	0	0	0	1	1	2	Y
840	Bay Trail (Along Napa River - N American Canyon Area)	Existing Bay Trail (Just S of Green Island Rd)	Soscol Ferry Rd	5.3	Shared Use Path (Class I)	$19,978,000	1	1,428	$34,900	0	0	0	1	1	2	
852	Coombsville Rd-Wild Horse Valley Rd	Shady Brook Lane	SR 128	6.1	Rural Bicycle Route (Class III)	$458,500	0	446	$7,400	0	0	1	1	0	2	
858	Coombsville Rd-Wild Horse Valley Rd	2nd Ave	4th Ave	0.2	Bike Lanes (Class II)	$33,300	1	1,657	$218,300	0	0	1	1	0	2	
859	Las Amigas	Buchli Station Rd	Milton Rd	0.7	Bike Lanes (Class II)	$95,000	0	138	$272,600	0	0	0	1	0	1	
866	SR 221*	Kaiser Rd	Vista Point Rd	1.1	Shared Use Path (Class I)	$4,104,500	0	695	$17,400	1	0	1	1	1	4	Y

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
868	Skellenger Rd	Conn Creek Rd	Silverado Trail	0.9	Bike Lanes (Class II)	$131,900	0	141	$63,100	0	0	0	1	0	1	
871	Dry Creek Rd	Oakville Grade Rd	Orchard Ave	6.8	Rural Bicycle Route (Class III)	$511,000	2	2,403	$40,000	0	1	1	1	1	4	Y
872	Coombsville Rd-Wild Horse Valley Rd	4th Ave	Shady Brook Ln	1.1	Rural Bicycle Route (Class III)	$85,500	1	1,158	$19,300	0	0	1	1	0	2	
884	Linda Vista Ave	Napa City Limits	Dry Creek Rd	0.8	Bicycle Boulevard (Class III)	$1,569,700	16	24,159	$401,900	0	1	1	1	0	3	
885	SR 29/221*	American Canyon city limit	Kaiser Rd	1.1	Bike Lanes (Class II)	$166,500	1	763	$20,800	1	0	1	1	1	4	Y
889	Yount Mill Rd - Yount Street	Yountville town limit	SR 29	2.1	Rural Bicycle Route (Class III)	$157,600	4	6,614	$109,600	1	1	1	1	1	5	Y
894	SR 128 /Conn Creek Rd*	Rutherford Rd	Silverado Trail	1.3	Rural Bicycle Route (Class III)	$98,900	0	140	$2,300	1	0	1	1	0	3	
906	Sanitarium Rd	Deer Park Rd	Deer Park Rd	1.8	Rural Bicycle Route (Class III)	$133,100	1	1,212	$20,100	1	0	1	1	0	3	
907	Glass Mountain Rd	Silverado Trail	Sanitarium Rd	0.9	Rural Bicycle Route (Class III)	$65,700	1	853	$14,200	0	0	1	1	0	2	
908	McGary Rd (Extension of the Solano Bikeway)	Solano Bike (Class I multi-use path)	Hiddenbrook Pkwy	0.7	Unclassified Bicycle Route	$55,500	0	15	$300	0	0	0	1	0	1	
916	American Canyon Path (along Newell Rd - S Kelly Rd)	Watson Ln	SR 12 (Jameson Canyon Rd)	2.3	Shared Use Path (Class I)	$8,628,500	3	4,031	$102,500	0	0	0	1	0	1	
917	Kelly Rd	SR 12	Jameson Road	1.0	Bike Lanes (Class II)	$142,600	0	337	$5,700	1	0	1	1	0	3	Y
918	Airport Blvd	Devlin Rd	SR 29	0.3	Bike Lanes (Class II)	$37,500	0	401	$12,100	0	0	1	1	0	2	
935	Silverado Trail*	Napa City Limit	Monticello Rd	0.3	Bike Lanes (Class II)	$50,700	9	13,703	$507,200	1	0	1	1	0	3	
998	4th Ave	Imola Ave	Coombsville Rd	1.3	Rural Bicycle Route (Class III)	$101,000	5	7,437	$124,100	0	0	1	1	0	2	
1010	1st Ave	Coombsville Rd	Hagen Rd	2.0	Bike Lanes (Class II)	$287,500	4	5,244	$179,600	0	0	1	1	0	2	
1011	Vichy Ave	Hagen Rd	Monticello Rd	1.2	Bike Lanes (Class II)	$173,300	2	3,289	$144,100	1	0	1	1	0	3	
1013	Wooden Valley Cross Rd	Wooden Valley Rd	Gordon Vallley Rd	1.3	Rural Bicycle Route (Class III)	$96,700	0	28	$500	0	0	0	1	0	1	
1015	Wooden Valley Rd	County Border	Monticello Rd	6.6	Rural Bicycle Route (Class III)	$495,400	0	128	$2,100	0	0	1	1	0	2	
1016	Soda Canyon Rd	Silverado Trail	county line	5.1	Rural Bicycle Route (Class III)	$379,300	0	126	$2,100	0	0	1	1	0	2	
1017	SR 29*	Tubbs Ln	Lake/Napa County Line	8.9	Rural Bicycle Route (Class III)	$667,500	0	582	$9,700	1	0	1	1	0	3	
1018	Finnel Rd	Town Limit	Yountville Cross Rd	0.8	Rural Bicycle Route (Class III)	$58,400	6	9,407	$155,900	0	1	1	1	0	3	
1023	Dealy Ln	Old Sonoma Rd	Henry Rd	1.2	Rural Bicycle Route (Class III)	$86,800	0	167	$2,800	0	0	1	1	0	2	
1024	Henry Rd	End of Henry Rd	Buhman Ave	3.4	Rural Bicycle Route (Class III)	$254,100	0	283	$4,700	0	0	1	1	0	2	
1025	Middle Ave	Los Carneros Ave	Cuttings Wharf Rd	0.2	Bicycle Boulevard (Class III)	$486,200	0	131	$2,200	0	0	1	1	0	2	
1026	Redwood Rd - Mt Veeder Rd	Napa City Limits	Dry Creek Rd	10.8	Rural Bicycle Route (Class III)	$811,500	7	10,899	$181,300	0	0	0	1	0	1	
1027	Dry Creek Rd	Trinity Rd	Mt Veeder Rd	2.3	Rural Bicycle Route (Class III)	$176,100	0	140	$2,300	0	0	1	1	0	2	
1029	Oakville Grade Rd	Dry Creek Rd	SR 29	3.7	Rural Bicycle Route (Class III)	$276,300	0	551	$9,200	0	1	1	1	0	3	
1030	Zinfandel Ln	SR 29/128	Silverado Trail	1.4	Bike Lanes (Class II)	$206,000	0	415	$47,000	1	0	1	1	0	3	
1031	Oakville Cross Rd	SR 29	Silverado Trail	2.5	Bike Lanes (Class II)	$363,900	0	286	$54,500	0	0	1	1	0	2	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
1032	SR 128 – Rutherford*	SR 29	Conn Creek Rd	1.5	Bike Lanes (Class II)	$220,200	0	183	$4,000	1	0	1	1	0	3	
1036	American Canyon Rd	American Canyon City Limit	I-80	1.9	Bike Lanes (Class II)	$280,900	10	14,400	$389,500	0	0	0	1	0	1	
1045	Stanly Ln	W Imola Ave	SR 12	1.7	Bike Lanes (Class II)	$241,300	1	1,687	$40,100	1	0	0	1	0	2	
1047	Skyline Path (along Imola Ave to Skyline Park)	Soscol Ave & 221	4th Avenue	2.0	Shared Use Path (Class I)	$7,757,100	14	20,936	$507,400	1	1	1	1	1	5	Y
1054	Big Ranch Rd	Napa City Limits	Oak Knoll Ave	2.1	Bike Lanes (Class II)	$303,000	136	201,854	$3,362,800	1	1	1	1	0	4	Y
1055	Oak Knoll Ave	SR 29	Silverado Trail	2.1	Bike Lanes (Class II)	$303,200	10	15,290	$301,400	1	1	1	1	1	5	
1056	Orchard Ave	Dry Creek Rd	City/County Line	0.5	Bike Lanes (Class II)	$79,400	2	2,723	$54,600	0	1	1	1	1	4	
1057	Conn Creek Path	Oakville Cross Rd	Skellenger Ln	0.9	Shared Use Path (Class I)	$3,507,900	3	4,067	$87,700	0	0	0	1	0	1	
1058	SR 29*	Madison St	Rutherford Rd	2.0	Bike Lanes (Class II)	$284,100	0	165	$4,000	1	1	1	1	0	4	
1081	Los Posadas Rd	Howell Mountain Rd	State Park	1.9	Rural Bicycle Route (Class III)	$143,100	6	8,189	$199,700	0	0	1	1	0	2	
1082	Conn Valley Rd	Howell Mountain Rd	Moore Creek Park	3.0	Rural Bicycle Route (Class III)	$224,000	1	1,629	$27,000	0	0	0	1	0	1	Y
1083	Howell Mountain Rd	Deer Park Rd	Ink Grade Rd	3.5	Rural Bicycle Route (Class III)	$265,500	0	662	$11,100	1	0	1	1	0	3	
1084	Monticello Rd*	Silverado Trail	Atlas Peak Rd	1.1	Bike Lanes (Class II)	$2,161,000	3	4,076	$67,700	1	0	1	1	1	4	Y
1085	Howell Mountain Rd	Silverado Trail	Conn Valley Rd	0.5	Bike Lanes (Class II)	$70,300	12	18,557	$371,700	0	1	1	1	0	3	
1086	White Cottage Rd	Deer Park Rd	Ink Grade Rd	3.7	Rural Bicycle Route (Class III)	$281,200	1	1,303	$66,100	0	0	1	1	0	2	
1087	Deer Park Rd	Silverado Trail	White Cottage Rd	4.0	Rural Bicycle Route (Class III)	$303,700	3	3,921	$65,100	1	0	1	1	1	4	Y
1088	White Sulphur Springs Rd	St. Helena city limit	End of Road	3.1	Rural Bicycle Route (Class III)	$232,400	1	1,962	$32,600	0	1	0	1	0	2	
1089	SR 128/Capell Valley Rd*	Steele Canyon Rd	Napa/Solano County Line	10.3	Rural Bicycle Route (Class III)	$775,100	2	2,971	$49,500	1	0	1	1	0	3	
1090	SR 128/Capell Valley Rd*	Steele Canyon Rd	Berryessa Knoxville Rd	4.8	Rural Bicycle Route (Class III)	$357,500	0	111	$1,800	0	0	1	1	0	2	
1091	Berryessa Knoxville Rd	SR 128/Sage Canyon Road	Pope Canyon Rd	4.6	Rural Bicycle Route (Class III)	$346,700	0	100	$1,700	0	0	1	1	0	2	
1092	SR 128/Sage Canyon Rd*	Berryessa Knoxville Rd	Silverado Trail	11.2	Rural Bicycle Route (Class III)	$838,600	0	16	$300	1	0	1	1	0	3	Y
1093	Lower Chiles Valley Rd	SR 128/Sage Canyon Rd	Chiles Pope Valley Rd	3.4	Rural Bicycle Route (Class III)	$252,100	0	174	$2,900	0	0	1	1	0	2	Y
1094	Franz Valley School Rd	County Border	Petrified Forest Rd	1.9	Rural Bicycle Route (Class III)	$141,200	0	45	$700	1	0	0	1	0	2	
1095	Chiles Pope Valley Rd	SR 128/Sage Canyon Rd	Lower Chiles Valley Rd	3.7	Rural Bicycle Route (Class III)	$274,800	1	2,142	$35,600	0	0	1	1	0	2	Y
1096	SR 29/128/Foothill Blvd*	Deer Park Rd	Calistoga - southern city limit	6.1	Buffered Bike Lanes (Class II)	$1,352,900	0	62	$1,000	1	1	1	1	0	4	
1098	Pickett Rd	Silverado Trail	Rosedale Rd	0.3	Bike Lanes (Class II)	$37,900	3	5,053	$84,400	0	0	1	1	0	2	
1099	Chiles Pope Valley Rd	Lower Chiles Valley Rd	Howell Mountain Rd	8.6	Rural Bicycle Route (Class III)	$647,000	1	1,420	$24,300	0	0	1	1	0	2	
1103	Howell Mountain Rd	Ink Grade Rd	Pope Valley Rd	2.5	Rural Bicycle Route (Class III)	$185,800	7	11,113	$185,000	0	0	1	1	0	2	
1104	Pope Valley Rd	Howell Mountain Rd	Aetna Springs Rd	1.7	Rural Bicycle Route (Class III)	$125,200	1	946	$15,700	0	0	1	1	0	2	
1110	Ink Grade Rd	N White Cottage Rd	Pope Valley Rd	4.2	Rural Bicycle Route (Class III)	$314,500	8	11,472	$270,600	0	0	0	1	0	1	
1115	Butts Canyon Rd	Aetna Springs Rd	Lake/Napa County Line	7.0	Rural Bicycle Route (Class III)	$523,500	8	12,044	$280,500	0	0	1	1	0	2	
1116	Silverado Trail	Larkmead	Dunaweal	2.5	Bike Lanes (Class II)	$363,300	0	99	$1,600	0	0	1	1	0	2	
1117	Dunaweal Ln	Washington Street Path/Vine Trail	Silverado Tr	0.8	Bike Lanes (Class II)	$117,500	0	615	$67,800	1	1	1	1	0	4	

ID	Segment Name	Begin	End	Length (Mi)	Facility Type	Estimated Cost of Project	Estimated Annual New Commuters	VMT Reduction Value	Total Economic Benefit	Project Prioritization Evaluation						Near-Term Project List
										Safety	Equity	Connectivity	Plan Consistency	Community Support	Total	
1120	Petrified Forest Rd	City Border	Foothill Blvd	0.3	Rural Bicycle Route (Class III)	$21,600	5	8,056	$197,100	1	1	1	1	0	4	Y
1126	Cedar St	Willow St	Berry St	0.4	Bicycle Boulevard (Class III)	$793,600	7	10,841	$255,800	0	1	0	0	0	1	
1127	Adams Street Extension			0.5	Shared Use Path (Class I)	$1,743,000	9	13,498	$224,600	1	0	1	0	1	3	
1135	Tulocay Creek RR Bridge	Over Wine Train RR ROW		0.0	Shared Use Path (Class I)	$108,500	20	29,821	$496,100	0	1	0	0	0	1	
1136	Westgate Dr	Atlas Peak	Hillcrest	0.1	Bicycle Boulevard (Class III)	$103,400	2	2,254	$50,200	0	0	0	0	0	0	
1139	Foster Rd	Hilton Ave	Golden Gate Dr	0.7	Bike Lanes (Class II)	$105,300	1	1,723	$28,600	0	0	1	1	0	2	
1156	Pope Canyon Rd	Berryessa Knoxville Rd	Chiles Pope Valley Rd	9.2	Rural Bicycle Route (Class III)	$690,500	44	66,046	$1,574,900	0	0	1	0	0	1	
1157	Howell Mountain Rd	Conn Valley Rd	Deer Park Rd	3.2	Shared Use Path (Class I)	$12,055,200	0	37	$600	1	1	0	0	0	2	
1158	Old Sonoma Road	City boundary	SR 12	2.8	Bike Lanes (Class II)	$411,700	1	1,066	$26,200	1	0	1	1	1	4	
1162	Congress Valley Rd	Old Sonoma Rd	Buhman Ave	1.0	Rural Bicycle Route (Class III)	$71,900	0	390	$10,400	0	0	0	0	0	0	
1171	Spring Mountain Rd	Sonoma/Napa County Line	St Helena city limit	4.1	Rural Bicycle Route (Class III)	$307,300	7	9,765	$161,800	0	0	0	1	0	1	
1174	Sulphur Creek Path - South Extent	Sulphur Springs Ave	Crane Ave	0.8	Shared Use Path (Class I)	$2,897,000	11	16,412	$390,300	0	1	1	0	0	2	
1180	Vine Trail St Helena to Yountville*	Chaix Ln	Madison St	7.7	Shared Use Path (Class I)	$29,307,900	6	9,364	$228,200	1	1	1	0	0	3	Y
1186	Napa Valley Vine Trail	Airport Blvd	Northern American Canyon City Limits	1.3	Shared Use Path (Class I)	$5,008,800	12	17,854	$424,500	0	0	1	0	1	2	
1188	Soscol Ferry Rd	Devlin / roundabout Class I connection	Vine Trail	0.4	Shared Use Path (Class I)	$1,459,900	0	563	$13,200	0	0	1	0	1	2	
1202	Tubbs Ln	Hwy 29	Silverado Trail	1.3	Bike Lanes (Class II)	$191,400	18	27,129	$452,300	1	0	1	0	0	2	
1220	Sonoma Hwy from Old Sonoma to Duhig Rd*	Old Sonoma Rd	Duhig Rd	0.2	Shared Use Path (Class I)	$883,400	6	8,274	$201,300	1	0	1	0	1	3	Y
1221	SR 29 Shared Use*	Broadway St	Solano County Limits	3.1	Shared Use Path (Class I)	$11,801,900	0	107	$2,600	1	0	1	0	0	2	
1223	Napa Valley Vine Trail - Napa Pipe to Soscol Ferry	Riversound Way	Soscol Ferry Rd	0.5	Shared Use Path (Class I)	$1,989,700	23	34,357	$572,700	1	0	1	0	0	2	
1227	Kortum Canyon Rd	Calistoga City Limits	County Limits	1.7	Rural Bicycle Route (Class III)	$126,700	6	8,607	$212,300	0	0	0	0	1	1	
1228	Petrified Forest Rd	County border	Calistoga City Border	1.8	Rural Bicycle Route (Class III)	$135,300	4	6,296	$104,800	1	1	1	1	0	4	Y
1229	Foothill Boulevard / SR 128*	County Border	Eastern City Limit	3.0	Bike Lanes (Class II)	$440,700	3	4,501	$74,800	1	0	1	1	0	3	
1230	Hagen Road	City of Napa Border	1st	0.5	Bike Lanes (Class II)	$76,900	3	3,755	$63,000	0	0	1	1	0	2	
1232	Green Island Rd	Good Luck Point	City of American Canyon Border	0.4	Rural Bicycle Route (Class III)	$28,300	2	2,944	$51,300	0	0	0	1	0	1	
1236	Eucalyptus Dr	Wetlands Edge Rd	Landfill Loop	0.4	Study Corridor	N/A	N/A	N/A	N/A	0	0	0	0	0	0	
1244	Silverado Trail	Trancas St	Deer Park Rd	18.6	Buffered Bike Lanes (Class II)	$4,089,700	10	14,529	$242,400	1	1	1	0	1	4	

Note: For additional details and methodology for the project cost estimates above, please refer to Table 6.4 on page 127. For more information about estimated project benefits, refer to Appendix F. Project cost estimates and benefits are for rough estimation purposes only.

** These projects are anticipated to be constructed along/within Caltrans ROW; this was only done for County of Napa and may exclude projects within the jurisdictions*

Appendix F

Potential Induced Demand, Benefits, and Emissions Reduction

NAPA VALLEY TRANSPORTATION AUTHORITY

Induced Bicycling Demand and Subsequent Benefits

The following analysis utilizes the National Cooperative Highway Research Program (NCHRP) Report 552 Guidelines for Analysis of Investment in Bicycle Facilities[1] to calculate potential induced bicycling demand among existing and new bicyclists generated by the proposed bicycle facilities. The methodology describes an approach for estimating the induced demand associated with a given bicycle facility improvement and translates the projected increase in demand to monetized benefits related to mobility, health, recreation, and decreased auto use. This section describes the application of the NCHRP 552 methodology for this project, and the anticipated benefits in terms of induced bicycling demand and monetized benefits associated with proposed bicycle facilities.

The induced bicycling demand benefits analyzed herein are calculated for each project separately and should be used for project-to project comparison only. Some benefits categories analyze the estimated benefits separately for "separated" versus "on-street" facilities[2].

Methodology

To estimate the induced demand benefits associated with bicycle improvements proposed in the Plan, the project team utilized the sketch planned method described in Appendix A and B of NCHRP Report 552, as well as Census population and commute pattern data, and average bicycling trip length estimates from 2023 Replica data[3]. The NCHRP 552 methodology is centered on several assumptions.

1. Existing bicyclists near a new facility will shift from the existing nearby facility to the new facility.
2. The new facility will result in induced number of bicyclists as a function of the number of existing bicyclists, relative to the attractiveness of the proposed facility (i.e., Class I shared-use path vs. Class II bicycle lanes).
3. People are more likely to ride a bicycle if they live within 1.5 miles of a facility than if they live outside that distance.

The methodology suggests that existing bicycle commute mode share can be utilized to estimate the number of existing and future bicycle ridership based on low, moderate, and high likelihood multipliers and the population within 1.5-mile, 1-mile, and 0.5-mile buffers that surround a facility. According to the NCHRP 522 research, the total rate of adult bicycling ranges from a low estimate, based on the Census bicycling commute mode share, to a

[1] Methodology utilized here in based on National Cooperative Highway Research Program (NCHRP) Report 552, Guidelines for Analysis of Investments in Bicycle Facilities, Transportation Research Board of the National Academies (2006), as well as the supplemental White Paper titled "Translating Demand and Benefits Research into Guidelines," available here, which was adapted from the demands and benefits outlined in the original NCHRP 552 report. The methodology described in the White Paper was used in the development of an online tool (no longer supported) created by the NCHRP 552 research authors.

[2] The NCHRP 552 methodology does not include Class III bike routes, so those facility types were not included in the induced demand benefits assessment. While the methodology did not originally include Class IV bikeways or Class II buffered bike lanes, as those facility types had not yet been consistently implemented at the time of report publication, Class IV facilities were analyzed using the same calculations as separated paths and Class II buffered facilities were analyzed the same as on-street bike lanes.

[3] Replica is an online platform providing data on the built environment and how people interact with it, most notably trip patterns. Replica models their data, representing movement by aggregating data from three primary sources: census demographic data, proprietary location data from telecommunications and other digital infrastructure within a region, and field observations. Replica's simulated datasets are cleaned of identifying information and calibrated against observed "ground-truth." The data is tested with field observations to ensure it is consistent with actual human behavior.

high estimate, based on 0.6 percent plus three times the Census commute share. Moreover, the highest likelihood of a member of the population to use the facility exists if they live within a 0.5-mile buffer around the facility. Thus, demand is reported at low, medium, and high estimates for the populations at each buffer distance. Each buffer area—at 0.5-, 1- and 1.5-mile distances from a proposed bicycle improvement are created using a network-based analysis in a GIS environment.

Existing Population Estimates

To project future bicycling demand, the existing population, and more specifically existing bicycling population near the proposed improvements, a key input to the NCHRP 552 methodology, must first be estimated. Existing population by block group for Napa County was estimated using 2023 American Community Survey (ACS) 5-Year estimates. Using a GIS-based python script, the network analysis buffers at 0.5-mile, 1-mile and 1.5-mile distances from each proposed bicycle facility are intersected with the block groups to establish the proportion of the entire block group within a given buffer distance area. The total population within each buffer distance near the proposed improvements was estimated by multiplying the proportion of area of each buffer to the area of the whole block by the estimated block population.

Existing Bicycle Demand Estimates

Daily existing bicycling population is estimated for several categories: adult commuter bicyclists, adult-noncommuter bicyclists and child bicyclists. The calculations used to estimate existing and new bicyclists within each category are described in the following sections. The estimates of existing population and bicyclists by category for each of the bicycle facilities considered is provided at the end of this document.

Existing Bicycle Commuters

The estimated number of daily existing bicycle commuters are based on the existing bicycle commute mode share, the percent of adult population, and the percent of adult commuters for each block group, which is estimated based on U.S. Census data[4]. To identify the existing bicyclist commuter population who could shift to the new facility, the equation below is used, where (R) is the total population within each buffer distance, (A) is the percentage of adult population, (C) is the Census bicycle commute mode share, and it is assumed that 50% of adults are commuters.

*Daily existing bicycle commuters = R * A * C *0.5*

Existing Adult Bicyclists

Adult bicycling rates are calculated at high, moderate, and low estimates. The NCHRP 552 research found that total adult bicycling rates range from the Census commute mode share at the low end to 0.6 percent plus three times the Census commute mode share at the high end[5].

$T_{high} = 0.06\% + 3C$

$T_{moderate} = 0.4\% + 1.2C$

$T_{low} = C$

[4] 2019-2023 American Community Survey (ACS) 5-Year estimates for Total Population, Age, Means of Transportation to Work

[5] NCHRP 552, Chapter 4; Appendix A.

To estimate existing adult bicyclists the equation below is used, where (R) is the total population within each buffer distance, (A) is the percentage of adult population, and (T) is the adult bicycling rate at high, moderate, and low estimates.

*Total existing adult bicyclists = R * A * Ti*

Existing Child Bicyclists

To estimate existing child bicyclists, the below equation is used. The population within each buffer area (R) is multiplied by the percent of population who are children (PC), then by 0.02 based on the 2017 National Household Transportation Survey (NHTS) estimate of children who ride a bicycle on a given day.

*Daily existing child bicyclists = R * PC * 0.02*

Future Estimates – Induced Bicyclists Demand

The NCHRP 552 research cites that people who live closest to a bicycle facility are more likely to bike than those who live further from the facility. Likelihood multipliers were developed to represent this probability[6].Using the estimated bicycling rates for each group (bicycle commuters, total adults, and children) along with the likelihood multipliers cited by the NCHRP 552 research (L), the estimates of induced bicyclists anticipated to be associated with a given facility is calculated for each group, as shown in the equations below.

*New bicyclist commuters = existing bicyclist commuters * L*

*New adult bicyclists = existing adult bicyclists * L*

*New child bicyclists = existing child bicyclists * L*

Where:

L800m = 0.51

L1600m = 0.44

L2400m = 0.15

Estimates of induced bicycling demand for each of the bicyclist groups is provided for the full list of evaluated bicycle projects at the end of this document.

Monetized Bicycle Mode Shift Benefits

The NCHRP 552 methodology presents guidance on translating their demand and benefits research to a benefit cost analysis approach for bicycle facility investments. This methodology results in total annual monetized benefits associated with mobility, health, recreation, and decreased auto use expected to result from new bicycle facilities. Each of the benefit types associated with the induced bicycling demand that is anticipated for the bicycle facilities proposed in the Plan are described in the following sections. The following benefits are summed up to provide a total monetary benefit for each bicycle project, provided in Appendix E.

Mobility Benefits

[6] NCHRP 552, Appendix B; Supplemental White Paper Translating Demand and Benefits Research into Guidelines

Mobility benefits represent the time cost associated with shift to given bicycle facility type for the total number of commute trips over a commute year for new and existing bicyclist commuters[7]. This approach is based on stated preference analysis findings that establish the number of minutes, on average, bicycle commuters are willing to spend to access various facility types, as well as an hourly value of time assumption. The resulting calculation represents a per-trip benefit by facility type. The annualized mobility benefits consider the estimated existing and induced demand to reflect the time in dollars that a new or existing bicyclist commuter is willing to spend to access the new facility.

Health Benefits

Health benefits represent the cost savings from physical activity benefits associated with induced demand anticipated to result from the proposed bicycle facilities. An annual per capita cost savings of $128, representing health benefit cost savings[8]. The annual health benefit is calculated by multiplying the annual per capita cost savings by the total number of new bicyclists anticipated with the proposed bicycle facilities. See Table 2 for the estimated health benefits associated with the proposed bicycle projects.

Recreation Benefits

Recreation benefits represent the cost savings related to recreational activity for new bicyclists induced by the new bicycle facilities. The cost of a typical day of recreation, valued at $10 for 1 hour of recreation activity, is based on a variety of outdoor recreational activities. The average adult cycling day, for example, includes roughly 40 minutes of cycling, in addition to some preparation and clean up time. To calculate annualized health benefits, the number of new commuters is subtracted from the number of new bicyclists, then multiplied by the typical recreation day cost. The number of new commuters is subtracted from the number of new bicyclists, because the value of the facility to new commuters is already accounted for in the mobility benefit.

Decrease Auto Use Benefits

Decreased auto use benefits include the benefits associated with user cost savings, reduced congestion, and reduced air pollution. This benefit is calculated based on the benefit per mile associated with vehicle to bicycle mode shift as a function of location and time of day, with congestion savings ranging from 0 to 5 cents per mile and pollution savings ranging from 1 to 5 cents per mile depending on conditions. The middle range of congestion and pollution savings is used for suburban areas, which is the value used for the analysis in this study. The overall savings per mile is estimated at 8 cents per mile for suburban geographies.

To calculate the annual decreased auto use benefit, the number of new commuters is multiplied by the average round trip length, savings per mile, 48 weeks per year, 5 days per week, and 2 trips per day. In addition to the monetized benefits associated with decreased auto use, these benefits can also be described in terms of VMT reduction. The estimated VMT reduction can be utilized as an input to calculate air quality benefits using other methods, as well as provides another metric to use as a lens to view decreased auto use benefits associated with bicycle mode shift.

Emissions Reduction

The NCHRP guidelines do not discuss how to calculate monetized greenhouse gas (GHG) emissions reductions benefits associated with a reduction in VMT. Instead, the Senate Bill (SB) 1 California Life-Cycle Benefit/Cost

[7] NCHRP Report 552, Chapter 4; NCHRP Report 552 Appendix D.

[8] NCHRP Report 552, Chapter 4; Appendix E, reflects the median value of 10 studies on health-related annual per capita cost savings for physical activity associated with induced bicycle use

Analysis Model (Cal-B/C) Grant Program Emissions Reduction Calculator is used. The model estimates emissions from changes in vehicle miles. The calculator requires the project location, length of construction period, average Daily VMT, percent of VMT that is truck and bus travel, and average trip length to calculate the value of tons of emissions saved per year. Benefits associated with emissions reductions are not included in the total monetized benefits for each project.

Pedestrian Network Improvement Emissions Reduction

The NCHRP Guidelines for Analysis of Investment in Bicycle Facilities do not extend to pedestrian improvements. The guidelines state that the relationship between bicycle facility improvements and induced riders/commuters should not be assumed to hold true for walking. The analysis the following analysis utilizes the California Emission Estimator Model (CalEEMod) Handbook for Analyzing Greenhouse Gas Emission Reductions Assessing Climate Vulnerabilities and Advancing Health and Equity. The Pedestrian Network Improvement methodology describes an approach for estimating the percent reduction in emissions from induced pedestrian trips based on the percent increase in sidewalk coverage.

Methodology

To estimate the GHG emissions reduction benefits associated with the pedestrian improvements proposed in the Plan, the projects team used the method described in CalEEMod Handbook: Pedestrian Network Improvements, sidewalk mileage collected during the analysis of existing pedestrian facilities, and the proposed pedestrian network. The CalEEMod methodology is centered on the assumption that:

Elasticity of household VMT with respect to the ratio of sidewalks-to-streets remains constant. A study found that a 0.05 percent decrease in household vehicle travel occurs for every 1 percent increase in the sidewalk-to-street ratio (Frank et el. 2011; Handy et al. 2014).

The estimated percentage of GHG emissions reductions is based on dividing the total sidewalk coverage (existing and proposed) in miles by the existing coverage, subtracting one, and multiplying by an elasticity factor. The percent reduction in GHG emissions from household vehicle travel in the study area (A) is calculated using the formula below, where C is the total sidewalk length in miles in the study area (existing and proposed), B is the total existing sidewalk mileage in the study area, and D is the Elasticity of household VMT with respect to the ratio of sidewalks-to-streets (-0.05).

$$A = (C/B-1) * D$$

The methodology suggests the study area be within 0.6 miles of the proposed pedestrian improvement, which represents a 6- to 10-minute walking time. Due to the number of pedestrian facilities proposed throughout the county, Census Block Groups were used to define each study area.

Results

Of the 101 block groups, 68 are expected to reduce GHG emissions, ranging from 0.01 – 3.11% reductions. Twenty-nine block groups did not have any proposed sidewalk improvements. Four block groups had no recorded existing sidewalks but had proposed improvements; in these cases, the calculation could not be performed. It should be noted that although sidewalks did not exist previously, it cannot be assumed that pedestrians did not use the unpaved areas. Therefore, the proposed sidewalks may have some GHG emission reductions.

The top 20 block groups that are expected to result in the most GHG emission reductions from sidewalk improvements are listed in Table F.1. Block Groups that are not wholly in one jurisdiction are shown with the second jurisdiction listed.

Table F.1: Top 20 Proposed Sidewalk Emissions Reductions by Block Group

Block Group	Jurisdiction	Existing Sidewalk Mileage	Total Sidewalk Mileage (Existing and Proposed)	GHG Emissions Reduction
060552017002	Unincorporated Napa County (Angwin)	0.55	0.89	-3.11%
060552015002	Unincorporated Napa County	0.36	0.56	-2.83%
060552020004	City of Calistoga	4.63	5.84	-1.31%
060552020002	City of Calistoga	3.35	4.19	-1.24%
060552020003	City of Calistoga	6.32	7.63	-1.04%
060552007043	Unincorporated Napa County / City of Napa	1.35	1.63	-1.02%
060552007042	City of Napa / Unincorporated Napa County	2.23	2.61	-0.85%
060552008044	City of Napa	3.35	3.82	-0.71%
060552007051	City of Napa / Unincorporated Napa County	6.74	7.61	-0.65%
060552006012	City of Napa	4.66	5.24	-0.62%
060552016021	City of St. Helena	5.97	6.70	-0.62%
060552017005	Unincorporated Napa County (Deer Park)	0.07	0.08	-0.60%
060552003012	City of Napa / Unincorporated Napa County	4.85	5.42	-0.59%
060552011012	City of Napa / Unincorporated Napa County	1.74	1.93	-0.54%
060552010062	City of Napa	7.97	8.84	-0.54%
060552003013	City of Napa / Unincorporated Napa County	5.04	5.58	-0.54%
060552020001	City of Calistoga	3.01	3.32	-0.52%
060552013001	Town of Yountville	5.23	5.78	-0.52%
060552004002	City of Napa	2.27	2.50	-0.49%
060552008031	Unincorporated Napa County / City of Napa	3.36	3.68	-0.48%

TITLE

Work Plan Fiscal Year 2026/27

RECOMMENDATION

Adopt a Minute Order approving the Open Space, Active Transportation, and Sustainability Commission Work Plan for Fiscal Year 2026/27.

CONTACT

Jason B. Holley, City Manager

BACKGROUND & ANALYSIS

The City Council formed the Open Space, Active Transportation, and Sustainability (OSATS) Commission in 2022 (Attachments 2 & 3).

Per these guidelines, the Commission serves in an advisory capacity to the City Council and staff. Each fiscal year, the Commission develops a Work Plan for the upcoming fiscal year. The Work Plan will list issues and projects to be addressed by the Commission and should be consistent with the Council's adopted goals and priorities pertaining to open space, active transportation, and sustainability. On May 6, 2026, the Commission, along with staff support, developed the draft Work Plan for Fiscal Year 2026/27 (Attachment 1).

For issues and projects that come up during the year that are out of the realm of the approved Work Plan and would require significant staff time or City funds, the Commission should determine if it is feasible to wait until the next year to address the issue or project. If the Commission determines that the issue or project should be addressed in the current year, a recommendation for modification of the Work Plan will need to be submitted to the Council for consideration. This recommendation for modification of the Work Plan will need to indicate which issues or projects will be postponed or eliminated to accommodate and add the new issue or project to the Work Plan.

Accomplishments From FY2025/26

The Commission continued its work on the Parks and Recreation Master Plan update, which is scheduled for City Council adoption on June 16, 2026. The Commission also established courtesy

trail signage to promote safe and shared use of trails throughout our park system. Staff is currently developing the signage and preparing an outreach plan for implementation.

The Commission received a presentation from Public Works staff on the concept of Complete Streets and its application to the Capital Improvement Program (CIP) street projects. Additionally, the Napa Valley Transportation Authority (NVTA) gave a presentation on the combined Bicycle and Pedestrian Plan. This item is scheduled to return to the City Council on June 16, 2026 for adoption and approval of a General Plan Amendment incorporating the American Canyon Active Transportation Plan as an appendix to the Mobility Element. The City was also awarded the Bronze-level Bicycle Friendly Community Designation through 2029.

The following projects are in progress or have been completed: The Outdoor Education Project at Wetlands Edge Park was completed and included construction of an outdoor classroom, restroom facility, interpretive garden, and additional walking trails. A Rectangular Rapid Flashing Beacon (RRFB) crossing and traffic calming improvements on Melvin Road were completed. Additional completed projects include shade improvements at Northampton Park, and the recycled water line connection at the American Canyon Little League Complex. The new restroom facilities at Northampton Park and Silver Oak Park remain under construction. The Recycled Water Refill Station Project is currently in development, with planning and coordination efforts actively underway. Lastly, construction continues for the Green Island Road Reconstruction and Widening Project, including the installation of a Class I trail.

The Commission received presentations on the BCDC's Sea Level Rise Report related to SB 272 and the Regional Climate Action and Adaptation Plan (RCAAP). The Commission also reviewed the mapping of sustainability-related initiatives identified in the City's General Plan. In addition, the Commission promoted community engagement by highlighting Napa Climate Now through the City's website, social media platforms, and the City Manager's Update newsletter. These outreach efforts helped residents better understand their climate footprint and opportunities to support local sustainability goals.

Work Plan initiatives on hold:

- *Engage with American Canyon youth* - this initiative was not completed during the current work plan cycle and will be carried forward into the next fiscal year's work plan to allow for more focused outreach and collaboration opportunities with local youth.
- *Increase tree plantings and prepare a "Road Map to 2030"* - development of a residential tree planting program and the "Road Map to 2030" initiative were deferred to next fiscal year's work plan pending the onboarding of the City's new Sustainability Analyst.

Looking Ahead

The OSATS Commission, alongside the Parks and Community Services Commission, will work collaboratively to evaluate the need for an e-bike ordinance and assess potential policy considerations related to safety and enforcement. The Commissions will also explore trail and park

wayfinding opportunities that improve connectivity and support active transportation throughout American Canyon.

The Commission will continue advancing sustainability initiatives focused on climate action, community engagement, and environmental stewardship. Planned efforts include evaluating a reusable foodware ordinance recommended by Napa County. The Commission will also develop a residential tree planting program, similar to the City's Cash for Grass program, to encourage increased tree canopy throughout the community. The Commission will prepare a "Road Map to 2030" to engage American Canyon businesses and residents in achieving the City's sustainability goals and will engage with local youth on sustainability and climate action initiatives through the City's High School Citizens Academy program. Additional educational opportunities include presentations on Marin Clean Energy's Deep Green program and participation trends, Tree City USA designation requirements and benefits, and home energy savings. Community outreach efforts will focus on increasing residents' awareness of clean energy options and other sustainability initiatives.

The Commission will review the requirements of the Room to Roam Act (AB 1889) and evaluate its potential implications for City planning and policy. The Commission will also develop a project charter and evaluate the feasibility of a Class I trail along Paoli Loop to improve connectivity and expand active transportation opportunities.

And lastly, the Commission will provide input on design of open space, active transportation, and sustainability projects in the current Capital Improvement Program, and review future projects.

COUNCIL PRIORITY PROGRAMS AND PROJECTS

Organizational Effectiveness: "Deliver exemplary government services."

FISCAL IMPACT

The annual cost to convene the Commission on a monthly basis is approximately $30,000. These costs are included in the FY2026/27 Budget - primarily through staffing allocations.

ENVIRONMENTAL REVIEW

None

COMMUNICATION

Level 0: No Further Public Communication Needed
This staff report serves as the formal communication on this item.

ATTACHMENTS:

1. DRAFT Work Plan FY26-27
2. Ordinance No. 2023-01: Chapter 2.30 to Municipal Code
3. OSATS Resolution 2022-R112

CITY OF AMERICAN CANYON
CITY MANAGER'S OFFICE

DATE: June 16, 2026

TO: Mayor and City Council

FROM: Jason Holley, City Manager

CC: Deputy City Manager Ikeda
Public Works Director Ahmann Smithies
Community Development Director Cooper

RE: Draft "FY2026/27 Work Plan" for the Open Space, Active Transportation, and Sustainability Commission

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Below is the proposed DRAFT Work Plan for FY2026/27 for the Open Space, Active Transportation, and Sustainability Commission.

1. Review the requirements of the Room to Roam Act (AB 1889) and its potential implications for City planning and policy.
2. Evaluate the need for an e-bike ordinance.
3. Evaluate a reusable foodware ordinance.
4. Create a residential tree planting program.
5. Engage with American Canyon youth on sustainability and climate action initiatives through the City's High School Citizens Academy.
6. Receive a presentation from Marin Clean Energy on Deep Green energy and participation trends from 2024 to present and encourage participation in community outreach to educate residents on clean energy options.
7. Receive a presentation on Tree City USA designation requirements and benefits.
8. Receive a presentation on home energy savings.
9. Prepare a "Road Map to 2030" to engage with American Canyon businesses and residents in the pursuit of social accountability and support for actions needed to accomplish these goals.
10. Develop a project charter and evaluate the feasibility for a Class I bike trail on Paoli Loop.
11. Evaluate trail and park wayfinding opportunities to improve connectivity and active transportation.
12. Provide input on the design for open space, active transportation, and sustainability projects in the current Capital Improvement Program
13. Review the FY27/28 Capital Improvement Program projects pertaining to open space, active transportation, and sustainability

ORDINANCE NO. 2023-01

AN ORDINANCE OF THE CITY OF AMERICAN CANYON ADOPT TO AN ORDINANCE REGARDING THE ADDITION OF CHAPTER 2.30 TO THE AMERICAN CANYON MUNICIPAL CODE CREATING THE OPEN SPACE, ACTIVE TRANSPORTATION, AND SUSTAINABILITY COMMISSION

The Council of the City of American Canyon does hereby ordain as follows:

SECTION 1. A new Chapter is hereby added to the American Canyon Municipal Code regarding the creation of an Open Space, Active Transportation, and Sustainability Commission, to read as follows:

CHAPTER 2.30 OPEN SPACE, ACTIVE TRANSPORTATION, AND SUSTAINABILITY COMMISSION

Section 2.30.010	Creation of the Open Space, Active Transportation, and Sustainability Commission/Terms of Commissioners
Section 2.30.020	Jurisdiction and Functions of Commission
Section 2.30.030	Compensation of Commissioners
Section 2.30.040	Designation of Chairperson and Vice Chairperson, Committees and Staff
Section 2.30.050	Time and Place of Meetings, Definition of Commission Quorum
Section 2.30.060	Commission Rules and Records

Section 2.30.010 Creation of the Open Space, Active Transportation, and Sustainability Commission/Terms of Commissioners.

There is created an Open Space, Active Transportation, and Sustainability Commission for the City of American Canyon. It shall consist of five (5) members, appointed in the manner and for the terms prescribed in Sections 2.04.070 and 2.28.010, respectively, of this Code.

Section 2.30.020 Jurisdiction and Functions of Commission.

A. The Open Space, Active Transportation, and Sustainability Commission for the City of American Canyon shall perform all functions as described below and shall serve in an advisory capacity to City staff and the City Council.

B. The functions, powers, and duties of the Open Space, Active Transportation, and Sustainability Commission shall include the review of issues referred to the Commission by the City Council, the City Manager, and City staff, residents, or organizations of the City; to provide advice, comment and make recommendations regarding such issues as requested; to organize or facilitate community benefit activities or functions; and other duties as assigned by the City Council.

C. Areas of purview of the Commission shall include, but not be limited to, review and provide input on plans and policy documents supporting Open Space, Active

Transportation, and Sustainability efforts, and recognize further Open Space, Active Transportation, and Sustainability efforts needed.

D. The City Council may from time to time refer a matter to the Commission for review, comment, recommendation, and action. All actions of the Open Space, Active Transportation, and Sustainability Commission are subject to appeal to the City Council by any person or organization affected by such action through the procedures set forth in Chapter 2.04 of this Code.

E. All actions taken by the Commission shall be reported by City Staff to the City Clerk and shall be placed on the next regular agenda of the City Council after receipt of the report by the City Clerk. Actions taken by the Commission shall not be considered final until the City Council has heard and further considered the matter or has determined that further consideration of the matter is not required. When placed on the agenda of the City Council, the City Council may elect to consider the matter and may schedule the matter for a hearing of public hearing before the City Council. The City Council shall consider any appeal of an action taken by the Open Space, Active Transportation, and Sustainability Commission by an interested person or organization through the procedures set forth in Chapter 2.04 of this Code. The decision of the City Council, after considering or hearing the matter shall be final.

Section 2.30.030 Compensation of Commissioners.

The members of the Open Space, Active Transportation, and Sustainability Commission shall each receive compensation payable out of the general fund of the City, provided adequate funds have been budgeted, therefore, in the amount of one hundred and five dollars ($105.00) per meeting. Standing or temporary committee or subcommittee members shall not be compensated. The compensation for Commissioners prescribed herein shall be exclusive of any amount payable as reimbursement for actual or necessary expenses authorized by the City Council and incurred in the performance of official duties for the City.

Section 2.30.040 Designation of Chairperson and Vice Chairperson, Committees, and Staff.

A. Designation of the Chairperson and Vice Chairperson for the Commission shall be governed by section 2.28.20 of this Code.

B. The Commission may, from time to time, create committees or subcommittees to study issues, to perform work on behalf of the Commission, to provide a service to the residents, or a segment of the residents, of the City, or to improve the quality of the environment of the City and living conditions of the residents of the City.

C. Standing or temporary committee or subcommittee shall have at least one Commissioner assigned to the committees. The Commission shall make appointments of

committee and subcommittee members with the approval of the City Manager or designee.

D. The City Manager may appoint a department head, or other staff, and provide compensation for their services as may be authorized by the City Council and by an annual City Budget.

Section 2.30.050 Time and Place of Meetings, Definition of Commission Quorum.

A. The Commission shall hold at least one regular meeting each month at such time, date, and place designated by the Commission. The Chairperson or a majority of the Commission, after giving notice to the Commissioners, and to any media and members of the public who have previously requested such notices in writing, so that the notice is received at least twenty-four (24) hours before the meeting, may hold a special meeting.

B. A majority of the Commissioners shall constitute a quorum.

Section 2.30.060 Commission Rules and Records.

The Open Space, Active Transportation, and Sustainability Commission shall adopt rules for the transaction of its business and shall keep a public record of its resolutions, transactions, findings, recommendations, and actions. Minutes of the Open Space, Active Transportation, and Sustainability Commission meetings shall be filed with the City Clerk.

SECTION 2. EFFECTIVE DATE. This ordinance shall take effect thirty (30) days after its adoption.

SECTION 3. SEVERABILITY. The ordinance shall be liberally constructed to achieve its purpose and preserve its validity. If any provision or clause of this ordinance or application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this ordinance which can be given effect without the invalid provision or application. To this end, the provisions of this ordinance are declared to be servable and are intended to have independent validity.

The foregoing ordinance was introduced and read at a regular meeting of the City Council of the City of American Canyon, State of California, held on the 17th day of January, 2023, by the following vote:

AYES: Councilmembers Aboudamous, Joseph, Oro, Vice Mayor Washington, and Mayor Garcia
NOES: None
ABSTAIN: None
ABSENT: None

The foregoing ordinance was adopted at a regular meeting of the City Council of the City of American Canyon, State of California, held on the 7th day of February, 2023, by the following vote:

AYES:	Councilmembers Aboudamous, Joseph, Oro, Vice Mayor Washington, and Mayor Garcia
NOES:	None
ABSTAIN:	None
ABSENT:	None

Leon Garcia

Leon Garcia, Mayor

ATTEST:

Taresa Geilfuss, CMC, City Clerk

APPROVED AS TO FORM:

William D. Ross, City Attorney

RESOLUTION NO 2022-R112

A RESOLUTION FO THE CITY COUNCIL OF THE CITY OF AMERICAN CANYON RECONSTITUTING THE OPEN SPACE ADVISORY COMMITTEE AS THE OPEN SPACE, ACTIVE TRANSPORTATION, AND SUSTAINABILITY COMMISSION, AND APPROVING THE COMMISSION'S FISCAL YEAR 2022/2023 WORK PLAN

WHEREAS, the City of American Canyon has always been supportive of open space preservation and enhancement and such support has been integrated into the City's General Plan (for example, the Vision Statement notes we should "capitalize on the unique environmental setting of the foothills river valleys and agriculture") and

WHEREAS, the General Plan 'Parks and Recreation Element advocates for trail systems that connect the river areas with residential neighborhoods and open space areas in the foothills, and

WHEREAS, in 1999, the City was fortunate to receive 640 acres of foothill open space as a result of a generous donation from Jack and Bernice Newell and

WHEREAS, at approximately the same time, the City received a $3 million CalFed Grant to acquire and restore 460 acres of wetlands on our western border and

WHEREAS, connecting the wetlands and Newell Open Space through a network of trails and bike paths is important to enhance public access and enjoyment and

WHEREAS, the City Council formally recognized the efforts to establish preserve and enhance open space in and around American Canyon through the establishment of the Open Space Advisory Committee (OSAC) as a standing "citizen s advisory committee (Resolution 2005-83) and

WHEREAS, the City Council formally designated the OSAC as the City s Bicycle Advisory Committee in November 2010 (Resolution 2010 115) and

WHEREAS, the City Council desires to reconstitute the OSAC as a new commission having purview over issues of 'open space active transportation' and sustainability and

WHEREAS, the role of the new Open Space Active Transportation and Sustainability Commission (OSATS Commission) is to review and provide input on various plans and policy documents prepared by staff (and consultants) before they are eventually considered by the Council

NOW, THEREFORE, BE IT RESOLVED the City Council hereby rescinds Resolution 2005-83 and Resolution 2010 115 in order to reconstitute the former Open Space Advisory Committee as the new Open Space, Active Transportation, and Sustainability Commission and

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council establishes a five member Open Space Active Transportation and Sustainability Commission (OSATS Commission) pursuant

to American Canyon Municipal Code Chapter 2 28 (Boards and Commissions Generally) for the purpose of supporting open space active transportation and sustainability efforts in and around American Canyon, and

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council endorses the OSATS Commission's review and input on plans and policy documents supporting the following Open Space' efforts and recognizes there may be future efforts needed, subject to Council review and confirmation

- Restoration of the wetlands on the City's western border to improve the eco system in the Bay Area and provide public water access, and
- Updates to the General Plan, Parks and Open Space Master Plan, Newell Management Plan, Newell Grazing Plan, and other plans, and
- Open space, trails, and public access development, such as Clarke Ranch, re use of the Corporation Yard Jaegar Open Space, and other open space areas, and
- Trail use rules and regulations and trail maintenance and repair standards, and
- Volunteer conservation programs and projects, wildlife monitoring, and improvements or alterations to City owned open space property, and

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council endorses the OSATS Commission s review and input on plans and policy documents supporting the following 'Active Transportation" efforts and recognizes there may be future efforts needed, subject to Council review and confirmation

- Updates to the Citywide Bike Plan
- Updates to the Citywide Pedestrian Plan
- Updates Active Transportation Development Standards
- Awards and recognitions such as the Bicycle Friendly Community designation

NOW, THEREFORE, BE IT FURTHER RESOLVED that the City Council endorses the OSATS Commission s review and input on plans and policy documents supporting the following Sustainability efforts and recognizes there may be future efforts needed subject to Council review and confirmation

- Countywide Greenhouse Gas Emissions Inventory
- Regional Climate Action Plan
- Climate Action Interim Plan for City of American Canyon

NOW, THEREFORE, BE IT FURTHER RESOLVED that the OSATS Commission shall support staff s open space active transportation and sustainability efforts by reviewing and providing comment on plans and policy documents funding programs the annual Capital Improvement Program (CIP) CIP Project design documents and/or serving on technical advisory committees

NOW, THEREFORE, BE IT FURTHER RESOLVED that the OSATS Commission shall draw upon the expertise of its members and other sources to provide advice to the City Council regarding open space active transportation and sustainability efforts

NOW, THEREFORE, BE IT FURTHER RESOLVED that Commissioners serve as liaisons with the community regarding open space, active transportation, and sustainability efforts, keeping staff and the Council informed of issues and concerns

NOW, THEREFORE, BE IT FURTHER RESOLVED that this Resolution does not constitute authority for Commissioners or the OSATS Commission to perform operational or management functions or to make decisions on behalf of the City

NOW, THEREFORE, BE IT FURTHER RESOLVED that OSATS Commission shall develop an annual work plan regarding open space, active transportation and sustainability efforts for approval by the City Council

NOW, THEREFORE, BE IT FURTHER RESOLVED that City Council hereby approved the OSATS Commission's FY 2022/23 Annual Work Plan attached hereto as Exhibit "A and incorporated by reference

NOW, THEREFORE, BE IT FURTHER RESOLVED the City Council formally designates the Open Space, Active Transportation, and Sustainability Commission as the City's Bicycle Advisory Committee, and

NOW, THEREFORE, BE IT FURTHER RESOLVED that this Resolution shall take effect immediately upon adoption

PASSES, APPROVED and **ADOPTED** at a regular meeting of the City Council of the City of American Canyon on the 20th of December 2022 by the following vote

AYES	Councilmembers Joseph, Oro, Washington Vice Mayor Aboudamous and Mayor Garcia
NOES	None
ABSTAIN	None
ABSENT	None

Leon Garcia Mayor

ATTEST

Taresa Geilfuss, CMC, City Clerk

APPROVE AS TO FORM

William D Ross City Attorney