

# Appendix A - Plan Conformance with ATP Guidelines

# A-2

Item	Requirement	Page
A	<b>Mode Share:</b> The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.	17, 76
B	<b>Description of Land Uses/Destinations:</b> A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, major transit hubs, and other destinations. Major transit hubs must include, but are not limited to, rail and transit terminals and ferry docks and landings.	19
C	<b>Pedestrian Facilities:</b> A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools.	29, 58
D	<b>Bicycle Facilities:</b> A map and description of existing and proposed bicycle transportation facilities, including those at major transit hubs and those that serve public and private schools.	36, 58
E	<b>Bicycle Parking:</b> A map and description of existing and proposed end-of-trip bicycle parking facilities. Include a description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots, and in new commercial and residential developments. Also, include a map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vehicles.	43
F	<b>Wayfinding:</b> A description of existing and proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.	70
G	<b>Non-Infrastructure:</b> A description of existing and proposed bicycle and pedestrian education and encouragement programs conducted in the area included within the plan.	71
H	<b>Collision Analysis:</b> The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.	50
I	<b>Equity Analysis:</b> Identify census tracts that are considered disadvantaged or low-income and identify bicycle and pedestrian needs of those disadvantaged or low-income residents, including lack of connectivity to key destinations, mobility challenges, public health concerns, and safety issues.	26
J	<b>Community Engagement:</b> A description of the extent of community involvement in the development of the plan, including disadvantaged and underserved communities.	7, C-10
K	<b>Coordination:</b> A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, housing, or energy conservation plans, including but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan, and local or regional housing plans or process improvements that are adopted or in development.	5, B-4
L	<b>Prioritization:</b> A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	73, E-43
M	<b>Funding:</b> A description of future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated cost, revenue sources, and potential funding for bicycle and pedestrian uses.	73, F-53
N	<b>Implementation:</b> A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	73
O	<b>Maintenance:</b> A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	71
P	<b>Resolution:</b> A resolution showing the adoption of the plan by the city, county, or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district, or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.	G-60

# Appendix B - Relevant Plans and Policies

Many local, regional, state, and federal plans and other documents were reviewed during development of this ATRTP. These plans and documents contain goals and policies related to active transportation which were taken into consideration when developing this plan.

## Local and Regional

### 2015 Calaveras County Regional Bicycle, Pedestrian and Safe Routes to School Master Plan

The Calaveras County Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan (Alta Planning + Design and the Calaveras Council of Governments, 2018) was developed by the CCOG in coordination with member agencies and through public outreach efforts. The plan vision is to create “an improved and enhanced bicycle and pedestrian network within Calaveras County that addresses the mobility needs for people of all ages and abilities, while improving the economic health of the county”. Project goals include:

- Goal 1: Provide an efficient network of bikeways and pedestrian facilities throughout Calaveras County.
- Goal 2: Improve bicyclist and pedestrian safety.
- Goal 3: Ensure the timely funding and construction of the bicycle and pedestrian improvements described in this plan.
- Goal 4: Increase the number of commutes, recreation, and utilitarian bicycle and walking trips.

- Goal 5: Increase the awareness of bicycling and pedestrian travel through encouragement, education, enforcement and evaluation programs.

The Plan identifies approximately 22 miles of existing bikeways and trails in Calaveras County and Angels Camp. A comprehensive needs assessment, which included community outreach and a community survey, collision analysis, commute patterns analysis, and other important considerations, helped identify bicycle and pedestrian projects that would improve connectivity and access for residents and community members. Approximately 17 miles of recommended bikeway projects in Angels Camp and approximately 237 miles of recommended bikeway projects in the County were identified. Funding opportunities and an implementation plan are also included.

### Regional Transportation Plan

The Calaveras County 2021 Regional Transportation Plan (LSC Transportation Consultants, Inc and Calaveras Council of Governments, 2021) provides a coordinated 20-year vision of the regionally significant transportation improvements and policies needed to efficiently move goods and people within the region. The following transportation needs and concerns related to non-motorized transportation are documented in the 2021 Plan:

- Widen shoulders on state highways to reduce conflicts between cyclists and motorists. Particular areas of concern brought up as part of public input include:
  - SR 4 from Arnold to Big Trees

- SR 12 in Valley Springs
- SR 26 in Valley Springs
- SR 49 between San Andreas and Angels Camp
- Bicycle lanes or separated bicycle paths have been requested in the following areas:
  - Arnold to Dorrington
  - Hogan Dam Road to SR 26 near Valley Springs
  - Vallecito and Red Hill Road
  - Murphys
- Sidewalks along six-mile road in Murphys
- Gaps in sidewalk and poor bicycle facility connectivity combined with high vehicle speeds in the Angels Camp-SR 49-N. Main Street Corridor
- No shoulders, limited pedestrian facilities, or high vehicle speeds limit the number of potential active transportation users in the Pope Street Corridor in San Andreas despite a relatively short distance between residences and schools
- Safe Routes to School for the Valley Springs Elementary School
- Complete streets improvements throughout the commercial core area in Murphys along SR 4 are needed to address limited bicycle and pedestrian facilities, a high proportion of senior residents and the proximity of an Elementary School
- Limited bicycle and pedestrian facilities combined with heavy truck traffic and

projected future growth in all traffic in the SR 49 corridor in San Andreas

While the above concerns were documented, the only funded bicycle/pedestrian related projects identified are in the City of Angles Camp and are documented below .

- SR 49 at Murphys Grade – Roadway overlay, sidewalks, and intersection improvements from City limits to Demarest.
- SR 49 in Angles Camp from Copello Road and 4/49 Intersection – Multimodal improvements as identified in the Angles Camp N Main Street Plan including sidewalks and bike lanes, multi-use paths, crosswalks, HAWK beacon, striping, and median island.
- SR 49 in Angles Camp from SR 4/49 Intersection to Utica Park – Multimodal improvements as identified in the Angles Camp N Main Street Plan including contiguous sidewalks and bike lanes with streetscape features and medians as feasible, bus pullouts, bulb-outs, and enhanced crossings.
- Angles Camp Trail Phase 1 – Environmental, PE, and ROW bike/ped access from Stelte Park and Greenhorn Creek Subdivision to downtown corridor.
- SR 4/49 and SR 49/Francis Street – Conversion to roundabouts, bridge, median island, sidewalks, bicycle lanes, multiuse path, retaining wall, and crosswalks.
- It is also noted that the RTP identifies Caltrans State Highway Operation and Protection Program (SHOPP) projects which are described in greater detail in the 2021

Caltrans District 10 Active Transportation Plan discussion section of this document.

## Calaveras County General Plan

The Calaveras County General Plan (Calaveras County, 2019) serves as the overarching policy document that defines a vision for future change and guides the location and character of development. The Circulation Element specifically provides a framework for decisions concerning the countywide transportation system, which consists of transportation modes, including roads, transit, bike, pedestrian, and aviation from the San Joaquin Valley to the high Sierra Nevada. The following goals and policies identified in the Circulation Element are applicable to the ATRTP.

- Goal C-1. A balanced circulation system that provides for the safe and efficient movement of people and goods while maintaining the county's rural and historic character.
- Policy C 1.1. Incorporate the concept of complete streets for planning transportation and development, including operations and maintenance, where feasible and suitable to the rural nature of the county and its topography.
- Policy C 1.3. Prioritize funding and construction of projects that reduce vehicle miles traveled.
- Policy C 1.9. Consider context sensitive designs, i.e., designs appropriate for the unique characteristics of the community in which it is located, for planned circulation improvements, which are intended to preserve the rural character and historic resources of communities in the County.

Alternative designs shall be in accordance with standards adopted or accepted by Caltrans or the County intended to provide a safe an efficient transportation system.

- Policy C 1.13. Strive to increase roadway connectivity, particularly in Community Areas, to reduce trip lengths, enhance emergency response, encourage opportunities for trips to be made by walking and bicycling.
- Goal C-5. A safe, convenient transportation network for pedestrians, cyclists, and users of other non-motorized modes of transportation that is suitable for the rural nature of the county and its topography.
- Policy C 5.1. Incorporate safe and convenient bicycle and pedestrian access, where feasible, in all transportation improvement projects.
- Policy C 5.2. Bicycle and pedestrian access and circulation shall be designed into new development projects where applicable to enhance internal circulation and interconnectivity with surrounding land uses and to implement any adopted bicycle and/or pedestrian plan.
- Policy C 5.3. Safe routes to schools shall be incorporated into new residential projects where appropriate.

In addition to goals and policies in the Circulation Element, the Conservation and Open Space Element includes the following relevant goals and policies:

- Goal COS-6. A high-quality system of recreational facilities enhancing the quality

of life and health of residents and visitors and contributing to the County's economy.

- Policy COS 6.3. Pursue partnerships with public and private entities that make the most of limited funding, share maintenance costs, provide important linkages between recreational facilities and generally expand the quality and quantity of recreational opportunities countywide.
- Policy COS 6.4. Facilitate the provision of and access to local and regional trail systems.
- Policy COS 6.5. Design recreational facilities to minimize ongoing maintenance costs and reduce potential environmental impacts.

The County's Land Use and Housing Elements were also reviewed to determine the location of planned growth areas and existing residential and commercial zoned areas. This information was used to identify where bicycle and pedestrian improvements should occur to ensure walking and biking can be a viable mode of transportation for both existing and planned development areas.

## Promoting Safe Bicycle Travel Opportunities for Bicycle Tourism and Economic Development

The Promoting Safe Bicycle Travel Opportunities for Bicycle Tourism and Economic Development (referred to as the Bike Tourism Plan) was developed in 2019 by CalBike, Fehr & Peers, New Economics & Advisory, and Mark Thomas in collaboration with the following five counties: Tuolumne County, Stanislaus County, San Joaquin County, Calaveras County, and Alpine

County. The two primary intentions of the plan are to (1) attract visitors and grow the tourism industry for economic development while (2) simultaneously enhancing the opportunity for local residents to enjoy equitable and safe bicycling for transportation and healthy recreation.

The Bike Tourism Plan indicates that bicycle tourism in Calaveras County (as of 2019) generates approximately \$345,000 annually in rider expenditures captured locally. With additional investment in bicycle infrastructure that would increase tourism by 20-40 percent, rider expenditures could increase to \$414,000-\$552,000.

Several "signature" and "supporting" trail projects are identified in the document. The following are particularly relevant to the ATRTP:

### Signature Projects:

- East Bay Municipal Utility District (EBMUD) Pipeline Trail from Stockton to Lake Camanche - While the bulk of this signature project is located in San Joaquin County, the overall intent is to provide a car-free connection from Lodi/Stockton areas to the popular and varied recreational opportunities at Lake Camanche as well as a connection to the existing Mokelumne Coast to Crest Trail.
- Angels Creek Trail from Murphys Grade Road near Angels Camp to New Melones Reservoir - This 5.1-mile trail along Angels Creek would offer active access to wine tasting, cavern excursions, outdoor adventures, and world-famous cultural events like the Jumping Frog Jubilee.

### Supporting Projects:

- Repaving Dogtown Road to San Domingo Road
- Repaving San Domingo Road from Dogtown Road to Sheep Ranch Road
- Repaving Sheep Ranch Road from San Domingo Road to Main Street in Murphys.
- Establishing a low-stress bicycle route from Murphys Community Park to Ironstone Vineyards along Algiers Street and 6 Mile Road.
- Installing bike amenities at Murphys Main Street, Murphys Community Park, Angels Camp Main Street, Utica Park, and Ironstone Vineyards.

To complement the infrastructural recommendations, this Bike Tourism Plan makes a number of policy and programmatic recommendations. Policy recommendations relate to rumble strips and signage. Programmatic recommendations relate to events and practices.

## Other Recent Local Planning Efforts

In addition to the above referenced projects, the Calaveras Council of Governments (CCOG) has recently completed the following planning documents relevant to the proposed project:

- San Andreas Pope Street and Safe Routes to School Gap Fill Plan (2020)
- Valley Springs Town Center Connectivity Plan (2020)

- Murphys SR 4 Complete Streets Corridor Plan and Project Prioritization (2019)
- Angels Camp North Main Street/SR 49 Complete Streets Corridor Plan and Copello Road Pedestrian Connector (2020)

Each of the above documents focused on identifying bicycle and pedestrian needs in the respective community which were aimed at increasing walking and biking to school, commercial areas, jobs, parks and recreational opportunities and more. These plans were reviewed in detail and projects were incorporated into the ATRTP as appropriate to ensure the ATRTP is further advancing the goals and objectives of these previous documents.

## State and Federal

### 2021 Caltrans District 10 Active Transportation Plan

The 2021 Caltrans District 10 Active Transportation Plan (Caltrans, 2021) was developed to identify locations with bicycle and pedestrian needs and help implement the vision statement and goals in Toward an Active California and the Statewide Bicycle and Pedestrian Plan.

District 10 covers the San Joaquin Valley and Central Sierra counties of Alpine, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne and has just under nine miles of designated bikeways on its 1,322 highway centerline miles. Most of these facilities are Class II bike lanes and most are in Main Street contexts. No bikeways in the district are considered low stress given the speed

and volume of the roadways on which they are present. A companion Story Map to the Plan was created to more easily highlight pedestrian and bicycling issues and opportunities described in the report. The Story Map indicates a bicycle, pedestrian, or bicycle and pedestrian need on essentially every mile of state highway within Calaveras County. Once needs were identified, they were grouped into three Tiers with Tier 1 being the highest priority and Tier 3 being the lowest priority. Despite having locations with a higher density of public and partner identified needs, all intersections and roadway segments in Calaveras County were categorized as Tier 3.

### Caltrans 2024-2025 Complete Streets Action Plan

The Caltrans 2024-2025 Complete Streets Action Plan (CSAP) identifies the highest priority actions over the 2024-2025 time period for implementing the departments' goals related to complete streets and active transportation throughout the state. Caltrans Director's Policy DP-37 solidifies their commitment to providing comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit.

The CSAP identifies the following two projects in District 10:

- SR 4 Safety – Construction of a pedestrian hybrid beacon, pedestrian refuge island, ADA elements, and sidewalks with landscape buffers in Murphys near the intersection of SR 4/Pennsylvania Gulch.
- Angels Camp Pedestrian Improvements – Sidewalk gap closure with improved crossing facilities, upgraded pedestrian features,

and a road diet with bike lanes in the City of Angels Camp.

The ATRTP is generally consistent with projects identified in the CSAP, however, a separated bikeway (Class IV) is recommended rather than a bike lane (Class II) given volumes and speeds on SR 49 in the City.

### California Transportation Plan 2040

A strategy of the California Transportation Plan 2040 (released in 2016) that supports improved multimodal mobility and accessibility goals is to double bicycle and pedestrian mode shares.

### California Green Building Code

The 2013 California Green Building Standards contain specific requirements for the amount and type of both short-term and long-term bicycle parking. Requirements are mandatory for non-residential projects and voluntary for residential projects. These standards may be superseded by local requirements if local requirements are stricter.

### California Assembly Bill 32 and Senate Bill 375

Senate Bill (SB) 375 is the implementation legislation for Assembly Bill (AB) 32. AB 32 requires the reduction of greenhouse gases (GHG) by 28% by the year 2020 and by 50% by the year 2050. Greenhouse gases are emissions – carbon dioxide chief among them – that accumulate in the atmosphere and trap solar energy in a way that can affect global climate patterns. The largest sources of these emissions

related to human activity are combustion-powered machinery, internal combustion vehicle engines, and equipment used to generate power and heat. SB 375 tasks metropolitan and regional transportation planning agencies with achieving GHG reductions through their Regional Metropolitan Transportation Plans. The reduction of the use of the automobiles for trip making is one method for reducing GHG emissions. This outcome can be achieved by use of modes other than the automobile such as walking, bicycling, or using transit.

### California Assembly Bill 1358

Assembly Bill 1358, the Complete Streets Act, calls for the inclusion of all modes upon any substantive revision of the circulation element of a city or county's general plan circulation element. The legislation requires planning for a "balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation."

### California Assembly Bill 743

SB 743, passed in 2013, required the development of new guidelines that address transportation impact metrics under the California Environmental Quality Act (CEQA). As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division,

except in locations specifically identified in the guidelines, if any." The new criteria promote the development of multimodal transportation networks.

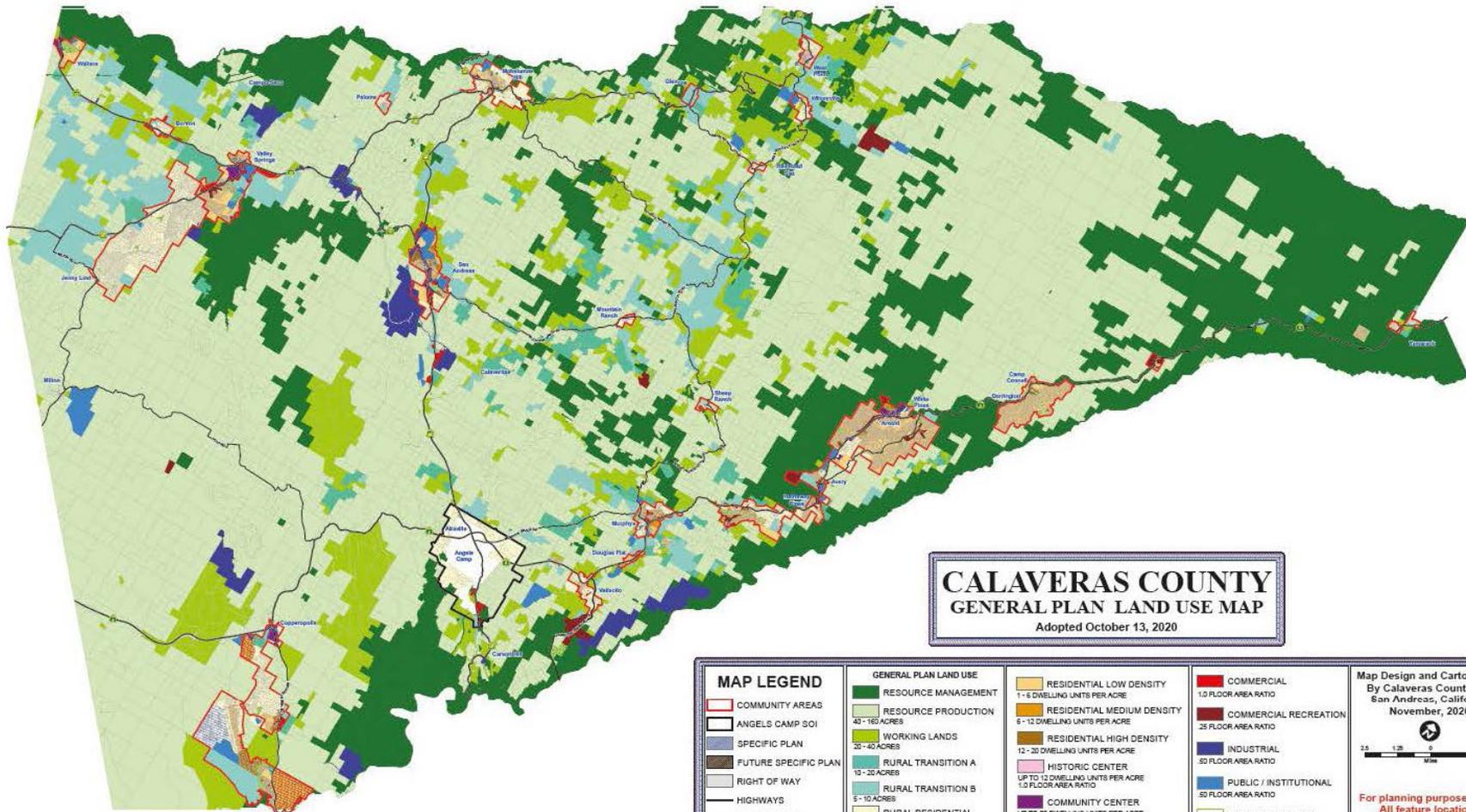
### US DOT Policy Statement on Bicycle and Pedestrian Accommodation Regulations and Recommendations

In 2010, the United States Department of Transportation (US DOT) issued a policy directive in support of walking and bicycling, encouraging transportation agencies to go beyond minimum standards in fully integrating active transportation into projects. As part of the statement, the US DOT encouraged agencies to adopt similar policy statements in support of walking and bicycling considerations such as:

- Considering walking and bicycling equal with other transportation modes.
- Ensuring availability of transportation choices for people of all ages and abilities
- Going beyond minimum design standards
- Integrating bicycling and pedestrian accommodations on new, rehabilitated, and limited access bridges
- Collecting data on walking and bicycling trips
- Setting mode share for walking and bicycling and tracking them over time
- Removing snow from sidewalks and shared use paths
- Improving non-motorized facilities during maintenance projects

### US Americans with Disabilities Act

The Americans with Disabilities Act Title III is legislation enacted in 1990 that provides thorough civil liberties protections to individuals with disabilities concerning employment, state and local government services, and access to public accommodations, transportation, and telecommunications. Title III of the Act requires places of public accommodation to be accessible and usable to all people, including those with disabilities. While the letter of the law applies to "public accommodations," the spirit of the law applies not only to public agencies but also to all facilities serving the public, whether publicly or privately funded.



**CALAVERAS COUNTY  
GENERAL PLAN LAND USE MAP**  
Adopted October 13, 2020

<p><b>MAP LEGEND</b></p> <ul style="list-style-type: none"> <li>COMMUNITY AREAS</li> <li>ANGELS CAMP SOI</li> <li>SPECIFIC PLAN</li> <li>FUTURE SPECIFIC PLAN</li> <li>RIGHT OF WAY</li> <li>HIGHWAYS</li> <li>MAJOR ROADS</li> </ul>	<p><b>GENERAL PLAN LAND USE</b></p> <ul style="list-style-type: none"> <li>RESOURCE MANAGEMENT 43 - 165 ACRES</li> <li>RESOURCE PRODUCTION</li> <li>WORKING LANDS 20 - 40 ACRES</li> <li>RURAL TRANSITION A 10 - 20 ACRES</li> <li>RURAL TRANSITION B 5 - 10 ACRES</li> <li>RURAL RESIDENTIAL 1 - 5 ACRES</li> </ul>	<ul style="list-style-type: none"> <li>RESIDENTIAL LOW DENSITY 1 - 5 DWELLING UNITS PER ACRE</li> <li>RESIDENTIAL MEDIUM DENSITY 6 - 12 DWELLING UNITS PER ACRE</li> <li>RESIDENTIAL HIGH DENSITY 12 - 20 DWELLING UNITS PER ACRE</li> <li>HISTORIC CENTER UP TO 12 DWELLING UNITS PER ACRE 1.0 FLOOR AREA RATIO</li> <li>COMMUNITY CENTER UP TO 20 DWELLING UNITS PER ACRE 2.0 FLOOR AREA RATIO</li> </ul>	<ul style="list-style-type: none"> <li>COMMERCIAL 1.0 FLOOR AREA RATIO</li> <li>COMMERCIAL RECREATION 2.0 FLOOR AREA RATIO</li> <li>INDUSTRIAL 5.0 FLOOR AREA RATIO</li> <li>PUBLIC / INSTITUTIONAL 5.0 FLOOR AREA RATIO</li> <li>PARKS/RECREATION</li> </ul>	<p>Map Design and Cartography By Calaveras County GIS San Andreas, California November, 2020</p> <p><b>For planning purposes only. All feature locations are approximate.</b></p>
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Source: Calaveras County General Plan Land Use Map, 2025

# Appendix C - Public Participation

Various outreach efforts were conducted as part of the ATRTP to actively engage local residents and stakeholders and collect meaningful community input. Table C-1 summarizes the in person public outreach events carried out throughout the planning process. These events were intentionally selected to ensure broad and inclusive participation.

In addition to the in person outreach efforts listed, the following online outreach efforts were conducted to maximize participation.

**Table C-1: Summary of Public Outreach Activities**

Event Type	Location	Date
Pop-Up Event	Calaveras County Fair	May 16 - 19, 2024
Project Advisory Committee Meeting	San Andreas	May 30, 2024
Community Meeting/Workshop	Valley Springs	June 26, 2024
Community Meeting/Workshop	Angels Camp	June 27, 2024
Pop-Up Event	Music in the Park - San Andreas	July 17, 2024
Pop-Up Event	Music in the Park - Murphys	July 31, 2024
Stakeholder Meeting	San Andreas	August 20, 2024
Project Advisory Committee Meeting	San Andreas	April 24, 2025
Pop-Up Event	Calaveras County Fair	May 15 - 18, 2025
Pop-Up Event	Farmer's Market - Valley Springs	May 23, 2025
Pop-Up Event	Sierra Nevada Arts and Crafts Festival	July 5, 2025
Stakeholder Meeting	San Andreas	July 23, 2025
Project Advisory Committee Meeting	San Andreas	September 30, 2025
Community/Stakeholder Meeting	San Andreas	October 28, 2025

Source: Green DOT, Fehr & Peers, 2025.

## Project Website

A dedicated website served as the central platform for information related to the ATRTP. It included project scope, planning timelines, details on public meetings, downloadable project documents, links to surveys and interactive maps, and the draft plan for review and comment.

The webpage was regularly updated throughout the planning process to reflect project progress and encourage ongoing engagement. Key features such as the comment map and survey allowed community members to provide input in multiple formats. The webpage was available at: [www.walkandbikecalaveras.com](http://www.walkandbikecalaveras.com)

## Advertisement and Media

Both digital and physical methods were utilized to promote the project at various stages. Online content including graphics, updates, and event announcements was shared via the project website and social media pages. These efforts were bolstered by following and collaborating with key local organizations to increase visibility.

Flyers were distributed at key community locations in the weeks leading up to events, ensuring timely notice for residents. In addition, posts were made to the CCOG Facebook Page and the County's Nextdoor account. Attendees often cited these sources as how they learned about the events, demonstrating the effectiveness of the outreach approach.



# 2025 ATRTP Plan

[Comment on our Map!](#)

**Contact**  
Questions? Comments? Concerns?  
Email Erin Kelly at [ekelly@calacog.org](mailto:ekelly@calacog.org)



## CALAVERAS ATRTP PROJECT LISTS FOR REVIEW

The Calaveras Council of Governments is in the process of developing an **Active Transportation and Recreational Trails Plan**. Initial project recommendations have been developed based on community input and an existing conditions evaluation. We need your input on finalizing these recommendations! Review the project lists below and provide comments to Erin Kelly at [ekelly@calacog.org](mailto:ekelly@calacog.org) by November 4th, 2025.

[Project Lists for Public Review](#)

### WHAT IS AN ACTIVE TRANSPORTATION AND RECREATIONAL TRAILS PLAN?

This Active Transportation and Recreational Trails Plan (ATRTP) will develop a vision for walking, biking, and hiking for transportation and recreation. This may include plans for new sidewalks, bike lanes, street crossings, and trail access improvements.

### WHY DO WE NEED A PLAN?

The purpose of the ATRTP is to provide Calaveras County with a blueprint for improving and expanding walking, biking, and hiking access. Identifying and prioritizing safe active transportation

Calaveras County  
Active Transportation and  
Recreational Trails Plan

@

# MUSIC IN THE PARK

Tell us how you stay active at an upcoming event!

[Contact Us!](#)

[www.walkandbikecalaveras.org](http://www.walkandbikecalaveras.org)

**TONIGHT**

**San Andreas**

**JUL 17 @ 6:30 PM**

**Turner Community Park**

Calaveras County  
Active Transportation and Recreational Trails Plan

Want to influence walking, biking, and recreation?

**We need your help!**

Join us at one of our community events hosted at:

<b>Valley Springs Elementary</b> Multipurpose Room 240 Pine St Valley Springs, CA 6/26/24 5:30 pm - 7:00 pm	<b>Bret Harte High School</b> Multipurpose Room 364 Murphys Grade Rd Angels Camp, CA 6/27/24 5:30 pm - 7:00 pm
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**Snacks and Refreshments Provided!**

This plan aims to identify opportunities for expanded bicycle, pedestrian, and hiking facilities!

Scan here for more information:

[www.walkandbikecalaveras.org](http://www.walkandbikecalaveras.org)

## Email Blasts

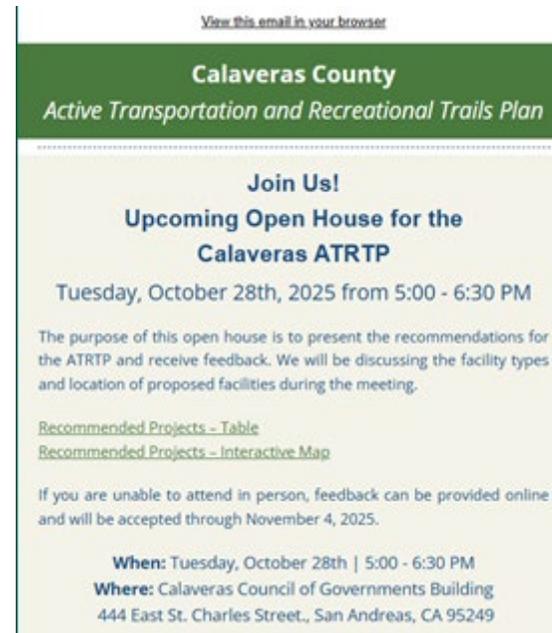
A series of targeted email blasts were distributed through MailChimp to ensure consistent communication throughout the planning process. These emails were sent to stakeholders and, depending on the topic, to the broader public to share project updates, meeting invitations, and opportunities for input. Each campaign featured clear visuals and concise messaging to maximize engagement and encourage participation in surveys and workshops.

Across all campaigns, emails reached approximately 173 recipients. The messages were timed to align with key project milestones, such as draft plan releases or public comment periods. This approach helped maintain awareness and transparency while driving continued community involvement in the project.

## Online Survey

A concise, user-friendly survey was created to gather input on transportation needs and priorities in the County. Designed to be completed in five to ten minutes, the survey encouraged broad participation while minimizing time demands.

The survey was hosted on SurveyMonkey, linked on the project webpage, and circulated through multiple communication channels to maximize reach. Hard copies were also made available at public events, ensuring accessibility for all participants and capturing a diverse range of community perspectives. The survey received 365 responses.



**Calaveras County**  
**Active Transportation and Recreational Trails Plan**  
**Community Survey**



**1. What community do you live in?**

<input type="radio"/> Angels Camp	<input type="radio"/> Murphys	<input type="radio"/> Valley Springs
<input type="radio"/> Arnold	<input type="radio"/> San Andreas	<input type="radio"/> Rancho Calaveras
<input type="radio"/> Mokelumne Hill	<input type="radio"/> Mountain Ranch	<input type="radio"/> West Point
<input type="radio"/> Other (Please specify) _____		

**2. How often do you walk or run in your neighborhood or around town?**

<input type="radio"/> Almost every day	<input type="radio"/> Once a week	<input type="radio"/> A few times a month
<input type="radio"/> A few times a week	<input type="radio"/> A few times a year	<input type="radio"/> Never

**3. How often does your child walk to school? (If applicable)**

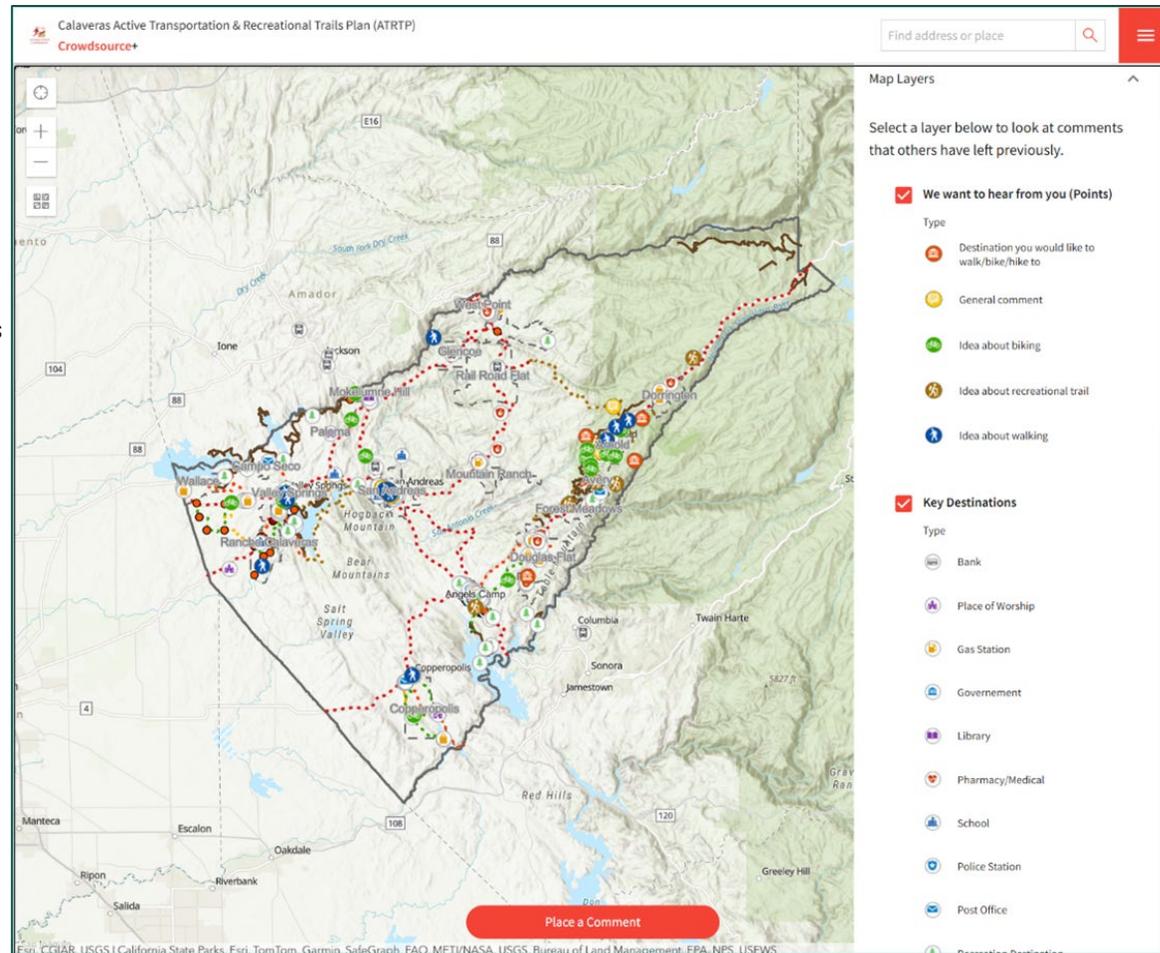
<input type="radio"/> Almost every day	<input type="radio"/> Once a week	<input type="radio"/> A few times a month
<input type="radio"/> A few times a week	<input type="radio"/> A few times a year	<input type="radio"/> Never

**4. Where (if at all) do you walk or run in your neighborhood or around town?**

## Online Interactive Map

Community members were able to provide comments via an online interactive map. The map allowed individuals to provide comments in specific locations or broader comments on overall desired connections. Comments could be categorized by ideas for walking, biking, recreational trails, key destinations, or general ideas; 145 total comments were received via the online map during the course of the project. This map was also utilized to display existing bicycle, pedestrian and recreational facilities as well as recommended facilities. This allowed the public to easily understand the location of proposed projects and ways in which proposed projects may close gaps/tie into existing infrastructure.

These various events played a key role in informing the recommended improvements for walking, biking, and hiking, and many recommended projects are a direct reflection of the community's significant influence and direction.



## Stakeholder and Advisory Committee Meetings

In addition to the community outreach efforts previously described, stakeholder meetings and project advisory committee meetings were held at key stages during the planning process. The project advisory committee consisted of City, County, and CCOG staff while the stakeholder group included a broad range of community members, business owners, City and County elected officials, and recreational stakeholders including employees from the U.S. Army Corps of Engineers, U.S. Forest Service, East Bay Municipal Utilities District, and the Arnold Rim Trail Association.

## Key Issues Highlighted

Lack of adequate bicycle and pedestrian infrastructure was a key issue consistently highlighted throughout the planning process. Many residents feel frustrated at the lack of bicycle and pedestrian facilities, are afraid to walk or bike in their neighborhood due to speeding/driver behavior and lack of safe walking/biking infrastructure, dislike having to drive to access a safe place to walk or bike, and hope for better connections between residential neighborhoods, commercial/office areas, schools, parks, and recreational trails. Specifically, the following key concerns were identified:

- Lack of a bicycle/pedestrian connections in the following areas:

### Valley Springs

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- SR 26 between La Contenta and Gold Creek Estates and downtown Valley Springs
- Hogan Dam Road
- Vista Del Lago Drive
- Baldwin Street
- SR 12/26 intersection
- SR 26/Hogan Dam Road intersection
- Southworth Road (Burson)
- Burson Road (Burson)

### San Andreas

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- SR 49
- Mountain Ranch Road
- Treats Avenue
- Russell Road (near the post office)
- Pope Street

### Angels Camp

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- SR 49
- Stockton Road
- Greenhorn Creek Road

### Murphys

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- SR 4
- Main Street
- Six Mile Road
- Murphys Grade Road
- Pennsylvania Gulch Road
- Jones Street

### Arnold

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- SR 4 between Big Trees Market and White Pines Lake
- Blagen Road
- Blagen Road/SR 4 intersection

### Copperopolis

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- O'byrnes Ferry Road
- Copper Cove Drive
- Little John Road

Lack of bicycle facilities on state highways for recreational cycling – In many locations, highways provide little to no shoulder. In locations where roadway widening to provide a buffered paved shoulder is not feasible, remove edgeline rumble strips where shoulder width is less than 2'. This would provide additional riding space for cyclists and would allow cyclists to easily transition from the shoulder to the travel lane as needed when shoulder width is too narrow to comfortably ride. Specifically, this comment was made in the following locations:

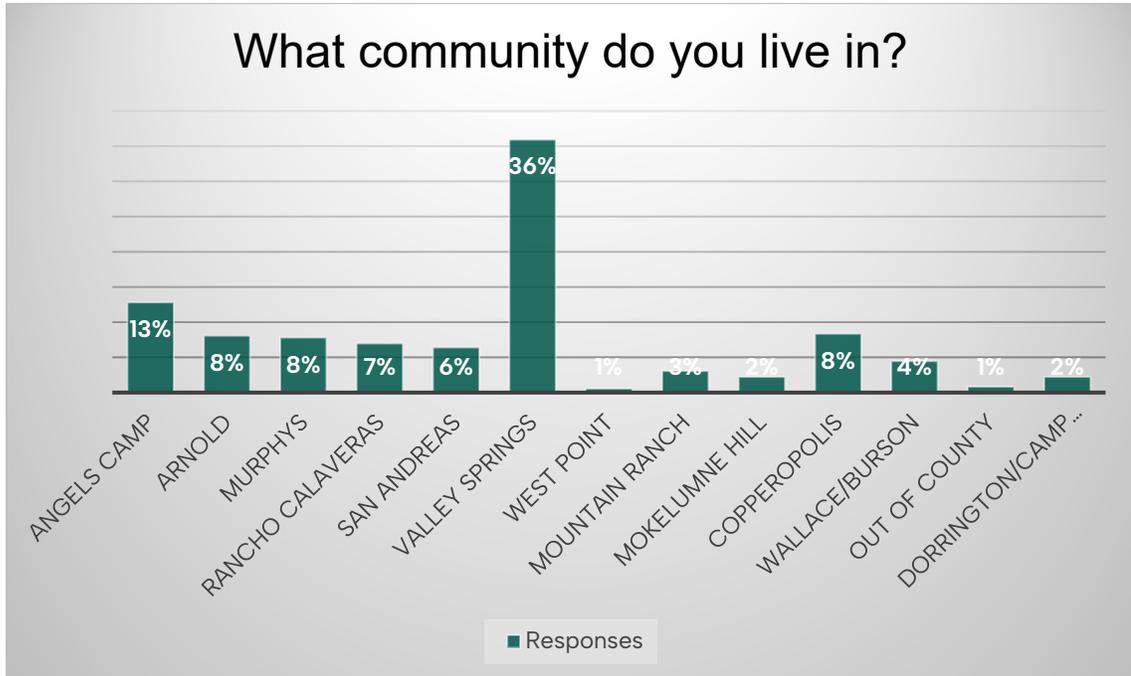
- SR 26 from SR 12 to SR 49 in Mokelumne Hill
- SR 4 from Rolleri Bypass Road to Pennsylvania Gulch Road
- SR 49 from SR 26 to Pool Station Road

All online interactive map comments and survey responses are included in Attachment C-1.

# Attachment C-1: Public Participation Comments

## Survey Responses

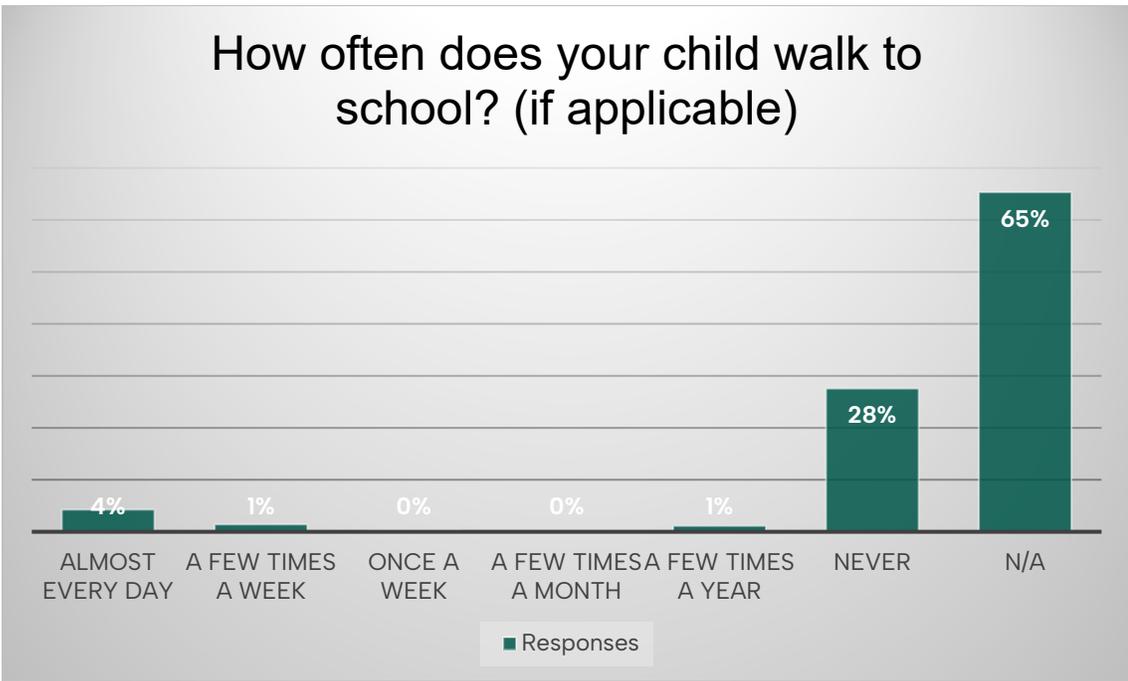
1) What community do you live in?



2) How often do you walk or run in your neighborhood or around town



3) How often does your child walk to school? (if applicable)



4) Where (if at all) do you walk or run in your neighborhood or around town?

- Black Creek, streets, ART
- Sierra pacific industry trails.
- Jenny lind rd and Milton rd
- In my Murphys neighborhood and into town
- All over... down 49 and around the neighborhoods
- Sometimes I walk around my neighborhood but with no sidewalks in can be unsafe. There aren't any safe bike paths and cars drive crazy around here so biking your risking your life.
- Manzanita Dr or in Murphys proper
- Local streets, in Murphys
- Around the property
- Mustang Rd & White Pines Lake
- Lake Mont Pines
- Appaloosa Way -O'Byrne's Ferry
- On the streets
- Greenhorn Creek
- Michel Road and on our property
- On my own property and on our country road
- town square copperopolis and downtown angels camp
- Around Copperopolis Town Square in their parking lots but would LOVE to have a trail or path around that area that is safer.
- neighborhood
- Tennis Courts at Greenhorn Creek
- Rocky hill, feeney park
- Town square Copperopolis.
- Around the block and at Black Creek
- Highway 12

- Around Town
- The roads around our house .... Siegel/Hautly/Sparrowk Lake Hogan and other trails
- neighborhood and downtown
- Shopping centers
- Greenhorn
- Neighborhood lake, rim trail, grocery store (hwy4)
- On the street in the neighborhood, or at white pines lake or to downtown arnold.
- Lake Mont Pines Community or the Stanislaus National Forest behind Lake Mont Pines.
- Greenhorn Creek
- Gold creek/lake hogan
- In Meadowmont neighborhood, and from my business on Hwy 4 to the post office. Also on Blagan Rd.
- Riverbank, CA
- Gated community
- La Contenta
- Around La Contenta neighborhood and New Hogan Lake
- Store, restaurant, park
- On the side of the road
- From Middleton's to high school
- I don't have any place to walk. I live on Garner where the cars drive too fast
- Walk the dog for a mile-plus.
- Sidewalks and back trails in CV
- Around my neighborhood, out to Ironstone, Arnold Rim, Melones trails, Greenhorn neighborhood,
- I mostly say in neighborhoods just off of 49
- Blue Lake Springs to Big Trees road that goes to the back end of Big Trees State Park
- Gallius, heney, Dale, Butler, Denis, Blair, Ross
- I carefully and with difficulty walk on hills here in Murphys Diggins. Walking in Murphys is dangerous and unpleasant.
- Baldwin Street, Hwy 26 & other areas in Rancho Calaveras
- Stockton rd
- Greenhorn Creek Area
- On the steet
- From Stelte park to town
- Angel oaks and greenhorn
- Street in gated community
- Behind MT elementary school
- My neighborhood
- Around Meadowmont/ Fly-in-acres/Pinebrook
- Around apts on Copello or Bret Harte sidewalks are non existent on 4 by travel lodge it's sad
- We take walks through our neighborhood, and go hiking at local trails
- Throughout the Greenhorn Creek neighborhood
- To the high school
- On my 20 acres

- Arnold rim trail and between bear valley and murphys
- Yo the street. There are no side walks or trails.
- Through my regular neighborhood behind Utica Park area and alongside HWY 49 up and down Angels Camp.
- Neighborhood streets, across highway 4
- Rancho
- Greenhorn creek
- Greenhorn
- Garner, Dogtown, Murphys Grade, Hwy 49
- Mostly around blue lake springs, and the rim trail
- The golf course while golfing. We always walk. Also, we love hiking at Big Trees, and near New Melones. However, we have to drive to get there.
- In my neighborhood
- Blue Lake Springs, White Pines Lake, Arnold Rim Trail
- Around a loop in my Wallace neighborhood
- Library to Government Center, Russell to sunset to Broadway to Market
- Around the neighborhood in Poker Flat
- On my property
- Campo Seco rd, Marlette st, center street, Main Street, Hobbs field
- neighborhood streets and occasionally Arnold rim trail.
- Purdyville to the power house rd. By the creek, downtown then back to purdyville
- Around hogan and on McCauley road
- Neighborhood and government center
- Yes
- I walk to a few neighbors houses, and I walk from store to store when I'm in town
- Angel Oaks neighborhood
- Asphalt and sidewalk.
- We run and walk around the tracks at the schools (VSE, Toyon), but neither are great quality. We also take walks around our neighborhood, not well paved, mostly gravel, lots of hills, but pretty area. We would walk around town, but there isn't a "cute little downtown" area to walk to/through, so this doesn't happen much. Would be great if we could move in this direction as a town. Create a "small town" downtown street like Moke Hill, Murphy's, Jackson, Angels. We're just two intersected highways with disparate businesses. We enjoy the trail at Hogan, but it's short. We walk the Coast to Crest trail, which is nice. Have also enjoyed walking the Arnold Rim trail and the Natural Bridges trail. There is also a trail head in Paloma.
- My neighborhood Anderson st and around the area
- sheep ranch road and out to ironstone
- Arnold Rim Trail
- Neighborhood
- Within 2 miles of my neighborhood in Rancho Calaveras. Sometimes Hogan Lake.
- Everywhere
- We walk home from MT a few times a week. It's too busy/to much traffic to walk in the morning. We also walk and bike ride with the kids in greenhorn
- Along main roads, biking on Dogtown Road
- Silver Rapids Rd, Huckleberry, Crowell Ln.
- Copper Valley and Town Square

- Neighborhood streets (mainly Sunset St & Russel Rd), main roads Pool Station Rd and 49
- White Pines Lake and Arnold Rim Trail
- Alex Quinones ball field, turner park & walk along the streets in San Andreas
- Down town
- Up to Government Center and back to the hospital
- Near Mark Twain Elementary neighborhoods and surrounding neighborhoods, as well Greenhorn neighborhood, would love to safely run the highway towards Sonora, Vallecito, and Copperopolis.
- Little John Road or Black Creek Park
- Greenhorn Creek, Finnegan Rd, Main St
- Hogan reservoir
- Sonora, Martina, HWY49, Bush, Main, Finnagin, Gold Cliff, and Mark Twain roads mostly
- I live on 40 acres off the hwy so I head to greenhorn
- Private road or trails
- Usually walk at work at county buildings
- Only at the park
- Rancho Calaveras: Mcatee/Nall/Baldwin
- Country road but they are graveled and uneven with ruts
- Mom walks, around my street, Lake Hogan trails.
- La Contenta, hogan lake
- Neighborhood
- Hogan lake
- My property
- At Hogan or in La Contenta
- All throughout valley springs
- Gold Strike Rd. and Government Center
- Paths around Wallace Lake and neighborhood streets.
- La Contenta
- Roos rd., Brooks In., and around my neighborhood.
- Murphys
- On street and in forest service land
- Try to it's difficult to do so
- Lake Hogan
- On my street and at Lake Hogan
- In our neighborhood
- New hogan dam + park
- I ride the trails on Spi and blm land in West Point, railroad flat, lone, Jackson, and sometimes in Arnold.
- In town, up to the ball field, around the school
- On streets and in hiking trails
- I'm disabled, I can't run or walk a lot.
- Big Trees Road and 6 Mile Roaf
- Burson road
- No where. You would get ran over

- i
- On the roads or off road paths
- Just down the main road through town, RRF road
- Neighborhood
- In the foothills
- near park and main street in Moke Hill, from tennis courts to town.
- La Contenta
- At lake hogan
- Gold creek, La Contenta and Hogan
- Have to go across the street to Cedar center because we have NO sidewalks ☹️
- Cant walk in town. My riad on southworth is used as a speedway between 26 and 12 and for local motorcyclists
- Down Berkeseey Drive
- Running on the road for exercise
- O'Byrnes Ferry Road and Copper Cove
- Library/ government center trails
- private roads in my neighborhood
- River of skulls, the only paths around.
- Greenhorn creek
- Murphys: Hwy 4, Bret Harte, Sheep Ranch, Main St, 6 mile, Williams, apple blossom...
- Hogan trails
- Both
- Both
- Through neighborhood streets
- La Contenta, gold creek and the trail around the lake
- In my backyard.
- I will sometimes walk around downtown Valley Springs, around the Good Friends restaurant in that general area. I also often walk around the La Contenta area. Hogan is also a great spot.
- Side of the road or in the road .
- Centennial St. to the post office downtown Angels Camp
- New Hogan
- No where safe to walk where we live
- Local streets or the Bret Harte track
- In my HOA approved trails at blackcreek where its safe from cars
- Neighborhood and Hogan
- On Finnegan lane to the end by the creek and all over town
- Brett Harte Track, Forest Meadows, and the Murphys neighborhood
- Side of road
- Little John
- Valley springs - park behind VSE
- Walk in neighborhood but in remote area of Mountain Ranch.
- Up the hill from my house along Hogan Dam RD
- Less busy streets off Vista Del Lago
- La contenta and in town
- New Hogan

- Hogan lake
- Rancho
- Mill Woods subdivision
- Center street, Campo seco road, all around
- Berkeley
- LaContenta
- Paved roads
- No where
- Gold Creek
- La Contenta, Gold Creek, Lake Hogan
- Jenny lind area
- Neighborhood by Valley Springs Elementary
- Neighborhood
- To and from New Hogan
- Angels oaks and greenhorn, because it's the only kind of safe area to walk with traffic
- Trails at new hogan.
- Nowhere
- On the roads
- I drive to Hogan and walk on trail. Would be great to walk on sidewalk!
- In the streets because there are no sidewalks in San Andreas (pope area)
- La Contenta subdivision.
- Toyanza Subdivision to the DMV, or just around the neighbor. The Alex Quiñones Community Park is another place.
- All over San Andreas
- The cemeteries and residential areas
- Lake Hogan, the pond off Pardini, and the river access off Doss Ct
- GOLD STRIKE RD, HWY 49
- Hogan lake
- logging roads
- I don't because there are no sidewalks
- Lake Hogan
- Valley springs
- Neighborhood or the lake
- On the rds
- Hogan Dam
- Lake Hogan
- Everywhere except between Vista, Del Lago and Hogan Dam Road where there is no bicycle lane or shoulder on Highway 26
- Davis street loop or on our own property because there's no sidewalks or bike trails anywhere but Hogan
- In Greenhorn
- Can't, the roads aren't safe.
- Hogan Lake, trail behind Valley Springs Elementary
- Quartz Drive, EB Mud Trails
- Hogan Lake & in Valley Springs town.
- Up and down neighborhood streets.

- McAtee St area
- Messing rd
- Mostly bike in neighborhood, into Ranch and around Hogan
- Walk around McAtee and Baldwin
- I live in an HOA with private roads. That's where I walk.
- In town, but would like to have more crosswalks and stop lights to walk across the street
- Downtown to New Hogan
- I walk my kids to school. We walk the trail behind Valley Springs Elementary. and my oldest son walks all around town. He wants to be able to walk to the gym, but there are no sidewalks so it's not safe. I would love if there were more sidewalks.
- La Contenta area
- La Contenta and New Hogan
- On the streets around my house
- In my yard
- Hogan Lake
- From Bush st to park ave.
- Hogan
- Garner, Bergsma, Freidman, Stabulis
- Mostly in neighborhoods.
- Lake Hogan Trails
- On the street
- The neighborhood and Lake Hogan
- Vista Del Lago Dr./ La Contenta
- Rancho Calaveras
- Neighborhood
- immediate neighborhood only.
- In my neighborhood
- Gold Creek
- Baldwin Jenny Lind Road and Redman!
- On our close streets in Rancho
- At lake hogan or Comanche
- Hogan trail
- Around hogan trails
- hogan
- Neighborhood and town
- Library, park, grocery store, gym, lake, restaurants
- Rancho Calaveras neighborhood. Near the Silver Rapids area.
- Around the neighborhood.
- Demin ct and Hartvickson rd
- Only option is around Hogan Dam but you have to be worried about snakes and animals
- Meadowmont to post office, stores, restaurants, concerts, White Pines lake
- La contenta.
- Lake Mont Pines
- Inside the golf course.

- My property, as it is unsafe to walk on the roads in this County for various reasons.. What this bloody County needs is to establish horse trails through out the County and connecting to adjacent counties. This could be done inconjunction with some other projects that the County should be doing but isn't, due to there not having a long term plan. Ask me. I'll tell you what it should be. LOL.
- Shopping haircuts etc
- Not at all. There's so safe place to do so in my community or close by unfortunately. There are no sidewalks, bike paths, nor trails in my area.
- Just in my own neighborhood
- Past library, govt center, pope st, turner park
- On the roads around the neighborhood and on Quill to Black Creek Park We have no sidewalks or hiking areas.
- All around town and out to Ironstone.
- Just in my neighborhood blue lakes springs
- Baldwin, Westhill, area.
- Lakeshore dr to kiva to Little john and copper cove drive
- Stelte Park
- By the Library
- In my neighborhood, fire roads and Arnold Rim Trail
- In my immediate neighborhood
- La Contenta and New Hogan Lake
- around government center
- Mountain Ranch foot path thru town
- 6-Mile to Ironstone and from Feeney Park to Downtown Murphys
- Walk locally in La Contents Neighborhood
- Throughout subdivisions, and throughout town
- Main St., park, library
- I like to bike in Calaveras County!
- Hogan Lake because there's a safe walking trail. Also in Rancho Calaveras neighborhood where I live.
- altaville, dogtown, angels camp, murphys
- on our neighborhood streets; Arnold rim Trail- San Domingo Trail, Stanislaus River access trails
- On my side of the highway (highway 4)
- San Domingo Canyon section of Arnold Rim Trail
- Around my neighborhood/Jenny Lind
- Murphys, San Domingo Canyon, Arnold Rim Trail, White Pines Lake
- Walk in La Contenta b/c there is no where to walk with my littles where I live (on Baldwin)
- Hogan reservoir, MC2C trails, la contenta area
- New Hogan Lake
- On my street
- La contenta
- Valley Springs, Nove X main X jean X hwy 26
- At the nearby trails around the lakes in our area. Or down our private road toward the main road.
- In the gated community.

- In and around Murphys
- Walk at the lake and in La Contenta- no sidewalks ☹️
- Meadowmont, Blue Lake Springs, Fly-In Acres
- Gold Creek and La Contenta neighborhoods.
- Around WLE and the lake here
- Historical AC / Greenhorn.
- Huckleberry
- Neighborhood at the very top ridge off of Northwest Silver Rapids. But I also often walk near Hogan.
- La Contenta and Hogan Lake
- The trail near hogan lake or a block around my neighborhood. Sometime the river of skull trail and the hike up to the cross.
- Up and down the street/neighborhood
- Up and down my personal street or by the Veterans ball fields
- Arnold Rim Trail, SPI Land, Blue Lake Springs West
- Golden Hills or Hogan
- La contenta residential areas, near Jenny Lind park by VSE, or hogan lake trails
- Hogan Trails and Rancho Calaveras neighborhood
- Pope St
- Bush St to greenhorn then back to Mark Twain
- Campo Seco Road
- Main street and adjacent neighborhoods. Murphys Community Park.
- I dont walk around town since there is no safe place to walk from my house to town, crazy drivers
- La Contenta Area/Vista del Lago. Lake Hogan, New Melones
- In the neighborhood( Toyanza dr.)
- neighborhood
- Turner Park
- Forest Meadows neighborhood streets, 6 mile Rd
- Rancho Calaveras
- in the street
- Hogan lake trails and in town errands

5) What do you like/dislike about walking or running there?

- traffic
- The beauty
- No shoulders or safe ones.
- Intersections that are not pedestrian friendly
- There are blind corners in the neighborhood. I appreciate there is enough room to walk/jog down the hwy/ roads and do loops. However, it could have some better space for bicyclists. I really dislike bicyclists on Murphy's Grade rd or sheep ranch. They are too narrow with blind curves. Hwy 49 between downtown and the church is dangerous to walk, but a lot of people do.
- I like to take my dog for walks but it is challenging with no clear walking paths and all the loose dogs around.
- Difficult to access Murphys or other areas safely on 4
- Love scenery. No protected sidewalks

- The roads are curves and afraid of getting hit by a vehicle there actually no place to walk on railroad flat it sucks
- no designated walking areas
- I like the option of flat or hilly walks/jogs.
- No walking or bicycling lanes
- Not safe, blind corners
- We love this beautiful neighborhood and enjoy walking here daily.
- Pot farms, dogs rubbing loose, fences, paranoid Trump supporters
- Trails and dirt roads.
- I like the lack of traffic but town square is too small for a longer walk
- it is a nice place to walk but it required dodging cars. I think a trail there would be nice with perhaps signs. Near a bus stop.
- The fast cars...I hate them I love my area
- I like that it is always available.
- It's not a complicated neighborhood. The only bike lane on Little John stasis but ends abruptly with nowhere to go.
- Nothing
- Not enough room on the shoulder of the road
- Uneven pavement
- Feel vulnerable re bad/distracted drivers
- downtown Murphys is dangerous for walkers, strollers, seniors. People do not always stop at the 4-way stop by Alchemy and it is dangerous to cross there. rs and disabled. We love the historical aspect, but there should be markers showing where wheelchairs and strollers, etc. can go to get through town. Sidewalks need repair desperately; broken asphalt. It's a wonder no one has sued the county as people have fallen.
- Nothing
- Sidewalks, less traffic, slower traffic, shade from trees
- The rampant, invasive fire hazards (yellow star thistle, mustard, juniper plants) that over reach on the side walks and walkways. It is unsafe and increases our fire risk.
- Love the rim trail, dislike that there's no safe way (ex sidewalk) to get to the grocery store or restaurants along Hwy 4
- I don't mind my neighborhood, but there are some streets where there is only ditches and not much area to get 'off' the road to the side so cars can past - for example on Moran road. Same thing when I walk from Blue Lake Springs to the post office. Walking down/up Highway 4 is not great at some points as the extended shoulder (dirt) is not wide enough or full of brush that is difficult to walk through and the only option is to walk on the concrete shoulder, which is too close to the cars and does not feel safe.
- The streets are horrible. No place to step off or ride without potential injury.
- Repetitive. Would like more local options.
- No sidewalks or bike paths
- No sidewalks or paths at all! No crosswalks. Cars drive fast on Rt 4. I like the trees and access to hiking paths relatively nearby, but getting around town is dangerous and unpleasant.
- The complete streets, side-walks, trees, landscaping, etc
- I like to bike and hike
- Quiet streets. Very little traffic.

- Safety concerns. People drive too fast, no sidewalks, and not enough room for 2 people and a dog to walk in the gravel along streets.
- Motor vehicle traffic is unsafe for pedestrians. No walkways or trails for people and bikes
- It works fine.
- No sidewalks the entire route
- Too many fast cars, and distracted drivers
- No sidewalks, terrible roads and no traffic control.
- Uneven back trails
- I would love a designated walk/bike path from Murphys to Ironstone, it would've been amazing for our community! I like Greenhorn because it's one of the only paved sidewalks to walk with a stroller and toddler. Love ART for the mountain hikes.
- There aren't always sidewalks when I poke out onto 49
- No area for walking off the side of the roads need more walking/bike lanes and paths to keep us safe
- Dogs roaming, cars not sharing the road
- The uneven sidewalks and no trails at all.
- No sidewalks!
- No walking or bike path for kids going to or from school
- No enjoyable & safe way to walk to downtown area
- Cars, they seem to speed up when passing... also the asphalt gets very hot
- We walk across Vallecito Rd to Depot Rd because walking on Vallecito road is so unsafe
- I like it except I wish there was better lighting (why aren't there more street lights??) and the sidewalk extended past the first turn into Greenhorn (wish it kept going all the way to the third turn)
- It's ok but view gets okd
- No sidewalks horrible roads
- No where to run in Valley Springs
- Having to walk on the streets- curvy, narrow and people drive way too fast
- No sidewalks where you feel safe as a senior
- We love living in the forest and enjoy the trees.
- I am sorry that there are no sidewalks along Stockton Street. There are hundreds of homes in Angel Oaks, Greenhorn Creek and the Gallery neighborhoods. Instead of walking to Savemart and Rita's, etc., everyone must drive because it is too dangerous to walk the shoulder of the road on Stockton
- The crosswalk on highway 49 going to the high school IS DANGEROUS!!!! Poorly marked lines, poor signage approaching, and no flashing or crossing signs to alert cars of ppl crossing... No lights around
- It's safe
- Hard to get from town to town safely
- There are planned horse trails for Copperopolis that have never been enforced.
- Sidewalks don't connect or are nonexistent and there are no large trees to reduce the heat in town. Vegetation lowers temperatures for everyone.
- Loose dogs
- Greenhorn creek rd does not have sidewalks
- Level concrete/pavement and natural beauty

- Cannot walk directly across Street from Dogtown Road to CVS shopping center. Not safe for my children to get across highway 49. We live so close to everything yet. It feels so far because it is not accessible by foot safely.
- It's calm and peaceful with beautiful scenery. I wish Arnold was more of a walking or biking town . I would love to be able to walk from BLS to downtown Arnold to eat or get coffee and shop.
- Sometimes we feel rushed to keep pace with other players.
- The scenery
- I'm in the mountains!
- The weeds on the sides in the street
- O.k.
- I like walking here but the weather is often too hot and the streets have limited shade.
- Not many trails or safe easements near the road to run or walk
- No sidewalks, it's dangerous for kids to walk home from MHE because of the lack of sidewalks.
- face flies in the summer
- There are too many bushy trees not being managed / trimmed, getting worse.
- Hills in my neighborhood ( toyanza) cars in government area
- Not very safe places to walk
- Fresh air
- Sidewalks and safety
- Not really safe in areas without sidewalk
- The tracks at the schools aren't kept nice, divots, rips in turf, covered in weeds and rocks, etc. Hogan trails are short and not connected to each other, nor to town. There is also a trail head in Paloma, but oh boy the poison oak does me in for weeks, such that I don't want to go back. Would be great if we could eradicate the poison oak.
- No sidewalks to stay off the roads
- Sheep Ranch Road has many speeding drivers. It would be great to have " humps" or "bumps" installed. Also there are parking lots ( white church – first Congregational ) whose parking lot is being used as a street/ pass through. This is dangerous because there are no stop signs when they exit the parking lot. They speed through the lot.
- Like the time in the forest
- Limited sidewalks
- I like the "community feel". However, I'd love to have a walking/biking path to Valley Springs from Rancho Calaveras.
- Most roads in copperopolis there is not even enough space for pedestrians to safely walk, run or ride a bike. You need jump in the bushes when a car drives by or car has to move to oncoming traffic to allow space for pedestrians.
- Roads are narrow, lots of parked cars and traffic throughout the neighborhoods to feel safe walking or bike riding with young kids
- Traffic traffic traffic–noise and safety issues
- Not safe because there is no side walks and cars pass by closely. Sometimes fast.
- Limited options
- Hard, hot asphalt surface with litter from drivers and regular broken glass. This is especially challenging when walking dogs.
- That area is fine. I would like to walk around the shops but I feel it isn't safe due to no sidewalks

- Alex Quinones ball field – I love the walking trails & disc golf course, but for part of the year the trails are far too overgrown to use, weeds & vegetation up to my waist etc. The streets in town in San Andreas are dangerous to walk on with a dog because of the lack of sidewalks.
- I like walking along the creek
- All of the crosswalks aren't followed. Cars speeding on Mountain Ranch Road
- Need more shoulder space on the side of roads to allow for safely walking.
- It's really the only place to do that.
- Scenic, close to home and accessible.
- Quiet
- I fall regularly because of loose gravel. There are no sidewalks, or uneven sidewalks cars are aggressive partly (I think) because walkers are not 'normal' around town
- safe, lots of people, I usually have my 3 year old
- Trails not connected
- Curbs, sidewalks parking lots safer to walk on County campus
- It's not long enough.
- I like the exercise and fresh air. Don't love the fast cars.
- Mountain lions hiding in the brush
- There are not many walk friendly trails
- Lack of space for civilians, designated walking trails
- Not enough trails
- I love it I don't come in contact with anyone and love the terrain
- Hogan– love the trail and the lake. Dislike the worry of snakes in the summer. La Contenta– love the ease of walking in the neighborhood, dislike the traffic without designated walking areas
- Guest from out of town trashing our community
- No bike/pedestrian lanes or sidewalks on Gold Strike, which would be a perfect, scenic, off-highway location for the San Andreas area, but it doesn't always feel safe because of no lanes and scary people near downtown. If an effort was made to attract pedestrian and bike traffic there, more people would use it for recreational purposes and hopefully overshadow the scarier people.
- Very little traffic. Mostly is pedestrian, cycling only.
- It is not safe, we need sidewalks.
- Traffic is very quiet. Drivers respectful, because we know each other. But, if I in town...there is completely different story
- I love walking there because they have sidewalks
- prefer to have trails than walk on the street.
- Safer areas to walk without being worried you and your pretty well be ran over.
- Limited trails on the lake side. The river side is too isolated and has transients so I don't feel safe.
- Lake Hogan is great. Don't like walking on my street for safety reasons
- It is safe, accessible and comfortable.
- I have to walk on the side of the road to get to the park entrance
- Not enough access. Trails are lacking water and get boring at the campo seco trails, costs a lot of gas for me to haul there. And between the snow gates, snow, and fire season, seems like Spi and blm lands were hardly open 30 days this June! Riding out there can be dangerous with the dirt bikers, trash dumps, and random target shooters, I wish we could organize a little more.
- Not enough lights in evening also need some trash cans

- Walking along highway 4 feels dangerous, a sidewalk would be great. Also cycling on highway 4 feels unsafe ( because of cars, but also sand on the side of the road)
- N/A
- Nothing
- I love walking but I hate that we don't have side walk
- No sidewalks or area to walk
- on my property
- The roads in Mokelumne Hill are small and are not safe for kids to walk on. Cars go too fast around town and kids have a hard time negotiating oncoming cars.
- Too busy with cars going by and no dedicated trails anywhere nearby
- No sidewalks
- peaceful, not a lot of room when cars come
- No sidewalks
- It's safe. No risk of being hit by a car. Slim chance of encountering aggressive dogs.
- The walkways
- Paved roads that are even 🚶
- As above. No sidewalks and dangerous vehicle traffic. Daily
- It's fine, would like other options
- Lack of traffic
- No sidewalks, blind curves.
- I like the designated walking trails- it's peaceful and feels safe
- No separation between vehicles and pedestrians.
- Like, sidewalks. Dislike, no paved route or non gated way to finnegan to walk to downtown.
- Is limited
- Mostly safe places to walk, not a lot of cars. The places without sidewalks can be tricky
- Traffic
- Na
- No walking paths
- No sidewalks or designated paths
- Want to ride from La Contenta to down town without having to go by way of the lake.
- The serenity
- There are hardly sidewalks available and traffic makes it hard to move around town in an accessible way. There are also harsh/soft shoulders which discourage walking along Highway 12 or 26. As well, when my child walks through downtown Valley Springs (Pine Street, Daphne Street) I feel it is unsafe for her to travel by herself and usually require an adult/older relative/other friends to be with her. There is also a strong lack of proper shade.
- Scared I will be run over no space on the side of the road.
- No side walk, heavy traffic not safe for adults or children.
- I love where I walk now. I am unable to walk in my street. Although the speed limit is 25. People speed. Lots of trash. I would not bike here as there is no lane in 26. I think that is much needed
- No shoulder. Not safe to walk.
- The track is hot and not always available (sports practice and games etc) most local streets lack sidewalks
- Not enough trails for continual use

- Loose dogs and no shoulder
- I like being by the creek and the lack of traffic
- Heat!
- No sidewalks
- No sidewalks or safe places to walk.
- This is the only option to walk dogs/ ride bikes.
- Unpaved roads
- There is no shoulder so it is fairly unsafe especially with the blind corners
- Dislike- No sidewalks or street lights
- No sidewalk
- Narrow road
- Need more trails
- Biking
- the lack of sidewalks makes it dangerous
- People drive really fast on campo seco with no shoulder for me to pull off on
- Nothing
- Dislike no walking paths or bike paths
- Nothing
- I dislike that it's all on pavement. I'd prefer trails.
- Lack of sidewalks and street lights
- I dislike that there are no sidewalks and sharing the street with vehicles especially around blind corners and hills
- Would like sidewalks
- I dislike that there are no sidewalks or bike lanes. I dislike that there is no safe way to walk or bike through to La Contenta and beyond.
- No paved roads to walk on
- No sidewalks to or from the lake
- Some sidewalks to walk on makes it safer, wish more of town was safer to walk to.
- I like that they are clean and moderately challenging
- Cars
- I like that the trail is well maintained. I do not like having to drive to walk.
- I have to dodge cars because there are no sidewalks, and it is dangerous to take my baby in the stroller.
- There are no sidewalks. Not only is this hard on older folks, it puts too close to the traffic that's usually running 10mph or more, over the speed limit.
- There's no crosswalks, and the sidewalks are very narrow. People drive too fast and risk running you over. The Alex Quiñones Community Park is a bit sketchy as you have to cross through some private property. It always feels like I'm being watched even when I'm alone at the park.
- Auto traffic is too fast. Need traffic calming.
- not enuf room to walk on rd
- Stickers haha! I do wish that overall there were bigger shoulders or sidewalks in my town
- I like the inclines. I wish there were more sidewalks.
- Nothing
- To much dust or the homeless make it uncomfortable
- No safe place to walk

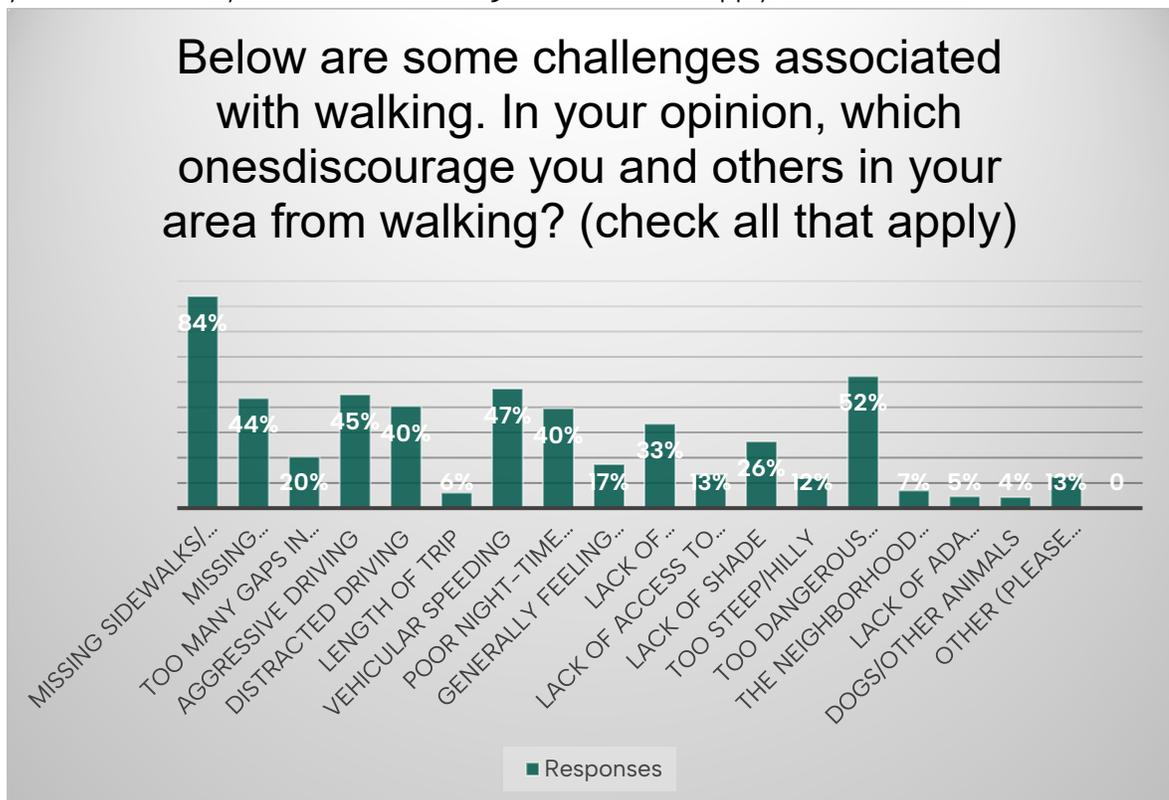
- I love that I can choose the time, place and distance. We have other trails on the agenda.
- No safely for some of us that walk everyday with our kids
- There are unleashed dogs, poor lighting and no sidewalks. We really need paths in the communities that extend through public land with paved or designated walkways
- No cross walks in San andreas that are safe. Children walk to and from school and ots dangerous.
- I like how well maintained the trails are. In addition folks walking their dogs do a pretty good job of picking up waste that their dogs lewve
- yes, I walk or use my walker/cane and my father-in-law in town has a mobility electric scooter that he uses because he's disabled and cannot get out to my house just off Silver Rapids past Vista Del Lago
- Nature
- Beautiful outside scenery is nice. No bike trails or sidewalks anywhere sucks
- It has sidewalks & wide streets
- No space to walk, no sidewalks or pathways.
- Safety
- There's no designated path in Camanche Ranches along the EB MUD Pipeline
- Nice trails to walk at Hogan. Valley Spring is harder because there isn't any shoulder
- No shade.
- Nowhere safe to walk or ride a bike. Drivers are too fast and reckless in Rancho Calaveras/Jenny Lind areas. No way to connect to Jenny Lind elementary except by hwy 26. Dangerous for bikers and pedestrians.
- It's nice but busy with traffic.
- Like that we are able to get to Hogan from our home
- There, no side walk
- Lack of traffic rule oversight. We have people crossing on double yellow lines. Why would anyone think walking or biking would be safe when folks to that and go unticketed due to lack of resources for enforcement. We have a big county. We are understaffed. I can see people getting seriously hurt unless enforcement capability changes.
- No crosswalks and no sidewalks
- Traffic, no bike lanes, it's very dangerous
- I wish there were more trails. And I wish they were more sidewalks.
- No sidewalks
- There is no connection from La Contenta to anywhere else.
- Nothing
- It doesn't feel like there are many safe places to walk and run
- There are no safe sidewalks to keep you safe. And my grandchildren walk from park ave to school everyday. I just pray a car doesn't kill one of them because Angel's wont keep their citizens safe they only care about tourist.
- Love the view
- Large trails
- Loose dogs (sometimes, not all the time)
- No sidewalks
- A lot of hills and have to drive far to get to a place that I can walk with my kids
- No sidewalks or biking/hiking trails connecting to town.
- Crazy drivers and bad roads

- No shoulder, not safe anywhere, fast, inattentive drivers, no dedicated bike lanes
- Dislike that there are no sidewalks
- Fast cars, no sidewalks, unsafe, loose dogs. Limited to property
- I dislike that there is no sidewalks
- not long enough. Local rural road. Can't get any farther.
- The heat
- I love it!
- Can't walk to town on Hwy 26
- Views, easy to access
- Speeding cars – have no respect to slow down
- Only trail in town wish we had better bike trails
- I like the beautiful view of the lake. I don't like the rattle snake risk or that I can't start from my or my companions house.
- no sidewalks to walk on for safety. Town is "far" from residential areas and there is not a safe route to walk there.
- Somewhat dangerous
- Lack of designated sidewalks and shade
- No sidewalks. Speed limit is 45. Rock trucks coming from the quarry frequently blow through the stop sign at the Silver Rapids Hartvickson intersection. Somebody's dogs are always loose.
- Dislike the cars going to fast.
- I don't like not having a path to walk on
- There is no where to walk dogs, bike or even just walk to get some exercise without worrying about getting hit
- Like that there,s so little traffic
- The speeding on vista Del Lago
- Loved it except for the horrible road conditions. I have low vision so walking on undermaintained roads is hazardouss
- There are no good walking trails. You have to enter o to golf course property to walk in a safe area. It is not safe to walk in Little John.
- It's unsafe/dangerous to walk/run on the roads outside of a few blocks in the towns. Again, there's a serious lack of futuristic planning in this County. Something like this could be paid for with what is already happening in this County plus things that the County should be pursuing, but is either to lazy or to stupid to pursue.
- Safe
- I dislike that I can't do it
- Don't feel safe. No shoulders. People drive way too fast
- Pope st is dangerous
- It's unsafe. No sidewalks, sometimes not even a shoulder.
- Sidewalks uneven. No path on 6 mile road.
- I love the access to trails but it's not walkable to the grocery store because the highway is dangerous to walk down.
- Quiet, friendly
- No safe area off side of road to avail cars until divided part of little john
- Cars
- It's a nice path but used by lots of dog walkers
- Mostly safe to walk my dog off leash – though I always bring a leash. Love that!!!

- No walkways. Have to walk in the street with the cars.
- Dry and hot
- I would like to be able to walk to turner park , no safe walking on Pope street. '
- Paved, dog friendly
- There are no dedicated pedestrian paths or bike paths. I feel like cars have the right-of-way, and I just hope no one is flying down the street and will have time to see me walking or biking.
- It's quiet, and no traffic
- Minimal sidewalks, no dedicated pedestrian and bike paths
- Narrow roads with speeding cars that think they are God.
- too close to road, no access on highway to connect to towns from outskirts of town
- I don't like crossing the highway, and there is no shoulder/sidewalk on our residential streets. We usually have to drive to the trailhead to access trails without being exposed to traffic.
- proximity to my home and natural beauty
- A trail would be nicer than walking in the road without sidewalks
- Exposure to nature, proximity to restaurants/bars
- No side walks.
- Would love more trails so less walking on the streets; no sidewalks in my area so its not so safe with the traffic
- Like: pretty scenery. Dislike: dog poop on trail, overflowing garbage bins, random bulldozing of vegetation.
- Fast cars, no sidewalks
- Not a lot of cars
- Unsafe shoulder, often has trash
- I like the natural aspect of the lake trails.
- I like being in an area that's safe to push a stroller but I wish we weren't limited to walking safely just within our community. We would love to be able to explore further.
- sometimes a lot of traffic in Murphys
- Hogan is great. La Contenta has no sidewalks
- Lack of shoulders can be challenging on busier streets like Mustang and Moran
- Cars!
- The roads in the community are wide enough to walk comfortably with cars, and the path around the lake is nice. May be nice if more of it was paved for people with strollers
- Dislike: narrow roads and speeding cars. Would like more dedicated walking/running trails.
- Traffic
- I prefer paved roads easier to bike and walk also can see wildlife in the event. I need to avoid it lol
- Great views at Hogan and nice trails.
- Don't like to walk it alone. Could be snakes and mountain lions. Poison oak
- I often have to walk my neighborhood multiple times in order to get in the activity I want because the only other option for me is walking down Hwy 49, which doesn't have sidewalks and I feel unsafe with my baby.
- Not much space to move to when vehicles need to go by
- No separated trails

- No path or sidewalk options
- There's no sidewalks and/or stroller friendly trails
- The Hogan trails are well kept and feel safe. I don't like walking in the neighborhoods as much because lack of walking space and loose dogs
- No sidewalks
- There can be a lot of sun during the hot weather and the car is drive very fast. I like that the loop is easy With hills and flats
- Cars
- Crowds and car traffic. Our sidewalks are an embarassment; they're unlevel enough to be dangerous. I see people fall on our sidewalks near-daily. Elderly family members have been injured that way. Speed limits are never enforced on Main Street, people drive dangerously by my house dozens of times daily on the way out to Murphys Grade.
- i love the views dislike the crazy drivers
- No sidewalks – dangerous cars. No lanes for bikes
- Quiet, not many cars
- not safe
- Love It!
- Unable to link neighborhoods safely or practically due to traffic or access restrictions
- Quiet, safe roads
- like: the rural setting; dislike having to watch for cars.
- Few trash cans both at hogan and at or near store entrances

6) Below are some challenges associated with walking. In your opinion, which ones discourage you and others in your area from walking? (check all that apply)



Other:

- Loose dogs!
- We are very happy walking here.
- downtown angels camp, there is sap dripping off the trees gets on my dog's feet
- Would love a shady area/path to walk around Town Square.
- Let's face it there are no sidewalks in Calaveras County with exceptions to very few in town areas. No bike lanes. The massive new hwy 4 project has no bike trail added to it or other walking dedicated trail.
- Potholes are ridiculous.
- N/A
- none
- Want more walking and biking paths and allow ebikes
- We need trails. And not the Arnold Rim Trail. We need to be able to walk dogs safely.
- Valley Springs is walking running and biking unfriendly
- Not enough signs... Crosswalk lines should flash when ppl are crossing, needs speed humps 2 slow on coming traffic
- Dogs are not allowed at our boat launch/picnic grounds. We need dog parks.
- Uncontained Dogs
- None of the above
- No dedicated walking paths
- bears or aggressive dogs
- A fear, Mtn lions in the area & trees need trimming in the neighborhoods.
- Crosswalks and shoulders and street lighting are only needed in town. Because so few people walk around their neighborhoods. Usually there are unpaved shoulders in those areas where people can get off the road. Most of them don't walk after dark. Way too many distracted and speeding drivers.
- parking lot used as road = danger to pedestrians
- We live rural - if one wants to walk or run, one ought to move to a suburban area or city
- .
- Would like to see trails connected or ways kids can get into town from surrounding neighborhoods
- Mountain lion dangers and pot growers with illegal transient and migrant workers, who are unvetted criminals
- Out of town guests
- I don't want to I have plenty of space
- Missing bike lanes
- Sketchy people in San Andreas, hot sidewalks dogs can't use, trails dogs aren't allowed on, dirt bikers and off road cyclists that run you over on the trail and scare horses and dogs, loose neighborhood dogs that chase and attack you.
- Like how it is now. No issues.
- night time creatures
- Would love to ride bike to town but cannot very unsafe

- Loose aggressive dogs. Neighbors forget to close their gate and dogs approach us on the street to protect their territory. We have almost been attacked multiple times so we stopped walking in our neighborhood.
  - No crosswalks to cross Hwy4
  - I have been blamed by drivers for walking along the side of the road because they could not see me but the only reason I'm walking on the side of the road is because that's the only place to walk.
  - Hard to bike ride from Centennial St to downtown angels on Hwy 49
  - Loose dogs
  - Road is unpaved. Loose Dogs
  - lack of parking at walking locations
  - We live in a rural area.stop trying to make it like big cities.
  - Nothing
  - The drug users and homeless freely walking around town talking/screaming at themselves.
  - Bad sidewalks , cracks and bumps where they are there.
  - We need streetlights on Vista del Lago at the least. Sidewalks would be nice.
  - No trails
  - No bicycle lane connecting Rancho Calaveras or Gold strike with the town of Valley Springs in the same ZIP Code. So it limits peoples ability if they do not want to drive or cannot drive a car. And I see people walking dangerously next to the highway 26 coming west past Hogan Dam roadRoad.
  - No consistent sidewalks
  - It would be nice if there was a path to jle
  - Don't expect sidewalks but more bike lanes would be nice and could be used by walkers/runners
  - Loose dogs in our neighborhood
  - Very easy to walk in this area
  - Loose animals
  - Too hot in the summer
  - None of these... please don't install lights and sidewalks...
  - Vista Del Lago
  - Rural living is What I love. No sidewalls. No street lighting. This is the forest.
  - Without nighttime lighting, I can't see it's too hot to take my dog out on the asphalt during the day so I have to walk in the dark at night with no sidewalks and no street lights. It's pretty scary.
  - Cars parked blocking side of road
  - It would be great to have a way to walk to new Malones, especially since they charge to park and walk
- 7) Please list specific locations (intersections or roadways) where there should be safer street or highway crossings for people walking (example: at "x" intersection or on "x" road between "y" and "z").
- everywhere

- Milton's intersections at Jenny Lind rd and HWY 26
- Big trees road and creek view near hwy4
- I think Angels Camp is good for crosswalks/ intersections... maybe one from Copello Dr to the shops across the way?
- On 4 near Manzanita Dr
- Manzanita Dr, Murphys south to Broadview Ln, Apple Blossom Dr and to town of Murphys Big Trees Road. Also reverse and back north.
- Railroad flats
- Hwy 4 and Blagen Rd., & Manuel and Hwy 4 Arnold
- O'Byrne's Ferry X Copper Cove
- Na
- I wish they would be some well lit trails like down by the creek behind all downtown San Andreas.
- O Byrnes Ferry Road and Spangler Lane needs cross walk with flashing lights. People in the houses across from the Family Dollar Store must dodge cars to cross/walk or use wheel chair to get to the grocery store !
- Basically everywhere in Calaveras County.
- Walk from Main Street to West Point Cemetery. Shoulders and pavement uneven. Have to be careful to not roll ankles.
- 4 way stop in Murphys, by Alchemy.
- San Andreas all over
- Downtown Angels Camp!!

Drivers are too fast, not looking for people crossing the street.

Need blinking lights in roads, bumps to slow down

- At Brett Harte drive and Fieldstone Drive
- 1) Highway 4 between Moran Road and Big Trees Shopping Center.
- 2) Moran road love creek to Highway 4
- Hwy 4 & Blagen Rd. A stop sign that has flashing lights or a roundabout would be beneficial.

Crosswalks with flashing lights in subdivision near the community center or common JOA facilities.

- All over valley springs and San Andreas
- On Hwy 4 at Blagan Rd.

On Hwy 4 across from the grocery store or across from country club drive.

- N/A
- O'Byrnes Ferry
- Vista Del Lago and Hartvickson needs a crosswalk.

- Any where on Vista Del Lago Dr between Hwy 26 to New Hogan Dam Road. People average speed is 40mph-55mph or higher. Dont feel safe walking to Pizza Factory, the gas station or the gym. Nice that the street light at hwy 26 & VDL is a blinking 4 way stop. It really slows down traffic

Highway 26, between Highway 12 and Vista Del Lago Dr. You can't safely walk from La Contenta to the MarVal shopping center. People drive over 65mph. You should see halloween at hwy 26 & Gold Creek gated community. So many children in costumes trying to cross hwy 26.

- Every intersection on Vista Del Lago between Highway 26 and New Hogan. Especially at the school bus stops.  
Downtown Valley springs also.
- none I can think of
- Garner Place, Olive Orchard and Hwy 26
- All of Main Street in Murphys and all side streets.
- On 49 around The Pickle Patch and Chevron. On Pool Station Rd. up to Russells
- Going through big trees need more biking paths
- 4 and Tom Bell.
- Main St X Cruscos

Not a street by that crosswalk is extremely dangerous. There are no signs or lights and daily I see people almost getting hit.

- Moran Road, all street connecting, Patricia Ln, HWY 4, by grocery store. SNAC. By the Bistro, El Vaquero. Everywhere down town Arnold. Would be nice to have some appealing wall pads and lights. May be connecting more areas such as the ace store/post office.
- Vallecito rd and depot rd - both intersections
- Now that there is no left turn out of grade school pick up line, a new issue has been created. Everyone turns right then takes the next left.... That road (pacific??) is full of kids walking. There's no shoulder or side walks. I worry the change is now going to result in one of these kids being hit.
- Valley Springs is so small that all the sidewalks should be fixed and have lighting and there should be a park not like the one by the library. It's terrible is just unfriendly to its own residence. It caters to people at the lakes, but not to resident.
- Disappointed at Hwy h and 49 round about wont have cross walks l'd dangerous. From Travelodge to Highway four there is no crosswalks. The sidewalks are nonexistent. There's sporadic kids walk to school and it's dangerous. I understand no crosswalk at Port 49 when the roundabout goes in what do you expect kids to do when they're supposed to walk to school, senior citizen walking Walk this city is not planning for that. No crosswalks nothing it's dangerous.
- The corner of Stockton Road and Angel Oaks Road is very dangerous. There is traffic coming from many different directions and people tend to speed coming down Angel Oaks heading toward Highway four. There is a curve and a hill, making it quite careless. And again, there are no sidewalks along Stockton whatsoever. This makes it completely unsafe to walk to save Mart or Rite Aid. It's really quite sad since there are hundreds of homes that would benefit from the ability to leave the car at home and take a quick walk over to pick up a few grocery items.
- On Hwy 49 between the Bret Harte High School and Dollar General

- Would love to have safe connecting bike trails between Bear Valley down to Angels camp
- Intersection of HWY 4 and 49 needs a pedestrian bridge, which I know is a lot to ask for but it could also potentially be used to set up a “welcome to the foothills” sign or something, idk. The intersection is too large to be safe. When walking across the crosswalks, you feel extremely vulnerable and especially during the summer months when everyone is speeding up HWY 4.

- Across Highway 4 at Boards Crossing Rd

Across Highway 4 at Upper Frontage near Camp Connell General Store

- Greenhorn creek rd – Selkirk ranch rd

- Intersection of Highway 4 and Highway 49, it is only a three-way crosswalk and needs to be a four-way crosswalk.

- I think it would be great to have a bike and walking lane off highway 4. it’s too scary walking on the highway.

- Walking on Little John is always dangerous.
- Russell sunset both have blind spots speeding traffic
- Between old downtown and town.
- Center street, Lafayette st and Maretta, Campo Seco and 49
- none that I know of
- 49/ Mt. Ranch rd

By Sierra gas station and motel

- Most streets down town valley springs
- From MarVal across to fire/vintage store

From senders Ace across to shopping area with Mar Val

If they aren’t already there crosswalks going from the terrace to the wellness center and from La Contenta across to the smokehouse

- Little John. Too much speeding

Copper Cove. Dangerous for pedestrians and Bicycles

- Sheep Ranch Road

Parking lot of First Congregational Church in Murphys

- Not in Calaveras County
- No shoulders, walkways on copper cove, qual hill, Areowhead, little John, oberns Ferry
- Walking through town, from Mark Twain to the park, too many breaks in the sidewalks and intersections, have to cross back and forth across the highway to follow the crosswalks
- There should be a way to walk or bike on a path all the way through Angels camp (highway 49) without being on the road right next to all of the traffic. It needs to be a priority for Calaveras
- Huckleberry and Crowell.

- Along Russel rd by the post office parking lot. There is frequent traffic in to the post office, and walkers have no side walks or crosswalks on Russel to make safe walking paths obvious to both cars and pedestrians.
- Blagen Rd and Hwy 4
- In San Andreas - east St. Charles and Treat Avenue
- Treat Avenue x Hwy 49, there is no crosswalk. There are also no crosswalks from California Street x Hwy 49 to Mountain Ranch Road.

The crosswalks at Main Street x Hwy 49 and Russel x Hwy 49 (by post office) are not well marked, people don't stop or slow down. I've seen 2 people hit in both crosswalks. There should be the lights and a button like that at the hospital on Mountain Ranch rd.

- 9
- Little John and Copper Cove Drive, Reeds Turnpike and Obyern's Ferry Rd, Copper Cove Drive and Obyern's Ferry Rd.
- Intersection of Highway 4 and Main Street, Angels Camp.
- Hwy 49 south side of town from my house Sonora St to Tryon Park, Main St, or anywhere else the crosswalk by the old/no shoulder bridge is where I feel the most unsafe I have to J walk usually
- NA
- Around the schools and parks
- Gold creek to four way in valley springs
- The road to go to town highway 12
- O'Byrnes Ferry Rd, Copperopolis
- From gold creek to town on Hwy 26
- None keep it small stop trying to turn the area into Sacramento
- None
- EVERYWHERE on St Charles between Mountain Ranch Rd and Hwy 49. Mountain Ranch/St Charles intersection. Possibly where Gold Strike Rd with Hwy 49 if CalTrans would add a bicycle lane between there and the Hwy 12 intersection to create a loop for riding in San Andreas connecting Main St/Gold Strike, St Charles, and a short distance of 49 between them.
- Silver Rapids, and 26 rd. It should be roundabouts, which slow the speed.
- From Hwy 49 to Mountain Ranch Rd.
- I do not know of any controlled street or highway crossings in Ranch Calavers. Any would be appreciated.
- Highway 26 between Vista Del Lago and the intersection of Highway's 12 and 26. Also Vista Del Lago from Highway 26 to Hogan Dam Road.
- 26 between Ace Hardware and the other side of the street
- The area at 49/Main Street in San Andreas....kids and motel folks are almost getting hit daily there.
- Highway 4 in Arnold. From Big Trees Market going east.
- Garner and Hwy. 26

- None
- Southworth rd in burson
- Hwy 26 has no shoulder to even walk on
- On hwy 26 around the 3 forks of Mokulomne river near bridges where people access the water
- Around the horse arena and the ball park, and the roads around town.
- Pennsylvania Gulch Rd., French Gulch Road, 6 mile Road,
- Ponderosa way on BLM at Doster that used to be accessible for mountain biking before the Butte Fire
- 26 @ y sidewalk from La Contenta

Silverrapids up east to town

- To cross Hwy4 at Cedar center and Hwy4 to Blagen Rd
- Highway 12 at southworth. All of southworth then all of Ospital. There have been multiple wrecks and deaths on southworth
- Hwy 26 to Valley Springs
- Between ace and mar val..them people have a death wish
- O'Byrnes Ferry Road and Copper Meadows intersection
- Between SAAM's gas station and across to apartments/ resource center; Between Wells Fargo and Rollin Dough; between 7-11 and Sierra Inn.
- Crosswalk on 49 between Bret Harte Hs and Dollar General should have flashing lights.
- All of Valley Springs! There are no sidewalks anywhere!
- Bret Harte and highway 4. Need a crosswalk (NO TRAFFIC LIGHTS).  
The intersection of big trees rd and Main Street in Murphys can be difficult to cross when people are Turning but no one knows if they are doing a hard turn Onto Main Street or a turn toward the coffee shop  
Need a way to cross the street at the end of Main Street in Murphys by the fire station to get to church Street. Plus there's nowhere to walk on church Street, no sidewalks
- Copper Cove

O'Byrnes Ferry

Little John

- How to get from La Contenta to Downtown on the highway or back trail?
- Copper Cove and O'Brynes Ferry Road

Little John Road

- Specifically heading down La Contenta Drive, there are really only shallow sidewalks and it's quite steep.  
At the 4-way stop in the center of town (by Sinclair, intersection of highway 12 and 26) there are often aggressive drivers/speeders which makes it difficult to cross safely.
- Copper Cove and Little John .
- Centennial st. And Hwy 49 crosswalk, traffic lights or stop sign.
- Most roads around valley springs aren't safe to walk due to not having shoulder.

- Main Street in Murphys needs another crosswalk or two.
- Obyrnes X copper cove crossing
- 26 and silver rapids and gold creek
- The corner at Main st and Finnegan
- Little John and copper cove. Little John and reeds turnpike.
- Silver rapids! Needs light for 4 way stop. It also needs a cross walk. Additionally people always cross to go to Taco Bell etc, there should be a cross walk in between so that pedestrians can walk safely. (Not just the crosswalk by good friends. ) also when I drive home from VSE to Wallace there should be sidewalks there. There are many people walking and it's super dangerous for them.
- Ponderosa Rd and Story Rd.
- At the end of hogan dam rd
- Vista Del Lago and 26
- four way in town
- Be nice to ride a bike from La Contenta to downtown/12/88.
- Olive orchard drive
- Hwy 26 to town
- Campo seco road and highway 49
- None
- Crossing Vista del Lago
- No where
- Highway 26 between La Contenta and Highway 12
- Turn lane and crossing at the entrance of the parking lot of dayo/power up gym and the intersection 'Y' connecting hwy 26 and hogan dam road.
- There should be at least one stop and crosswalk in between the 4 way stop at 12 & 26 and PowerUp Fitness. The population of Valley Springs seems to be rising rapidly and it is hard to make turns out of the business parking lots on the 26.
- Paloma rd/ Cosgrove Creek rd
- The highway 12/26 intersection is dangerous for pedestrians, as well as the entrances to any major shopping center, no clearly marked crosswalks in those areas
- Stockton rd x greenhorn creek rd or at least that area.
- From the vista del lago into town
- Burson road, highway 12, highway 26 need street lights and to be widened and trails installed separated for safety that lead to and from town.
- Across from the senior center to the government center in San Andreas.
- The Four way stop at the Good Friends intersection needs a light or something. People use the crosswalk at their own risk.
- The Vista Delago road, or raceway, has no sidewalks.

Hartvickson has no sidewalks.

This makes it extremely dangerous to walk next to this road.

- All of Mountain Ranch Road from the highway 49 to the library needs a sidewalk. We need a cross walk from the DMV to the hospital. Additionally a crosswalk near the 3-way stop at 49 and Mountain96 Ranch Road. There's bus stops for children over there and there's no safe way to cross the road.
- Treat at 49.

High school at 49.

- The crosswalks in San Andreas need flashing lights. The corner of Church Hill and E St. Charles Street needs a stop sign all the kids walking to and from school it's very dangerous.
  - I wish more people slowed down going down the hill on Hartvickson right before Baldwin
  - 26 and Hogan Dam Road
  - Highway 4 downtown arnold
  - From vista del lago into town
  - School area is HUGE walking anywhere by stores
  - Westhill road, Baldwin the full stretch from Jenny Lind to Hartvickson to silver rapids t to the lake, and GARNER from Anderson to Hwy 26
  - San andreas valley springs
  - Baldwin St
  - Burson road & Hwy 12 needs crosswalks  
Hwy 26 & hogan damn road
  - Highway 49 & Highway 4
  - HWY 12 and 26
  - Valley Springs. The entire town could use improvement.
  - All roads that connect to hwy 26
  - Anywhere for the public to enjoy safely
  - Silver Rapids and Hwy 26
  - St. Charles/Hwy 49  
Hwy 26  
Hwy 12  
Mountain Ranch Road (is a deathtrap!)  
ANY narrow two lane road in Calaveras County.
  - Need to have a stoplight at the 4 way hwy 12/88 and 26. By good friends and need a stoplight where dollar general and orielys is.
  - Along highway 26 & highway 12 toward Hogan Dam Rd and along Hogan Dam Rd
  - Pine Street in Valley Springs to the laundromat on hwy 12. And from in town, Valley Springs to the gym on Highway 26. And from in town, Valley Springs down 26 to Gold Creek.
  - Hwy 26 and New Hogan Dam Road
  - All up and down Vista Del Lago
  - Southworth and h12
- Pettinger and h12
- From main street to the car wash. Bush st.
  - Garner from Hwy 26 to Baldwin

- Hartvickson has people walking their animals and children. There are NO sidewalks. We need sidewalks all the way down Hartvickson.
- Along highway 26 from La Contenta to the y.
- The 4 way stop in valley springs is scary to cross by foot or car. People run it all the time. Needs a stop light.
- No crosswalks at all in Rancho Calaveras. Only X-walks I've ever seen would be at the stop light at LaContenta, and at the Y in town. So anything further would be an improvement.
- Down town
- None, it's very low traffic in Rancho
- Milton and Baldwin, Baldwin
- Between Gold Creek and town
- Sidewalks would be nice in town
- Maybe a better trail from town to the lake for safe travel.
- Intersection of garner and Baldwin, Intersection of Hart Vickson and Baldwin, intersection of treosti and Baldwin, intersection of Bergsma and baldwin
- Comanche Parkway and Burson Rd., Highway 12 and 26
- At least the main road have pathway to walk I talked to Ben stopper my district supervisor he said it's the homeowner responsibility to cut weeds back from roadway
- None
- All along Little John Road. The speed limit is way too fast for the increase of population now residing on the road and the fact we are required to cross the road just to get our mail.
- Again, this is a perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
- Ace Hardware and business across street
- Anywhere honestly. Blizzard Mine Rd and RailRoad Flat Road intersection is dangerous. That's an easy one to identify.
- The entire community lacks safe areas. O' Brynes Ferry Road, Black Creek, Copper Cove
- Pope and treat st

More on st Charles with flags to carry across to indicate you are a pedestrian crossing

- Downtown stairs near SNAK. Need a crosswalk at JoMa's. Fix sidewalk between the toy store and Hovey Winery tasting room downtown. New sidewalk from the candle store down to the CWA building at the corner of Main Street and Big Trees Road.
- By Big Trees Market, highway 4 and cedar lane needs a stoplight, it's very dangerous to cross that section of the highway as people are speeding into town in a blind corner.
- None
- Kiva at Lake shore Drive cars come to fast around downhill curve
- Copper Cove and O'Byrnes Ferry

Copper Cove and Little John

- La Contenta and Vista Del Mar
- Highway 4 and Pennsylvania Gulch Road
- From La Contenta all the way to downtown. From La Contenta to the plaza with Pizza Factory.
- Highway 4. From Murphys proper to Michaelson elementary school. There needs to be safer crossing access across the highway to access Michelson. In addition a bike lane and side walk on both sides of the highway would make it much safer for children to get to school when walking or riding bikes.
- Hwy 4 and Penn Gulch, Hwy 4 and Jones St.
- McDonalds to Dogtown Rd
- older kids loading and unloading at school bus stops should be able to cross the highway 4 to walk home by themselves.
- There is a school bus stop on both sides of the highway by Snowshoe and Century 21. Having a safe crosswalk here would be beneficial not only to school kids, but to community members that would like to walk/pedal to the grocery store.
- No trail connector between Murphys and Hathaway Pines. I can't walk my dog from my door step unless I walk up and down Hwy 4.
- N/a
- Main Street on hiway 26
- Can't think of any. This area isn't meant for foot or bicycle travel.
- Comanche Parkway S
- main street
- Anywhere there is a paved road there should be a sidewalk
- Country Club Drive @ Hwy 4
- 26 near Taco Bell. People trying to cross the street there is so dangerous.
- I can't think of any in the Wallace area because people aren't typically walking on the highway here and in the community seems safe enough
- The highway from 4/49 cross road to New Malones
- Huckleberry and vista Del lago
- Lack of sidewalks from La Contenta alongside Highway 26 past the golf course and north east past gold country community leading into town/shopping area. That entire distance should be made more accessible for walking and biking.
- Between La Contenta and Gold Creek and between Gold Creek and town.
- Baldwin would be nice to have a bike lane. A few bike lanes to get from neighborhoods into town. Hwy 26 would be nice to have a bike lane And more sidewalks around down town.
- 1) Baker St/Francis St and Hwy 49
- 2) Dogtown Rd and Hwy 49
- 3) Stockton St and Hwy 49
- On 26 near Dollar General so people can cross over to the shopping center safely
- Moran Road at Calaveritas
- Lombardi to Golden Hills
- Around downtown Valley Springs/ Valley Springs Elementary School
- Pope Street and treat avenue, adjacent Robert's as well as Lewis

- Intersecton of Campo Seco Road and Hwy. 49
- all along vista del lago down into town is completely unsafe im aazed no one hasnt files a law suit
- Hwy 26 between La Contenta and town, you cant walk to bike there. No side walks and horns blowing at you if you try and ride a bike.
- Intersection of 49 and mountain ranch rd. No safe way to cross rd for pedestrians
- Highway 49 at Russel Road, Main St., Treat Ave, Mountain Ranch Road
- Mountain Ranch Road at Park Dr., the Library
- Anywhere on Hwy 4 in Arnold
- between senders and grocery outlet,
- Shoulder needed Along hwy 26 from ranco calaveras into valley springs . Pedestrian signs within the residential part of valley springs downtown.

8) Please list specific locations (intersections or roadways) wherethere should be sidewalks or walking paths for people walking and those with limited mobility.

- Milton rd and Jenny Lind rd
- Six mile road to ironstone should have a sidewalk or walking path
- Between downtown Angels camp and the church/ O'Reillys
- Quail hill road. Little john from downtown to neighborhoods.
- All streets in town of Murphys. Highway 4 within several miles of town both south and north of town.
- Same as above. Where to walk around here???
- along hwy 4 Arnold town center strip
- O'Byrne's Ferry X Copper Cove
- Copper Cove, Little john
- Na
- reeds turnpike and little john need sidewalks. there are too many distracted drivers weaving all over the roads.
- OBrynes Ferry Rd and Spangler Lane. People with strollers and wheel chairs try to cross Obrynes Ferry Road from the houseing development across the street to to the Payless IGA grocery store!
- The whole area in Valley Springs need these things
- Along Highway 4 at feeney park. Along pennyslvania gulch from highway 4 down to beginning of feeney park on the opposite side from the school. East side of highway 4 through murphys.
- Everywhere in Calaveras County.
- Along all the state highways some extra room for walking would be nice.
- Main Street to Skull Flat Road and up to Cemetery.
- Pathways in downtown Murphys should be marked for accessibility.
- I don't know the area well enough to be specific
- Along Hwy 4 between Lake Mont Dr and the grocery store
- white pines lake. There have been a lot of improvements, but for people with limited mobility there is not a path all the way around the lake or for them to get a bit closer to the lak.

- By HOA or subdivision Common area & facilities.
- From gold creek gates to marvel shopping center
- All the way from Big Trees Market to Arnold Station, the last shopping center in town. This would connect the town and enhance business!
- N/A
- The cart path walking path to the LaContenta golf course needs work. Broken asphalt creates tripping hazards.
- Would be nice to push my niece around in a wheelchair around la contenta but there are no sidewalks or curbs.
- Vista Del Lago at highway 26. All downtown Valley Springs
- All of Main Street in Murphys and all side streets.
- Little John longer bike lane
- Murphys sidewalks are terrible. So unsafe and can't push a stroller and poor people who are ADA.
- Everywhere. The town has a walk score of -50. I've never lived anywhere worse for walking.
- Along Baldwin Street. So many people walk/run/ride bikes and it's not safe
- Stockton Rd between Angel Oaks and Main St
- Highway 49 toward downtown Angels Camp
- All previously listed in #7 (Moran Road, all street connecting, Patricia Ln, HWY 4, by grocery store. SNAC. By the Bistro, El Vaquero. Everywhere down town Arnold. Would be nice to have some appealing wall pads and lights. May be connecting more areas such as the ace store/ post office.
- Hwy 49 for all of Angels Camp
- Na
- Most places in town, Altaville end don't have sidewalks
- The whole town of Valley Springs is so small there should be walkways lights crosswalks everywhere. You almost get run over anytime you come out of the grocery store on Hwy 12, Senders Hwy 26 trying to get out of any of the businesses and Valley Springs you take your life in your hands
- I would like to see a biking/walking path that connects Big Trees shopping center with White Pines Lake through meadow that was once a public golf course.
- Again, Stockton Road!
- See comment above
- From Best Western to Mike's Pizza. There is a man who rides his scooter along this way and me and my boyfriend have actually had to help him up as his scooter could not handle the terrain and he had fell over on his side. I can only imagine if someone is in a manual wheelchair, they would have to actually go out into the street shoulder to get around... // The sidewalk is falling apart or not there in front of Calaveras Lumber all the way down to where the HWY 4/49 intersection. If there's crosswalks there, there needs to be complete sidewalks.
- Greenhorn creek rd from Selkirk ranch--the other end of Selkirk ranch

- On both sides of HWY 49 running the length of town. It is not safe to walk to Angels Food market and that shopping center from Dogtown Road, however, it is close enough to walk.
- I would love to see a bike/ walking path from Dorrington to Murphy's.
- There should be trails around Lake Tulloch, or in the open space behind the water treatment plant, or up to the lake from Copper Valley.
- Along HWY 4 between Oak Cir. and Sequoia Rd.
- Russell just south of post office, sunset just east of Russell at the hill
- O'Byrnes Ferry road between Highway 4 and the bridge. There is not a bike or walking lane, cars drive too fast and too many trucks on the road.
- Railroad flat road
- Center street
- not aware of any
- All over this area especially on the main drag. Sidewalk isn't all the way
- Only in town. At the Terrace and Valley Springs town
- Anderson st, and around
- Greenhorn
- Nowhere
- No shoulders, walkways on copper cove, qual hill, Areowhead, little John, oberns Ferry
- A walking, bike path through town would be wonderful. Something with more gradual up and and downs and off the main path of cars
- On Russel Rd at the Post Office parking lot.
- Oak Circle Dr and Hwy 4
- Treat Ave to turner park, there are gaps. Russell road to the post office
- Wherever Possible!
- Along Stockton Road.
- Did
- Along HWY 49 between the Amex, and town all the side walk along the Hwy is uneven some of it is wood, and dirt.
- Along Mt Ranch Rd/Railroad Flat Rd. Then we could walk, run, ride.
- Around the schools and parks
- Highway 26 and vista del lago all the way into valley springs at the 4 way stop
- Not sure
- Stewart St, Angels Camp
- See #7
- Vista Del Lago
- None keep it small stop trying to turn the are into Sacramento
- None
- Between Government Center, hospital, Health and human services bldg, and locations within San Andreas Community Area, library, and local parks

- Along the highway from the golf course to the 4-way intersection where hwy 12 and 26 connect
- Going along Rd 26 to the Valley Springs, should be a sidewalks.
- From hwy 49 through Mountain Ranch Rd needs better sidewalks and safer. Possibly flashing crosswalks as many county and hospital employees love walking on their breaks.
- I think all walking paths should be accessible for people with limited mobility
- See previous response
- Hogan dam rd between park headquarters and river of skulls trail
- More recreational access on our rural lands....staging areas and not letting blm/Spi close it to everyone. I'd be happy to pay a permit, get a safety lecture, already carry extinguishers, and my horse isn't going to start a fire.
- Nove way , jean st.,hwy. 12 to Gym
- N/A
- Highway 4 in Arnold. Also Blagen road in Arnold/White Pines
- Southworth rd
- On hwy 26 around the 3 forks of Mokulomne river near bridges where people access the water
- Everywhere in Mokelumne Hill, especially around the school and parks.
- RRF road between the store and the ballpark
- Highway 26 especially at corner by dayo
- Pennsylvania Gulch Rd., French Gulch Road, 6 mile Road,
- Hwy 26 between La Contenta and downtown Valley Springs
- The strip of downtown Arnold from Dollar General to Giant Burger
- All of soutworth
- Hwy 26, like Silver Rapids to Valley Springs
- Copper Cove Rd. And the intersection at Obyrnes Ferry and Copper Meadows
- Pope street
- Stockton road in angels camp increase sidewalk around cemetery to provide walking access from greenhorn/angel oaks to save mart/bret Harte.
- There should be a clearly defined walking path along highway four where the waystation is in Murphys. Also, it floods in the winter so it is not only difficult because there's no clear path for humans To walk but also because it floods.
- Same as above
- Along 26
- Main Street in San Andreas
- Little John Road
- La Contenta Drive/Highway 12
- Copper Cove and Little John
- Hwy 49 downtown to centennial st. Angels camp
- Valley springs to hogan lake.

- Along highway 49 between the Finnigin lane intersection south to Ramorini and Centennial. There is a pathway on the east side of the road but it is rough and narrow and often hard to navigate with overgrown landscaping shrubs
- Obrynes to an extent to allow people to walk to payless
- Town and silver rapids
- Valley springs
- O'Byrnes and copper cove. All of copper cove. Copper cove and little John. All of little John.
- Silver rapids, Highway 12
- NA
- From the river of Skulls Trail to Wrinkle cove and into town
- la contenta
- Olive orchard area
- Hwy 26
- Hwy 4 in Arnold especially between grocery store shopping center and post office; also Blagen Rd between Hazel Fisher Elementary/White Pines Lake and the post office; Hwy 4 along places where school kids are walking to and from the school bus stop. There are several high school students who have to walk along the highway every school day. Calaveras transit bus stops should be ADA accessible. The one in front of the Arnold Library is not, there are gaps in the sidewalk
- None
- Vista del Lago
- No where
- Highway 26 between La Contenta and downtown Valley Springs
- From La Contenta to the Town of Valley Springs, connecting all shopping centers with Sidewalks
- Highway 26 from garner to town
- There should be sidewalks and bike paths from MarVal all the way to La Contenta. My family and others would enjoy walking and biking with that length of safe space.
- Paloma rd
- Highway 26 and 12 intersection, and the stretch of 26 between that location and Jean St.
- Stockton Rd, -Angels oaks to angel camp town. Adults and kids walk back and forth to town and there isn't any sidewalk.
- From vista del lago in to town
- Burson road, highway 12 and 26 to and from valley springs
- Starting at Gold Creek into Valley Springs would be great to have a sidewalk. Hogan Lake into town too.
- Pope street. Specifically to connect to the nice walking trail by the government center,
- Open up the golf course path for pedestrian traffic. Put sidewalks in on all roads within the LA Contenta subdivision.
- Answered in 7 on accident.

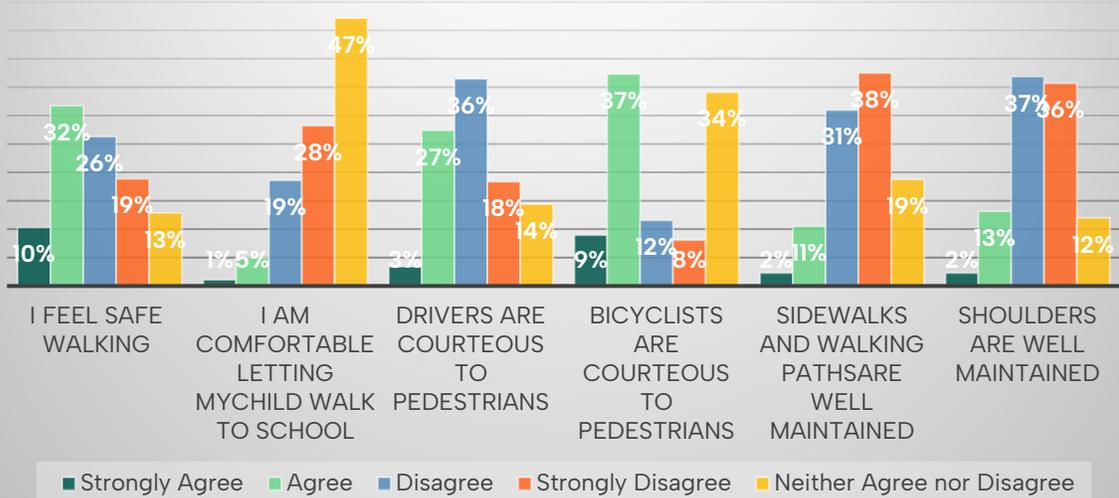
- I always see people walking on hwy 26 and wish it was safer
- All of San Andreas
- Down town valley springs
- The entire town
- La Contenta, Rancho Calaveras...
- Valley springs elm school
- Baldwin X Anderson, Baldwin X Garner, and other areas South of Garner where children catch the bus
- By treats. By goodies. And the one already there By the patio that should have lights.
- The recreational lakes in Rancho area
- Burson road & Hwy 12
- See above comment , same
- HWY 12, 26
- Not sure of street names but near the Valley Springs Elementary.
- Hwy 26
- Burson area
- Silver Rapids and Vista Del Lago
- Too many to list.
- Baldwin
- Everywhere
- Hogan Dam Rd to Highways 26 and 12 and in front of MarVal, etc
- Pine Street in Valley Springs to the laundromat on hwy 12. And from in town, Valley Springs to the gym on Highway 26. And from in town, Valley Springs down 26 to Gold Creek
- From La Contenta to Gold Creek and to Town
- All up and down Vista Del Lago
- H12
- The whole annexe.
- Hwy 26 between La Contenta and town. There are lots of people who can't walk, ride a bike or scooter into town
- Garner
- Side of highways 26 into town, always people walking on the shoulder. A sidewalk is needed there. Extremely needed on Hartvickson.
- Baldwin st
- Along highway 26 from La Contenta to the y.
- Sidewalks on Vista Del Lago and surrounding streets
- No crosswalks at all in Rancho Calaveras. Only X-walks I've ever seen would be at the stop light at LaContenta, and at the Y in town. So anything further would be an improvement.
- In town of valley springs, La contenta etc
- Highway 26
- None, sidewalks are ugly. Leave it natural
- Pardini

- Between Vista Del Lago and Hwy 12
- I've tried taking my 90 yo mom around in her wheelchair in Jackson, San Andreas, Murphys and there just isn't any accessible places for a wheelchair. Copperopolis is probably the best area for accommodation around here because it's a newer community
- The road ways between la contenta and the main town of valley springs should be connected with a sidewalk
- Highway 26 and Highway 12
- All the neighborhoods should have sidewalks for residents to use.
- Hartvickson rd
- Most roads that are not HWY 26 or HWY 12
- None
- Between La contenta and downtown.
- Little John Road. It would be AMAZING to have a walking trail from town Square down to the pond where Castle and Cook had once planned on building condos .a walking/bike trail .
- Again, this is a perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
- Again, anywhere honestly. It would be really awesome to have a walking/bike path from Wilseyville to West Point. I see a lot of pedestrians and bike riders along the way and it's very dangerous and many people take that path daily unfortunately.
- See above
- Pope st
- Feather Drive X Black Creek Road, all of Black Creek Road and Copper Cove at least to Cheyenne.
- Same as above
- The same intersection of highway 4 and cedar lane by big trees market
- Unknown
- Lakeshore drive, Little John, kiva, copper cove
- O'Byrnes Ferry, Copper Cove, Little John
- from Mt Ranch Road down Pope St. to Turner Park and up to Treats Market.
- Avery Sheep Ranch Road
- 6-Mile towards Ironstone, Jones Street from Highway 4 to Main Street in Murphys
- From La Contenta to downtown area. From La Contents to Pizza Factory plaza.
- Same as the question 7. Highway 4 near michelson
- South side of Hwy 4 btwn Penn Gulch and Big Trees Rd.
- Hwy 12, from Travel Lodge to Hwy 4
- Jenny lind
- Arnold desperately needs a sidewalk or off-street paved trail from Big Trees Market to White Pines Lake.
- Sidewalks from La Contenta shopping center into La Contenta.
- Along hiway 26 through valley springs; throughout la contenta
- Baldwin st

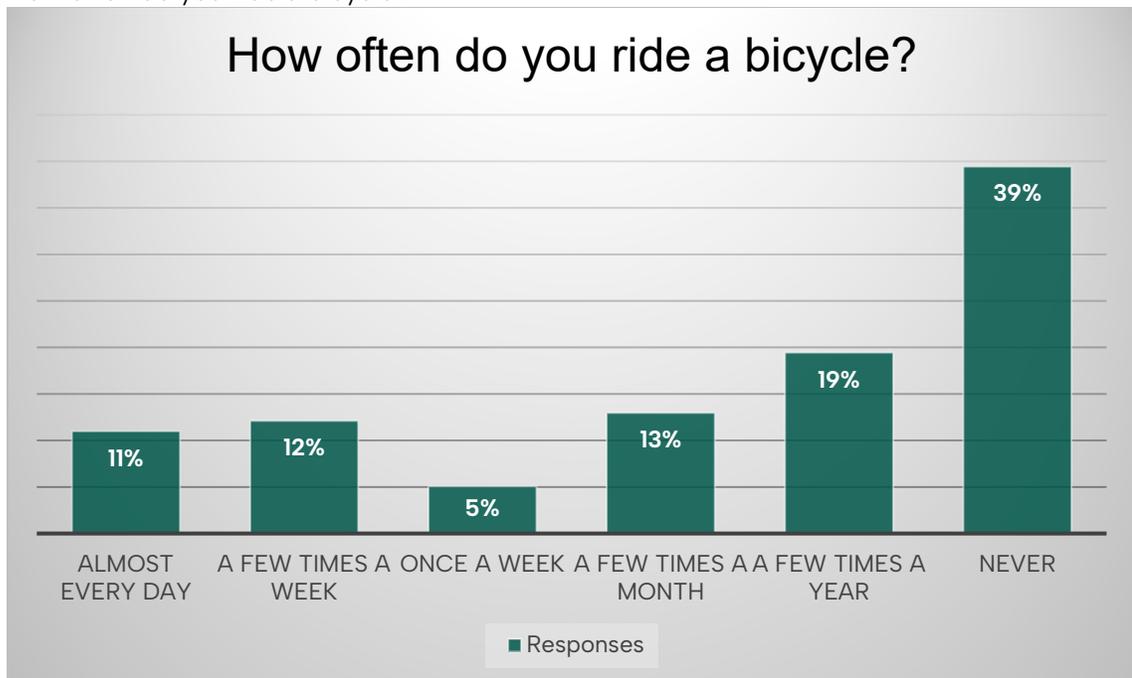
- From gold creek to downtown!
- Nove X main X jean X hwy 26
- We can get by with what we have.
- Camanche Parkway S
- a path along Angels Creek
- Highway 4, Cedar Lane to Lilac Drive
- 26 from La Contenta into downtown Valley Springs needs a walking path. Walking and/or biking on 26 is dangerous to riders and drivers. And now that CUSD has cut bus routes you're going to see more kids on the highway.
- The highway from 4/49 cross road to New Malones
- From Vista Del Lago intersection at Highway 26 there should be a continual sidewalk and bike path that goes north east past the golf course past gold country all the way up till the shopping areas
- Between La Contenta and Gold Creek and between Gold Creek and town.
- From the elementary school I go to town needs a side walk
- 1) North section of Hwy 49 between Copello Dr and Hwy 4 2) Dogtown Rd 3) Gardner Ln
- Hartvickson Lane in Valley Springs. Highway 26 from La Contenta into Valley Springs town
- La contenta Residential area and downtown Valley Springs
- I would love to see a walking/bike trail from La Contenta area up into town. Then eventually farther down 26 to Sliver Rapids and then further over time.
- Some sort of path to the lake. Along the creek would be nice, but, along highway four woodwork as well. It would be nice to not have to drive to events like frog jump.
- The entirety of Main Street in Murphys.
- starting at the bottom of vista del lago all the way into town, who want to walk in a drainage ditch full of broken glass and weeds
- Hwy 26 from La Contenta to town. the neighborhood of La Contenta. New Hogan Road leading the Lake.
- Pope St., Lewis, Market St., Broadway, Sunset, Russell Rd.
- Sidewalk needed on hwy 26 between vista del lago and intersection of Hwy 12/26. Plus signs to alert drivers of pedestrians and bicycles

9) Check the box for which statement applies best:

## Check the box for which statement applies best:

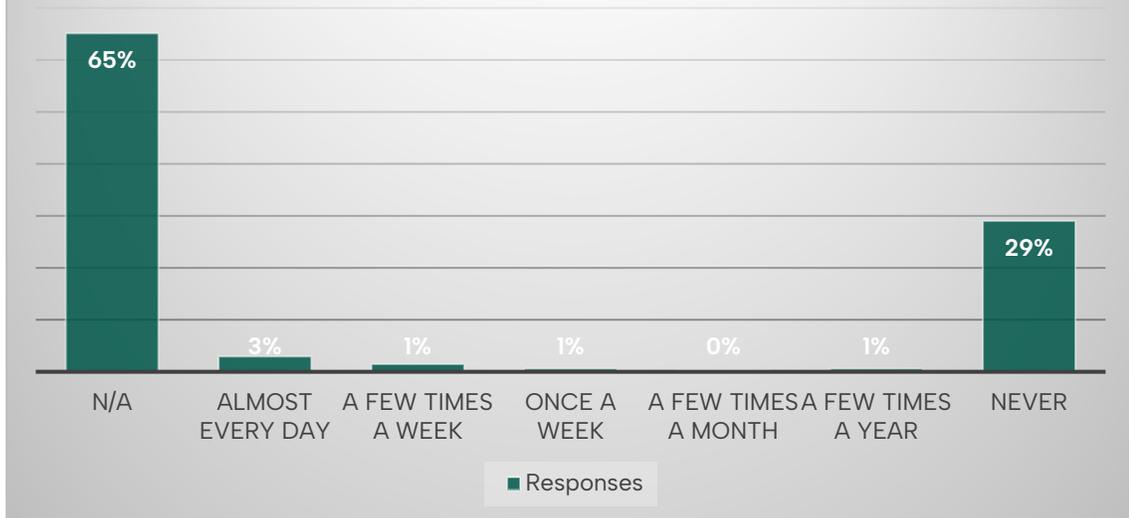


10) How often do you ride a bicycle?

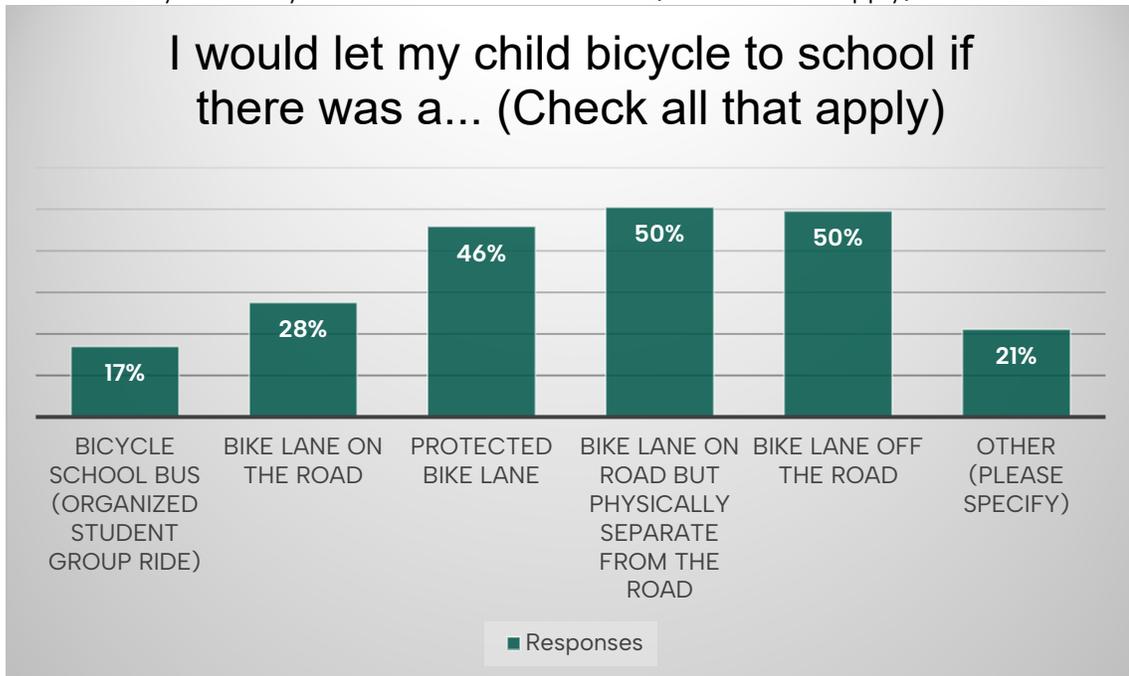


11) How often does your child ride a bicycle to school? (if applicable)

## How often does your child ride a bicycle to school? (if applicable)



12) I would let my child bicycle to school if there was a... (Check all that apply)



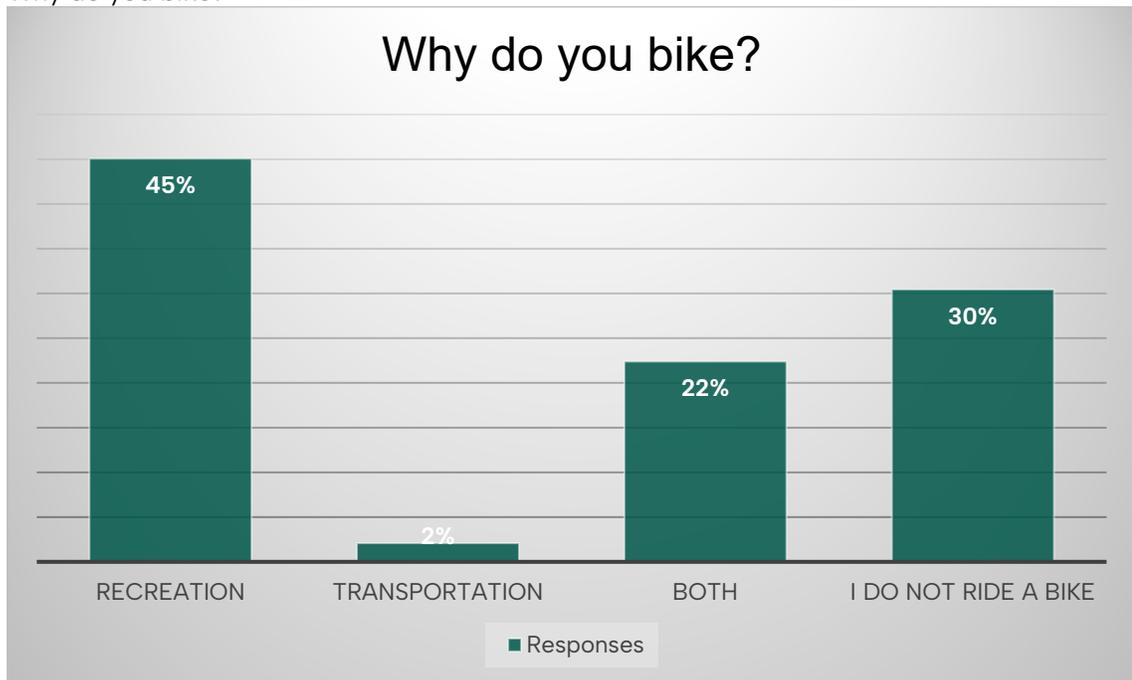
### Other:

- I don't have a child
- N/A
- NA
- Too young
- I do not have children.

- Never . Extreme speeding in all roads going to the area school here in Copperopolis. Please do not put a bike lane on Obrynes Ferry. Nobody pays attention along that major route. Speeding is a real problem and a bike lane would be very unsafe.
- Grown Children, do not live in County.
- school is too far to ride a bike for my kids
- N/A
- Never
- NA
- This is a joke kids from Copello to both schools must ride or walk no crosswalks, NO SIDEWALKS ITS Unacceptable when there's no buff service
- Better crosswalks and more crosswalks
- N/A
- No children
- Only if I lived within a mile or two of the school.
- Decent school in the district
- Separate bike path from the road
- N/A
- N/a we are to far away and she's to young
- I would not under any circumstance
- N/A
- No safe situation
- Too far to ride
- I wouldn't allow it all since there so many registered sex offenders living in Calaveras county
- Ns
- Does not apply
- I wouldn't just because I live in Wallace, but if I lived closer to schools 100% would allow if there was a safe path
- People shouldn't be riding bikes on the highway.
- Never
- NA
- STOP SIGNS FOR KIDS TO CROSS SAFELY
- children no longer live at home, grandchildren in local school
- Does Not Apply For Me.
- I dont care about a bike path you need to fix the streets first so they are safe for WALKING.
- We homeschool
- NA
- None of the above, too much human trafficking.
- No
- Not applicable because the distance is too far for kids to ride bikes to their schools from wallace
- we live too far for for my child to bike

- N/a
- Again, this question is yet another perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
- N/a
- We live too far to reasonably ride a bike or walk to school
- we live too far for this to be possible

13) Why do you bike?



14) Where (if at all) do you ride a bicycle for recreation or transportation?

- with the horrible drivers, I try to stay off the pavement so I mountain bike. If I ride at all, its on low traffic areas i.e. Tuttle town, Glory Hole, Hogan Dam Road
- On trails and blue lake springs.
- Hogan trails
- Six mile road
- I don't bike because I don't feel it is safe to bike in the roads.
- Don't around here but would love to go downtown with bike.
- Pretty much anywhere but mostly off road
- Mountain biking. I'm new to area and don't know which streets are safe on which to ride.
- Sometimes road by pioneer park and at pioneer park but far to have to drive to ride on bike
- around White Pines, drive to destination
- Lake Mont Pines
- Appaloosa Way

- We ride in Greenhorn Creek. We would like to ride outside our area, such as Glory Hole, but there are no shoulders on the 49 in some places to get there. We can get to Dogtown Road safely but it is extremely bumpy. Murphys Road has little or no shoulders in some places. So we are pretty much confined to Greenhorn Creek.
- New Hogan Lake Bike Trails
- Angels Camp, Valley Springs, highway 16 to work in Sac taking Amador Transit as connection
- Arnold Rim Trail, Bear Vallet Trails.
- folsom lake
- TOO DANGEROUS TO RIDE ON ALL STREETS IN COPPEROPOLIS. All roads are thoroughfares where there is excessive speeding, gravel and lumber trucks, construction trucks. Having children or adults in bike lanes would be simply unsafe here due to the number of cars speeding up to Lake Tullock or to Highway 4.
- By the lake and in my neighborhood
- Off road on hiking trails at New Melones
- Arnold rim trail, downtown murphys
- Copperopolis,
- At Home
- Throughout Murphys.
- Pool station
- Greenhorn, back road to Ironstone
- RIM trail and from Blue lake springs to downtown arnold. Also old Moran road to Big Trees part entrance
- Around Arnold, but I would love easy access to the grocery store, post office, Avery and Murphys.
- I would ride here but the lack of bike lanes on Greenhorn Creek Rd, Stockton Rd, and Highways 4 and 49 make it undesirable
- Gold creek
- I commute on my bike on Rt. 4 from one end of town to the other. I ride on back roads, fire roads, trails and Hwy 4 dorrington to Bear Valley and above.
- N/A
- Peoria, Arnold
- LaContenta
- Dirt trails to avoid traffic like new Hogan lake
- To the lake or park for recreation. To the grocery store for food. If the roads were safe for bikes
- There is nowhere to safely ride a road bike in Calaveras.
- Little John and CV
- Neighborhood, ART. We do a bike/ park hop in Arnold just because my kids need a relatively flat road, safe for kids and they like to have a destination. We start at Independence Hall and bike out to White Pines baseball field park and then bike back stopping at all the playgrounds. If there were more kid friendly biking areas that would be awesome.

- I would ride my bike from the Pickle Patch area to the downtown area of San Andreas, the high school, and the pickleball courts
- Blue Lake Spring to Arnold
- N/A
- In Stelte park
- Angel oaks
- NA
- Angels Camp
- I only ride my bike in my neighborhood is unsafe to ride a bike down Highway 12 or Highway 26 there's no bike lane. When you get into town, people are driving so fast like I said you take your life of your hands trying to go across the street
- Highway 4, and many of the forest roads, plus trails around Arnold and Bear Valley
- The Greenhorn Creek neighborhood
- Would do more if we had bike trails
- All over the county
- On the local streets.
- N/A
- Boards Crossing rd
- Not in this County anymore. Too dangerous.
- Melones
- My neighborhood, Country Lane Estates, as well as Dogtown Road, Garner, and Murphys Grade
- I don't really ride my bike here in the Arnold area because there isn't a designated path and I don't want to ride on the freeway
- Where I live in copper valley golf resort
- Market to Russell to Poole station to church hill to sunset to Russell to market
- I ride from Utica Park in Angels Camp to Murphys along the Murphys Grade Road and Six Mile Road. I also ride from the old hardware store parking lot in Angels Camp to New Melones, which is a nice ride but steep with limited shade.
- Arnold rim trail, neighborhood streets, trails parallel to highway 4.
- Hogan
- Government center, there's no where else 🚲
- Hogan. And around my neighborhood to neighbors houses and for exercise
- Copper Valley neighborhood and trails.
- We ride for recreation, riding for transportation isn't realistic for us in this area. We enjoy the trail at Hogan, but it's too short for bikes. Need more connected trails. We enjoy the Coast to Crest trail, but bikes aren't allowed there, which is disappointing. Maybe we can change that? Maybe certain days or hours are limited to horses, and others allow bikers also? And maybe a bike lane on Paloma for all the bikers that enjoy that road. I won't ride that road, too scary with the drivers. And as a driver, it's nerve wracking when bikers take up the whole road without consideration to drivers.
- Around hogan lake
- around Murphys

- the forest
- Greenhorn & to save mart
- On trail in the hills
- I would ride a bicycle if there was a path from Rancho Calaveras to Valley Springs.
- All over
- Around greenhorn creek and in the parking lot at Bret Harte
- Highway 49 and up Highway 4, also, Dogtown Road
- Sunset St to HWY 49 & Mountain Ranch Rd
- White Pines Lake parking lot
- San Andreas
- N/A
- Around the neighborhood and downtown Angels Camp.
- Hogan
- On HWY 49 between my house and town I like to ride along the creek as much as possible
- The park, on my property, and the fairgrounds when they have the bmx race weekend.
- On my Peloton or around my hilly neighborhood in rancho Calaveras north, or travel 1 hr away for nice bike trails (like Folsom Lake)
- La Contenta
- Between angels camp and murphy
- To my friends houses
- Outside of Calaveras County
- Hogan lake
- N/A
- My property
- La Contenta
- Gold Strike Rd. Government Center area. St. Charles
- Wallace, South Camanche to Valley Springs or lone. Over Pardee Dam , Olive Orchard, Hartvickson

Check Strava app roads traveled most are red.

- Around camping places, trails.
- Around the neighborhood and in arnold
- Out of town only
- Lake Hogan
- N/A
- Arnold, mill woods neighborhood. And pine drive.
- Hogan lake, tahoe
- Hogan dam rd to town from Rancho cadavers.
- On my property
- On less traveled roads or in areas with bike paths
- Baldwin st

- Murphys, Pennsylvania, Gulch, skunk Ranch, Murphys ranch, 6 mile Road,
- Where ever I can except 26 is just dangerous
- Gold Creek Estates and Hogan Reservoir
- Yosemite
- I don't, but if we had a cess to town, i would
- Kids ride in the neighborhood- Library trail
- River of Skulls, lake Hogan
- Around greenhorn creek
- Melones and Murphys Grade Rd area. Arnold Rim trails.
- My backyard and to sender's
- Around La Contenta, Gold Creek, lake
- Recreation mainly applies to around Hogan Lake. Transportation will often be within downtown Valley Springs, thinking Pine Street/Highway 26
- Leave the area.
- Up and down Hwy 49 from glory hole to downtown Angels camp.
- Hogan lake trails. Coyote point
- N/A
- Hogan
- At the lake and in the street
- Same as walking paths listed above
- Usually VSE empty parking lot
- Mountain Roads
- Up hogan dam rd and past the river of skulls
- NA
- to town
- New Hogan trail because it's safe
- Berkesey
- The lake
- Recreation and exercise
- Trails, paved roads, dirt roads
- No where nothing
- Gold Creek and Hogan Lake trails
- N/a
- I have to leave town to find a safe place my family can ride. It is usually around American River.
- NA
- South Petersburg road
- Road ways, avery, arnold rim trail, Bear Valley trails
- Trails around lake hogan
- I drive to Hogan lake to ride there
- I would bike if I felt like there were any areas to bike in San andreas

- At New Hogan reservoir. There is an actual path to ride on out there. It would be an amazing thing to have a path from LA Contenta, out to the lake, and have it connected to the path out there..
- N/A
- San Andreas
- Hogan lake and side streets with less traffic
- Lake trails
- Only on trails because there's no sidewalks
- Don't have place for me to ride at this age without electricity.
- On my own property or the lake
- On the side of rds in town or drive out of area to trails
- NA
- Silver Rapids to Hogan Dam Road on Highway 26
- Parks, lakes, around our property & around Davis/strum road in Burson
- In Greenhorn, husband rides to Murphys
- Lake Tahoe
- Hogan Dam recreation area
- Messing rd, lake hogan area
- See above
- Does Not Apply To Me.
- Downtown Valley Springs to New Hogan
- My son rides his bike all around town for transportation.
- Cameron Trail and lake Area. New Hogan Road
- New Hogan
- My yard, Hogan
- I would but it's too dangerous
- Hogan
- Lake hogan
- Mainly to, at, and from Lake Hogan
- I take the kids to VS elementary playground to scooter and ride bikes.
- Hogan lake
- From Rancho Calaveras to Lake Hogan area
- Berkesey and hogan trails. Hogan trails is dangerous as well. Vehicle theft / break ins. Remote trail for women
- No
- Only on the many existing trails around hogan or on my property
- From Vista Del Lago to Hwy 12
- Na
- Lake hogan or bike trails out of Calaveras
- hogan
- Lake Comanche

- Around lake hogan
- I no longer try to ride my bike here. I've nearly been killed. It's too dangerous. I've had a truck swerve TRYING to hit me.
- Home to market, post office, etc. recreational riding between Arnold and Avery — via Moran and Valley View, never on 4. Also in Big Trees and up on Spicer Road.
- La Contenra . It would be nice to be able to safely ride a bike from La contenta to Hogan Lake
- I would love to ride a bike but there is no safe trails to ride
- Not on these County roads.
- No where around here. We leave Calaveras County and go elsewhere. Primarily Alameda County, San Joaquin County, and Merced Counties.
- Neighborhood
- I don't bicycle
- I haven't pulled my bicycle out of storage because there's no safe place in town.
- 6 mile road, Pennsylvania Gulch Road, Sheep Ranch Road.
- In my neighborhood blue lakes springs
- None
- Lakeshore, kiva, Little John copper cove drive
- Going to start riding a lot more, with weather cooling off soon
- In my immediate neighborhood. I do not feel safe biking outside of it because there are no bike lanes and there are too many bad drivers.
- New Hogan Lake
- Downtown Murphys
- La Contenta and Gold Creek
- Throughout the Murphys area
- Rocky Hill to Michelson Elementary, Rocky Hill to El Dorado Savings bank shopping center
- I like to ride around Mountain View, Ebbots Pass, Angles Camp
- Hogan lake trail because you don't have to worry about vehicles.
- Glory hole trails and Angels Creek Road when its closed
- ART (Arnold Rim Trail), coffee shop, post office, grocery store.
- Hogan trails
- Arnold Rim Trail
- Our backyard.
- I used to ride for exercise near home (Burson) but the shoulder on Hwy 12 had too much glass and debris.
- Neighborhood
- Lake Hogan
- I do not. I only would if the route was nowhere near a roadway.
- N/a
- Murphys, Glory Hole

- Hogan
- Lake trails
- Gold Creek, La Contenta, Hogan trails
- Murphys grade, hwy 4, New Malones, and down 49 to San Andreas and back

- Hogan
- Hogan lake area
- New Hogan
- Need bike trails other wise only around the neighborhood
- 6 Mile Rd, Murphys
- At parks or at Hogan
- Arnold public roads.
- I don't ride a bike
- I don't feel like there is a safe area to ride a bike in my neighborhood
- American River Trail

#### Hogan Reservoir

- There is nowhere safe to ride bikes for any real distance in Murphys. I have to leave town to do any kind of serious ride.
- cameron trail in valley springs to the hogan mountain bike trails, my wife and i compete in mtb racing
- Hogan Lake area. New Melones. Around the La Contenta/Vista del Lago neighborhood.
- New hogan reservoir. New melones rec area, Arnold rim trail, bear valley alpine ca
- Hwy 4 Dorrington upwards, Spicer Rd, New Melones,
- Valley Springs Tri Dam, Mountain Ranch, Murphy's Grade, Dorrington to Bear Valley
- Local county roads with good visibility and low traffic

#### 15) What do you like MOST about bicycling there?

- quiet, serene, low traffic
- Has hills and away from neighborhoods.
- Designated trails
- Not a ton of traffic
- Na
- Don't do it.
- Minimal traffic
- Scenery!! And safety from cars
- Feel safe and a place to ride around
- less cars
- I get to neighborhoods I don't see when I walk.
- Not much traffic

- The beautiful neighborhood, the countryside with vineyards and ranches, the wide expanses at Glory Hole.
- Safe from road vehicles. Good parking infrastructure for bicycle transport to trails. Well designed trails
- I don't. Let's be honest: Calaveras HATES cyclists. It's as redneck and nasty to the lone cyclist as it comes, running us off roads, and yes, throwing beer cans at us.
- Well defined trails.
- trails with easy access to shopping and parking
- There is NO place, no road to ride safely in Copperopolis. Please do not plan for any bike lane for kids to go to school. The school is on a very very busy road with speeders and distracted drivers. Best that kids are driven to school or bussed!
- The bike trails are in good shape wide enough for the bikes to go around people or slower riders...
- Not crowded during the week
- I don't like it . Unsafe, no bike lanes, no parks to ride to. Let's face it there is absolutely no public recreation in Copperopolis and the Calaveras County.
- No cars driving.
- Being outside.
- Exercise
- Very little traffic
- scenery for the rim trail and same for riding to the park
- I love the convenience of being mobile.
- It's safe
- It's beautiful. It's not too trafficky for the most part.
- Recreation
- Challenging, good trails, no traffic
- Quiet streets.
- Avoiding traffic
- Scenery
- There is nowhere to safely ride a road bike in Calaveras.
- Bike lane
- Kid friendly or for me being out in nature away from people. I don't like road biking, way to dangerous on these curvy mountain roads for me.
- Not using gas
- Exercise and fun
- N/A
- It's safe
- Not busy with traffic
- NA
- Nothing
- The beauty of the trails

- There is very little traffic and the speed limit is 25 mph
- The scenery and slowing down to enjoy the fresh air
- Exercise
- N/A
- Low traffic
- Safe from cars
- It's my neighborhood
- Love the exercise and being outside
- Very little traffic
- Hills
- It's not Highway 4 and the roads have fewer cars that go slightly slower.
- being in the forest, and few people.
- The view
- Only place to ride nice trail
- Easy. Good hills. Scenic
- Not a lot
- Hogan, the beautiful scenery. Would love more bike trails around lakes and parks in the area.
- Open space for my child to ride
- season changes
- Fresh air
- There are no pedestrians or vehicles
- Exercise, transportation, fresh air
- Less cars, more space for bikes, easier and less stressful with young kids.
- The exercise and scenery
- Upgraded sidewalks and lanes by the hospital and calfire.
- safe from cars
- Being outside
- N/A
- Accessible.
- Flat, no cars
- It beautiful
- That there is one paved spot to do so for kids.
- Good views
- The paved roads
- Nature
- The wind
- Paths and trails
- Nice trails
- Same as walking
- N/A

- Ease of riding in my neighborhood
- Scenery. Much less traffic than Hwy 49. Mostly decent road surface. Perfect amount of terrain for moderate exercise. Can commute to work at Gov Center
- Back roads with little traffic
- Just a habit...
- which there was a bike lane on hwy 4
- Safety and accessibility
- Dedicated trails with no vehicles
- N/A
- Its my way to work, and keeps me off of highway 4.
- Safer than Hwy 26 .
- No traffic
- Feeling secure
- No traffic and when there is there are bike paths
- Route to town
- The beauty of the area
- Well maintained areas
- Set up and safety
- Trail is safe to ride on- no chance of bad drivers
- Trails
- Lack of traffic and shoulders
- Dirt trails are fun.
- Very few cars
- For transportation, the roads are relatively flat.
- Safety
- Being able to access the lake and fair grounds
- It's only place near us to ride.
- N/A
- Less unsafe traffic.
- Being able to
- It's open and safe on weekends
- Remote and few cars
- View of the lake, challenging hills
- Ma
- Getting to my destination
- It's safe
- Small read not a lot of traffic
- Récréation
- The scenery
- Lack of vehicle traffic
- N/a

- The bike paths are separate from the road.
- NA
- It's off the road
- Safe trails away from the road
- The lake is beautiful
- It has no cars with drivers looking at their cell phones.
- N/A
- Coasting haha
- No cars
- Safety and nature
- Off the busy unlighted roadways, the lake has some protection. My property is lighted
- NA
- It's off the roadway and can go from town to town if wanted.
- Nothing because it can't safely be done
- Being outside
- Views, safety
- Open and safe to ride and walk.
- Quiet, less traffi.
- See above
- Does Not Apply To Me.
- Nature
- less cars, and some trails
- Excellent trails
- Safety from the traffic on the highways and thru roads
- Large parhs
- Long trails
- Nature
- It's safe
- Maintained trails and courteous people.
- Like being there, not getting there. Not safe.
- Nice trail to ride
- No
- It's fun for the kids
- Nothing
- Na
- Bike trails that are paved or designated.
- the trails
- The views
- Open soaces
- I don't.

- Beautiful rides, little traffic
- Close to home and somewhat safe side streets
- I won't get killed.
- They have lots of bike paths!!!!
- Residential area with little traffic
- Scenic routes
- It's safe, very few drivers
- None
- Gives me exercise
- Wind in my face & Exercise
- Nothing
- The lake
- It's good exercise
- It's safe, and no traffic
- Small town few
- The views!
- Its easy for kids to learn and get comfortable on a bike.
- I love the ART because it is close to town and away from cars.
- The trail
- peace and quiet
- It feels safe.
- It's a very pretty area.
- I only occasionally bike down our private road at home. I like it because there's no vehicles to worry about.
- N/a
- trees, mix of flats and hills, designated trails at Glory Hole
- The trail
- View, well maintained.
- Hogan trails are great and well maintained.
- The asphalt is level
- Trails
- The quiet surroundings
- Safe
- Exercise
- Little to no traffic
- There are trails that are safe from vehicles
- Scenery
- N/A
- Paved trails, fewer people
- Mountain bike trails
- the views are amazing

- beautiful scenery, wildlife.
- The trails
- lack of rain
- Narrow roads, easy to hear vehicles approaching
- Quiet roads

16) What do you like LEAST about bicycling there?

- Hills
- The pot holes
- No bike lane on hwy 4
- I shouldn't be in the traffic
- Don't do it.
- Limited access without taking the bike there on my bike rack
- N/a
- Far from my house in wilseyville
- no where to go, no bike trail without a steep incline
- Hills. Tough to ride up and scary to ride down.
- Nothing
- The lack of shoulders on the roads. And can they resurface Dogtown Road?
- Dog poop on trails from dog owners not picking up after Fido
- See above. Being run off roads, yelled at, having refuse and cans thrown at us.
- driving 90 minutes
- This area is known for speeders as the roads here lead to Sonora or to Highway 4 and are used by commuters, trucks of all kinds. It would be totally unsafe to try to widen the road or install bike lanes in this entire area.
- All the dryness , possible snakes , rocks , to many large rocks for my bike tires to have me wreck.
- No bike lanes, no bike paths, no parks. Most of all I feel bad for children growing up in greater Calaveras County the recreational opportunity are nonexistent.
- Limited space.
- No bike paths
- Cars drive crazy
- Highway 4 is a bit nerve wracking as the concrete shoulder isn't very wide
- Calaveras County roads. Extremely dangerous. Pot holes, no safety in riding or biking.

I broke my ankle in half because of stepping out of the way of a fast moving car.

- Nothing
- Roads are often potholed and poorly maintained with ZERO bike lanes, making recreation and transportation unpleasant and often unsafe. It's quite hilly, but I got used to it :)
- N/A
- Remote, lack of emergency services,

- Climbing the blind hills on Hartvickson or Vista Del Lago because there is no shoulder. Very dangerous.
- Trails are too short for bike riding
- Unsafe motor vehicle traffic
- There is nowhere to safely ride a road bike in Calaveras.
- Lack of bike lane
- Hills
- Hills need ebike to be able to handle hills
- N/A
- I don't go anywhere
- Na
- NA
- Just like everything about riding a bike in Valley Springs or even walking for that fact
- Pretty thin in some spots on 4
- There are a lot of hills, making it quite challenging in spots
- Can't feel Comfortable on roads due to traffic
- Hard to get from town to town because of the lack of shoulders
- The hills are too steep.
- N/A
- No shoulder
- Far away
- People who drive too fast and no shoulder to pull over on and let them go by
- The cars
- It is limited on how far you can ride
- Traffic
- The bike lane is nonexistent in some areas and not maintained. Cars drive too fast and the road often feels unsafe.
- too hot in the summer.
- The trail should go farther
- Cars
- Around my neighborhood, there's no shoulders. And no bike lane. Bikers need to pull over onto the dirt area when a car comes. It is absolutely unsafe for the bikers to have events on streets where there is no bike lane and no paved shoulder for them to ride on when cars are passing. You need to stop having these events in neighborhoods/roads where there are no bike lanes and no paved shoulders.
- No bike lanes
- Too short, very hilly, not connected to town so we need to load up all the bikes on the car in order to get them there. It's a lot of work for a family.
- No paved area besides parking lot
- traffic
- No bicycle racks to park and lock the bike
- Mosquitoes

- No room, no shoulder to ride
- It's just for recreation, not to actually get to a destination.
- Cars and traffic, safety, concerns, and noise
- Turning left to Mountain Ranch Rd from Hwy 49
- Hwy 4
- No bike lanes, dangerous with cars
- Safety
- No sidewalks or lack of shoulders and aggressive drivers
- Getting there
- Trucks
- Not long enough.
- Not enough bikable trails
- Traffic
- Speeding cars
- The hills I have to climb
- Not enough trails
- The traffics
- N/a
- N/A
- No bike lanes. Unsavory characters. No bike racks at Gov Center or elsewhere in town.
- Drivers that get too close, no patience, yell or throw things at bike riders
- It's just good feeling.
- not as safe, need bike lanes
- I have to travel to bike because I don't feel safe riding at home.
- No comment
- N/A
- Highway 4 would be quicker
- No shade
- No bike lane.
- Lack of social interaction
- It's out of town
- Too much traffic no bike lane or sidewalk
- Dangerous drivers almost running me over distracted, drivers not paying attention and roads are not wide enough for bicycles and cars.
- Nothing
- Short distance
- Nothing
- Limited trails
- Melones trails not well mapped. Murphys grade rd not a great shoulder. Can be dangerous when cars come around corners or from both directions at one time.

- No way to get down town safely
- The roads are old and sometimes are rough.
- Like it .
- Hwy traffic no side walks or bike lane
- Coyote point trail not well maintained. Tall grass.
- N/A
- Fast vehicles hwy 26
- Not being able to
- Only option
- Dogs
- No Shoulder
- Na
- the journey there
- Nothing
- Roads ment for vehicles being held hostage by self entitled bicyclist.
- Distracted drivers
- Lack of connectivity to other parts of town
- N/a
- It's far away
- Na
- Wish we had more developments trails around the communities
- I'm stuck riding the trails
- I can't ride my bike from my house to the lake. I have to load it up in the car.
- The ride on Vista Delago.

Dangerous, is what comes mind. That's why I don't go out there that often.

- N/A
- Auto traffic too fast.
- Goatsheads that pop tires
- Na
- but limited access/lighting and can only be accessed by driving to the area. It's not a destination and I can't get to La Contenta shopping area which is the closest store
- NA
- Have to travel outside if calaveras county
- No bicycle Lane or sidewalk
- No sidewalks or trails
- Feel unsafe biking in Hwy and on gravel
- Traffic
- Too far to reach by walking or biking.
- Can be busy at time. No lighting. No paths
- Does Not Apply To Me.
- No bike lane

- No bike paths
- People are not respectful of pedestrians or people on their bikes. Or kids trying to cross the street.
- Wish there were more trails (around the lake) Not enough.
- Not enough trail options
- Having to drive to Hogan in order to bike. Being limited to just my yard
- Rocky terrain, busy with people
- Traffic
- It's at a school so hours it's available are not ideal.
- Lack of bike lanes, safety, discourteous drivers, etc.
- Remoteness, dangerous for women, vehicle break ins
- Not enough space.
- The heat
- Safety
- Na
- No safe bike paths or trails
- the ruts in the trails
- Tourist
- No designated bike lane
- It's dangerous. There's no safe place to ride. Also the huge bicycling events this county allows to go on are dangerous and inconvenient for us locals. Those people do not share the road and at time ride 4 to 5 across taking up the whole road. They also like to stop right in the middle of the road and around blind corners.
- Potholes... I also wish there was a way to ride to Murphy's without going along 4
- It's not safe to ride out of the area. (To ride from La Contenta to downtown Valley Springs, the lake or other parts of Valley Springs)
- I have to haul my bike there to ride.
- Sometimes limited shade, lack of resting areas.
- They all are dangerous due to the width of the roadway
- It's not safe to go on the highway and get to the grocery store
- None
- No shoulder. Unsafe
- Everything
- Hot and dry
- I don't feel safe because cars are presumed to have the right of way.
- No bike lane.
- Minimal safe shoulders, distracted drivers no bike lanes
- cars don't stop at cross walk on Hwy 4 and Penn Gulch; no cross walk or bike lane on south side of Hwy 4, no cross walk on Hwy 4 and Jones.
- Traffic on narrow, windy roads
- Unsafe roadways, unsafe drivers - no safe space for bikes along any roads around town (except ADA trail between Pine Dr and Oak Ct).

- Having to drive there first
- most of the trails are too steep for me
- Nothing.
- Traffic and lack of shoulder space.
- Cars
- Trail system
- Mosquitos.
- N/a
- fees for Glory Hole, traffic in Murphys
- Nothing
- Not well lit. Lots of places for people or animals to hide.
- No bike lanes
- The close proximity to cars/ traffic. No bike lanes
- Not enough trails
- No paved bicycle path
- Cars
- N/A
- Not as much places to ride
- Lack of infrastructure
- N/A
- There are no bike lanes or shoulders or paths
- Nothing really
- Complete lack of road bicycle infrastructure.
- idiot drivers and people who hate cyclist, valley springs is known for having dumb assed drivers who hate cyclist
- No bike lanes, cars honking horns and yelling at you, throwing food at you. Telling you to go home.
- The lack of maintenance of trails
- Car drivers
- Lack of bike signage
- Shoulders on highways are filled with crash debris (glass etc) or trimmings and large bushes with overhanging branches

17) Where do you feel unsafe bicycling?

- o'byrns ferry road
- Nowhere
- Milton and Jenny lind rd
- Hwy 4
- Calaveras
- Little john

- Highway 4!
- Streets and I'm sad about that. I road for recreation and transportation in Bay Area. I'm close enough to ride or walk to stores in Murphys but don't feel safe to do so on highway into town.
- On railroad flats
- along hwy4
- Busy streets
- Any/all highways
- On 49. Also on Murphys Grade Road. There are a few places on Highway 4 where the shoulder is too narrow.
- Any paved road in Calaveras County
- Everywhere here in Calaveras. Less so in Amador.
- It would be nice to have recreational trail system accessible to San Andreas and Mountaim Ranch.
- little john
- All roads in Copperopolis. Everybody complains about the speeders, and the large gravel trucks, construction trucks, etc.
- near the highways
- Highway 4
- Everywhere
- Highway 26 near West Point Elementary, Lions Hall, Library and West Point Community Covenant Church
- Everywhere.
- Anywhere here
- Most of county
- Everywhere - no meaningful cycling infrastructure. Paint along roadways doesn't protect people. PG&E keeps taking out trees along areas you might bike in but can't because of the lack of shade.
- Highway 4 is a bit nerve wracking as the concrete shoulder isn't very wide
- Too numerous to list.
- Everywhere in Calaveras county
- Many sections of Hwy 4, all of Rt 49. If you are using a bike for transportation your options are extremely limited.
- N/A
- Remote areas and on any surface streets
- See 16.
- In street or around town in Valley Springs
- Any road or street in the county
- There is nowhere to safely ride a road bike in Calaveras.
- Where there is not a wide bike lane
- Hwy 4

- Highway four, Blue Lake Springs
- I would never ride a bike in Murphys.
- N/A but streets if I did bike
- The rest of angels camp
- If I were to bike in actual town
- NA
- In neighborhoods with no side walks
- The whole town is unsafe for riding a bike Highway 12 and Highway 26 are definitely unsafe because of speeding cars
- Are you kidding me? Please tell me a place out here that is safe for biking. The reason we do not bike or run out here is there are no safe places to do so.
- Any place out of my Greenhorn Creek neighborhood
- On blind curves.
- N/A
- Highway 4 between Arnold and Camp Connell
- Back roads in Valley Springs
- Anywhere in town
- Highway 49
- All of Calaveras county unless you are mountain biking on trails
- Everywhere except where I live in Copper Valley golf resort
- Mountain ranch road, highway 49 between San Andreas and Angels Camp Highway 4 west of Angels Camp, highway 26 between Swiss 3 way and Mokelumne Hill
- Everywhere else in Calaveras County. Several roads have minimal traffic and would be suitable for cycling, however the roads are so poorly maintained that cycling is not pleasant.
- no where
- On the roads
- On streets where there are no bike lanes and no paved shoulders
- Little John. Copper cove.
- Paloma, on the streets, on the highways, pretty much anywhere that's not a dedicated trail.
- My neighborhood
- north of main street
- Highways 4&49
- On anything paved that a vehicle has access to
- On the highway.
- On roads with no shoulder
- Riding through town from MT neighborhood area to the farmers market or Utica park
- All of the roads
- Pool Station Rd
- Hwy 4
- In town, anywhere with frequent car traffic

- Everywhere
- Along Stockton
- Roads
- Everywhere
- On the road
- Most places in the area
- Hogan lake
- All over
- The highway
- Anywhere in Calaveras County
- Hwy 26
- Vista Del Lago
- Nowhere
- N/A
- On Hwy 49 now that they put in the ridges on the shoulder. St Charles because no bike lanes. Gold Strike because no bike lanes.

Pope Street area after dark because of people.

- I would never ride on 26 from Vista del Lago to Hogan Dam Rd. instead use Hogan Dam Rd.

Burson Rd south of 12 to Olive Orchard could use more of a shoulder.

- I don't bicycling in Valley Springs, just to busy streets.
- hwy 4
- Everywhere in Rancho Calaveras, trailed along the backside of Hogan, and most of "downtown"
- On hey 26/12
- Hogan dam rd and Into downtown valley springs
- N/A
- Highway 4 in Arnold. And Moran road in Arnold.
- On the hwy
- On all the roads
- In town
- Anywhere in valley springs
- On all the roads I ride on.
- Mountain Ranch rd
- 26
- Hwy 26
- Home in calaveras
- Residential areas, across highway
- Anywhere outside greenhorn in calaveras
- Any road in Valley Springs

- My fiancé would like to bike but I do not want him to because I feel like it's really unsafe in this county without any kind of clear biking paths
- Murphys grade rd
- Highway and main road to lake
- Little John Road
- O Bryan Ferry Road
- Along the highways. There is a distinct lack of paved shoulder.
- Copperopolis
- The annex portion from finagen lane to centennial
- Any road
- N/A
- Hwy 26
- Everywhere
- Any where else in calaveras county
- NA
- Around the blind corners
- The highway
- next to road
- Hwy 26
- On the highway because only idiots do that
- Along Vista del Lago to lake New Hogan
- Illegal encampments out in the woods
- Hogan Lake trails
- N/a
- The Valley Springs roads are not bicycle friendly. We need bike lanes and sidewalks.
- Na
- Anywhere in town or on roadways
- Angels camp
- On the roads in valley sorings
- On the streets
- On any public street in Valley Springs.
- N/A
- Along Hwy 49.
- Blind turns
- On the roads
- In my neighborhood and through town
- All over town.
- Busy roads with no bike lanes, shoulders or sidewalks and poor lighting—any path in Rancho Calaveras
- NA

- In towns of calaveras county. Valley springs and San andreas
- Highway 26 between Vista Del Lago and Hogan Dam Road
- In town in Valley springs
- Anywhere apart from my neighborhood & Greenhorn
- Our county with no bike lanes
- Everywhere in Valley Springs.
- Anywhere without a designated bike path
- Along any 2 lane road
- I would feel unsafe bicycling just about everywhere in this County. Heck, I feel unsafe DRIVING here.
- Everywhere
- Mostly crossing the intersection.
- Hwy 26 into town
- Vista Del Lago
- Along the highway and through roads of West Calaveras
- Streets
- All over calaveras county .
- Trying to go to town
- Around town
- Most roads in Valley Springs
- EVERYWHERE!
- Near any roadway
- Highway 26 and 12
- Nowhere
- Hwy 26
- Na
- On the road with no bike paths for cars to watch an follow bike lane rules
- The entire time I'm in the road
- Main riads
- Everywhere.
- On Highway 4... I avoid it
- Vista Del Lago, Hogan Dam Road, 26
- Everywhere in Copperopolis. Really unaware of anyplace in the county
- Calaveras County roads.
- Calaveras County
- Pretty much the entire community
- All around Murphys
- highway 4 in arnold
- N/A
- All of Copperopolis except the divided section of Little John that has a shoulder
- Highways

- I don't have a bike because I don't think it's safe.
- Everywhere
- N/A
- As a driver on Hwy-4 I get very nervous of road bikers drifting out of bike lanes. All too often bicyclists are riding two bikes wide and riding outside the white line. Need more SHARE THE ROAD signs
- Crossing Highway 4 is scary. Once on Main Street, I stay near the shoulder, but there's no protected bike area on Main Street between Highway 4 and Big Trees Road. On Main Street in Murphys, I'm concerned about cars opening their doors into me or my kids when we're on bikes. If I'm sending my kids to the park, we usually take Scott Street and S. Algiers Road, but again, sometimes cars speed down that street too.
- To downtown Valley Springs
- Throughout Murphys. Especially along the highway
- Hwy 4 and Penn Gulch crosswalk, Hwy 4 at Penn Gulch in front of Chevron station (cars turning into and out of the gas station don't see bicyclists)
- almost everywhere
- Anywhere around Rancho Calaveras on roadways because there aren't any shoulders on the road.
- all roads, and highway
- Along the highway
- Anywhere in Valley Springs that isn't my backyard.
- Hwy 12.
- Anywhere outside of immediate neighborhood
- Along highways
- Anywhere near a roadway. There's not enough room for bicycles to share the road in the foothills. With tight turns and hills, anyone on a bike out on those roads is asking for a problem.
- N/a
- Arnold
- On the roads
- Lake trails
- Anywhere on the highway.
- Every where. There are no bike lane. Some drivers are very uncourtious to bicycle riders
- On the road
- Alongside Highway 26 because there is no bikepath or even sidewalk
- I would feel unsafe on Hwy 26 in to town
- On any road that cars use
- N/A
- Any main road in Calaveras County
- Most places
- N/A
- City streets

- Everywhere in Murphys. I should be able to ride on the highway, but without a real bike lane it isn't safe.
- due to mis informed drivers pretty much all around valley springs
- Hwy 26 going through town. Hogan Dam Road.
- More traffic = higher probability of aggression = less safety
- San Andreas to Angels Camp, Hwy 49
- I do NOT ride hwy12 or 26 except where shoulder is VERY wide. I do not expect to ride there, as for the most part, the county roads are safer.

18) Where is bicycle parking needed?

- Hogan trails
- No idea
- Shopping centers.
- Town of Murphy's, Angels Camp
- Have no idea where
- I don't park
- Any/all towns/cities
- Downtown San Andreas.
- No place in Copperopolis unfortunately.
- By the lake, beginning at a start point and end of the trail.
- Any auto parking lot. But does not matter unless there are safe routes leading to parking area.
- Lions Hall, Library and West Point Community Covenant Church
- Big trees market, the softball field at white pines
- Many places. The local bike shop is the only one who has stepped up to the plate to provide bike racks for parking.
- Everywhere
- All the downtown areas, especially Murphys and Arnold outside of the grocery stores.
- N/A
- N/a
- Not sure
- Shopping centers, parks and lake if you could safely ride to those places on a bike.
- At all commercial and recreational locations
- There is nowhere to safely ride a road bike in Calaveras.
- Treats Market and True Value
- Big trees Shopping Center
- N/A
- ??
- NA

- Everywhere they also need to put a better park in park is terrible. There's no grass I found a snake At the park, garbage broken glass
- The stores and schools
- At bus stops.
- If anything, in front of essential businesses like grocery stores, gas stations, medical offices, etc.
- Downtown Angels Camp
- Everywhere
- Shopping centers, the library, downtown Angels camp
- Everywhere
- Dint know
- Downtown Murphys
- not needed
- Mar Val lots. Terrace. La Contenta. Hogan.
- Copperopolis town square.
- Would be great, if we had more trails, to have the "rent-a-bike" type stations. Those would serve as bike parking. Maybe at the lake parking lots?
- Everywhere
- Nowhere in town – keep it a town... we aren't in a city
- Downtown Angels
- Bicycle parking is needed everywhere, not to maximize convenience but because it is necessary for bikers to know where bikes can legally be parked and official bike parking is the best way to manage legal vs illegal parking for bikes.
- various shopping centers
- Post office, Treats
- All Businesses.
- I don't park mine I don't know
- ? Can't really answer until we have useable paths.
- At lake Hogan and lake Comanche and the schools and parks
- In town
- In donwtown
- In town, near the bus stops
- Everywhere in town
- Nowhere
- Nowhere
- Government Center (seriously! why is this so hard?). Library. Court. Health clinics just below hospital. Hospital. Treat's. Alex Quinones Park. Post Office. Where people go that they may need to stop at for an hour or so before continuing their ride.
- Around all parking places.
- at parks and shopping areas
- In town

- All stores in town
- marvel.senders.
- Everywhere
- Idk
- Parks, libraries, anywhere kids may go
- In front of stores
- In all places in Murphys area, and also in Arnold area,
- Every where
- No
- Outside stores and on Main Street
- Not sure
- By the stores
- 
- Any where where there is a biking trail. Bikers go to the trails in cars with the bike on the car. They seldom ride the bike to the biking trail
- IGA/Louies Pizza
- ?
- Everywhere!
- Not needed.
- Town square
- Around stores in town.
- Main businesses
- Schools, veterans hall
- NA
- At the lake entrances and the grocery outlet
- in town
- No where
- Nowhere
- Park when we get one
- No where
- N/A
- Recreation and shopping facilities
- Shopping centers
- Only at businesses.
- NA
- Somewhere in town
- N/A
- N/A
- I've never seen bike parking anywhere
- Na
- la contenta and the lake

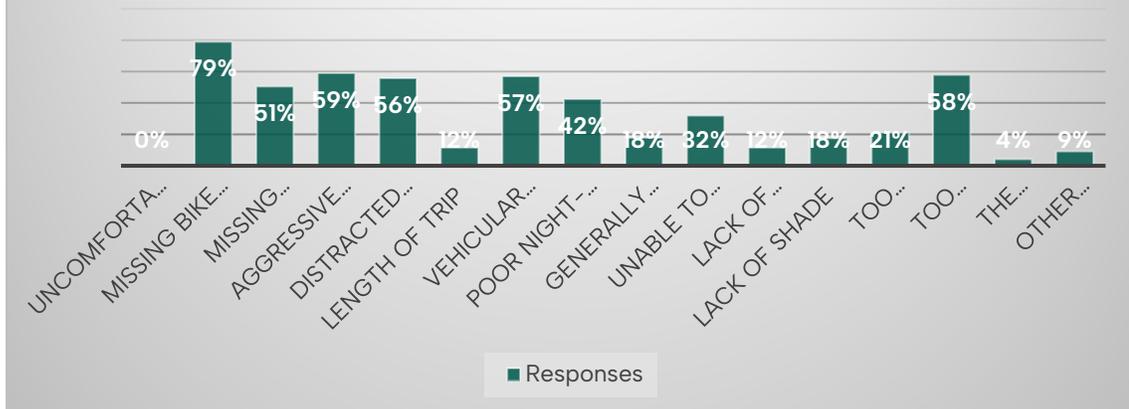
- Our county hospital.
- NA
- Strip mall/grocery stores & parks
- Near the schools, near Marval and CVS
- Everywhere by schools, our cities.
- Everywhere
- Everywhere.
- None
- Shopping in town
- Shopping centers, trailheads
- Downtown VS
- Valley springs, as well as a skate park here.
- Valley Springs
- Not worried about the parking, just the biking.
- NA
- It's not needed
- Don't know
- Na
- At trail heads
- In the main area
- Everywhere
- The shopping centers.
- At the market and at White Pines Lake
- How fan Lake and downtown
- Really, you can't figure this one out yourself. Oy.
- All business
- Unsure but at every major commercial locations and public buildings of course.
- ?
- Grocery store, ace hardware, giant burger, the gas station
- Grocery store. Town square
- Everywhere
- Don't know
- Restaurants
- Murphys Community Park and near the Masonic Hall by the Murphys Pourhouse
- Downtown, and plaza with pizza factory in valley springs
- Downtown
- Main St., Michelson Elementary, library, park
- Grocery store, post office.
- Downtown Arnold, Avery, and Murphys
- Unsure.
- Probably at a college campus in the valley or someplace like that.

- N/a
- Grocery Stores, Parks
- Not sure
- All shopping centers.
- Shopping malls and Historical AC
- Near the golf course or even across the street from the golf course.
- Down town
- N/A
- At any shopping center
- Big Trees Market in Arnold
- N/A
- Downtown Angels Camp, new Melones , fairgrounds,
- Downtown Mokelumne Hill in front of Moke Hill Nuts and Candies. We get a lot of bikers through town that want to stop but there is only one place to safely park their bike and it is a ways from downtown shops.
- Not really applicable in Murphys since it's such a bad place to bike. We'd need real infrastructure improvements for parking to be applicable. I guess the park could use some.
- n/a
- Everywhere! The lake, the stores in town.
- Murphys, Arnold, Bear Valley
- Murphys, Angels Camp, Arnold
- Not a good idea. Even a locked bike will get stolen. So, no, I don't expect to run errands with my bike.

19) Below are some challenges associated with bicycling. In your opinion, which ones discourage you and others in your area from bicycling? (check all that apply)

- Uncomfortable weather
- Missing bike facilities/ lack of shoulders
- Missing crosswalks/ unsafe intersections
- Aggressive driving
- Distracted driving
- Length of trip
- Vehicular speeding
- Poor night-time lighting
- Generally feeling uncomfortable biking
- Unable to access / lack of destinations within biking distance
- Lack of access to water
- Lack of shade
- Too steep/hilly
- Too dangerous to do so because of traffic
- The neighborhood feels unsafe
- Other (please specify)

Below are some challenges associated with bicycling. In your opinion, which ones discourage you and others in your area from bicycling? (check all that apply)



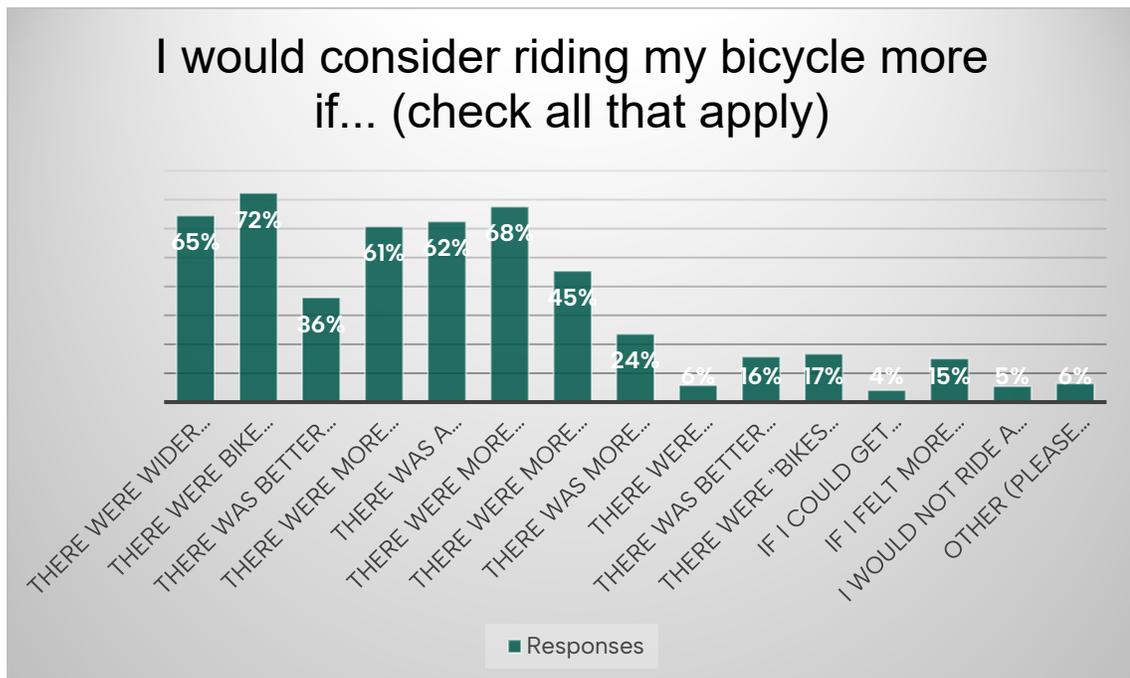
Other:

- I want to ride my bike but can't because of loose dogs
- Main roads are KNOWN by everyone to have speeding cars.
- All of the above...
- Lack of bike lanes
- There is nowhere to safely ride a road bike in Calaveras.
- N/A
- Poor attitude of drivers toward cyclists
- Dogs not secured behind fences or by chain. I have been chased by dogs on too many occasions.
- none
- Bike in the hills on trails - keep our county rural
- Dogs
- Unimprpved roads and no shoilder on Mtn Ranch Rd.
- Nothing
- N/A
- No bike lanes
- Na
- It's not the Bay Area we dont need this crap
- Entitled bicyclists holding vehicles behind them hostage
- NA
- Lack of poor driver enforcement. Example - Robert Murray of Mountain Ranch and his Orange Hummer has nearly caused SEVERAL accidents on Jesus Maria and Mountain Ranch Road.

- Instead of worrying about a biking grant why don't you make the streets safe for walking!!!
- None
- Jenny Lind is a 8 miles from town!
- Again, this question is yet another perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
- Not enough share the road signs on Hwy 4 (for bicyclists and drivers)
- Night time lighting is not advised, as it will never be advised to ride our rural roads /highways after dark

20) I would consider riding my bicycle more if... (check all that apply)

- There were wider shoulders on roads
- There were bike lanes on roads
- There was better night-time lighting
- There were more sidewalks and walking paths
- There was a separation between me and the vehicles
- There were more paved trails
- There were more dirt trails
- There was more bike parking
- There were showers at work
- There was better signage/wayfinding
- There were "bikes may use full lane" signage
- If I could get mechanical help with my bike
- If I felt more comfortable riding around cars
- I would not ride a bicycle, for any reason
- Other (please specify)



21) Please list specific locations (intersections or roadways) where there should be safer street or highway crossings for people bicycling?

- Highway 4!!
- Highway 4 north and south of Murphys town and south to Angels Camp. Also on highway 49 near intersection of highway 49 and hwy 4.
- High way 26
- Country Club and Hwy 4, it would be nice to be able to cross the hwy safely
- All major highway/road junctions
- Need some way to cross highway 4 to get to Six Mile Road safely.
- No area will be safe here.
- HWY 26, HWY 12
- Areas need to be connected. Angels Camp to Copperopolis. To Murphys ect ...
- Pine Street, West Point
- All along HWY 4
- 1) Highway 4 between blue lake springs and big trees market
- 2) Moran road
- Didn't we already answer this question?

In Arnold by Chevron and Ace Hardware. By Giant Burger & hwy 4.by the grocery store.

- Everywhere in valley springs and San Andreas
- Same as walking spots.
- N/A
- Obyrnes Ferry, highway 4 to Angela Camp and Murphys, Copperopolis to Jamestown and Sonora
- Highway 26 and Vista Del Lago.
- All of valley springs
- Vista Del Lago at highway 26. Every intersection on Vista Del Lago especially at school bus stops.

Hwy 26 at Hwy 12 in Valley springs

- Garner Place,Olive Orchard and Hwy 26 where there's alot of accidents
- There is nowhere to safely ride a road bike in Calaveras.
- Blue Lake Spring to Highway 4
- ?
- Your questions are repetitive the whole town of Bally Springs needs lighting sidewalks Bike paths Destination, you should have a bike path all the way to Hogan from town but going down that road you're gonna get ran over by the little coffee head over. There are flying around the corner. That would be great. There should be bike path to the town.
- Zero out here.
- 4 & 49
- N/A

- Little John and Copper cove drive
- See 17 above
- none
- Every where
- Same places as walking. In town, at the terrace, around Hogan Lake.
- Little John. Copper cove.
- Highways 4&49 intersection
- No shoulders, walkways on copper cove, qual hill, Areowhead, little John, oberns Ferry
- Though out angels camp
- Highway four and 49
- Access from Hwy 49 North to Mountain Ranch Rd
- Blagen Rd and Hwy 4
- Same as above.
- Intersection of H4 and Main Street.
- HWY 49 past downtown out to New Melones
- Around schools, parks, and lakes
- Highway 12 all their intersections to be honest the main 3
- Vista Del Lago & Huckleberry

#### Vista Del Lago & La Contenta Drive

- None
- No where stop trying to turn our small town into Sacramento
- Mountain Ranch & St. Charles. Russell and St Charles (where post office is). Mountain Ranch between Gov Center and Hospital back entrance. Main St and St Charles
- Wallace at South Camanche turning on to hwy 12 . Rumble Strips on hwy 12 from county line through Wallace to Southworth need to be removed or shoulder extended.
- Silver Rapids, and 26 rd.
- Hwy 26 is the main way to downtown and Jenny Lind School but there are no safe paths. It would be nice to have a safe crossing in several places
- See previous respinse
- Hogan dam rd and route 26 in valley springs
- Highways 12 and intersection with Highway 26
- Highway 4 in Arnold.
- Southworth rd
- Hwy 26 from silver rapids to valley springs.
- ldk
- Highway 26 and Baldwin st to get into town
- Pennsylvania Gulch. French Gulch. Downtown Murphys. 6 mile Road.
- Downtown Arnold, especially for post office, library, Ace hardware, running errands to & from
- Highway 12 and Southworth. Many accidents and deaths happen there
- Hwy. 26 Silver Rapids to Valley Springs

- Same as listed for pedestrians
- All major highways are unsafe to ride a bike. Most surface roads are unsafe.
- Murphys grade rd. Pennsylvania gulch rd.
- Same as above
- O Bryan's Ferry Road and Family Dollar
- Along any of the highway leading in and out of town, but specifically the La Contenta area (intersection of Hwy 12 and 26).
- Copper Cove and Little John st.
- Centennial St and Hwy 49
- N/a
- N/A
- 26 at silver rapids.
- Same as above
- Between dollar general and grocery outlet
- NA
- All around New Hogan Lake and through town
- In town four way
- None
- None
- Highway 26 - Vista Del Lago
- No where
- Around hogan dam road and hwy 26
- MarVal through to LaContenta
- Highway 26/12 intersection south to hogan dam road
- Same as walking answers
- Vista del lago into town
- All intersections.
- Hartvickson and Vista Delago.
- N/A
- Same
- Highway 26
- DTOP SIGNS IN SAN ANDREAS ON E. ST. CHARLES STREET
- The whole town
- Vista del Lago, HartVickson, Silver Rapids, Hwy 26
- Baldwin, Silver Rapids --a path from Rancho Calaveras area to the lake, to La Contents, to Valley Springs shipping
- Valley spring are to sandreas area
- Highway 26 between Vista Del Lago and Hogan Dam Road
- Burson road & Hwy 12

Hwy 26 & hogan damn road

- In general, along Hwy 49 from @ Tractor Supply to downtown Angels Camp
- Hwy 12 & 26 and city limits San Andrea's, Angels Camp, Murphys
- Any road that connects to hwy 26
- Messing pettinger rd, Burson red area, valley springs town
- See above
- Does Not Apply To Me.
- Everywhere
- Vista Del Lago
- Southworth and h12

Pettinger and h12

- Hwy 4 from main st to the carwash.
- Hartvickson.
- Along highway 26 from La Contenta to the y.
- Rancho Calaveras, Hwy's 12 and 26
- Four way stop sign on 12 & 26
- None
- Vista Del Lago to Hwy 12
- Pardini, Milton road, Main st
- Every year there's a big bike ride that comes along southworth and there is not enough room for them to ride 3-4 bikes wide and they will not go single file. It's poor etiquette on the bikers part to take over the roadway in this manner and I suppose not even legal. Bike lane would be nice but the fact is, they would likely still have poor manners and take over the roadway in a community they don't even live in. So I would be opposed at this point to any bike lanes due to the current and past experiences I have had with these bike clubs that come in from other cities and take over. Also, we are COUNTRY living and I like the look of our country roads without bike lanes.
- Around lake hogan, all through the main town of valley springs
- Highway 4
- Intersection 26 & 12
- Anything intersection with in a 1/4 mile of ALL towns. But again, this question is yet another perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
- ALL intersections should be pedestrian and bicycle safe!
- Main Street and Hwy 4
- Any large woad that connects subdivisions to highway 4
- Copper Cove and O'Byrnes Ferry

Copper Cove and Little John

- N/A
- Highway 4 and Main Street; Highway 4 and Pennsylvania Gulch
- From La Contenta to downtown Valley Springs. From la Contenta to pizza factory plaza.
- Highway 4 crossing to access Michelson

- Hwy 4 and Penn Gulch; Hwy 4 and Jones
- Hwy 4 full length from Angels to Arnold. Main St. and Hwy 4 in downtown Murphys
- As above
- N/a
- Baldwin st
- Between gold creek and downtown
- Hwy 26, Hartvickson, Baldwin
- None come to mind.
- Camanche Parkway S
- Major Highway 4 interesections
- Near the golf course and near Gold country
- In town. All intersections
- N/A
- Highway 4 throughout Arnold: Big Trees Market, Bear Valley Bicycles, Giant Burger
- Hwy 26/12
- Hwy. 26 and Jesus Maria Road

Hwy. 49 and Main Street in Mokelumne Hill

Hwy. 26 and Hwy. 49 intersection in Mokelumne Hill

- all of valley springs
- hwy 26 and Hogan dam road. Hwy 26 and Hwy 12
- Murphys@ Pennsylvania Gulch, Hwy 49/4,

Hwy 12/26

- Exits from Marval center onto 12 and 26.

Additional shoulder on both sides of Wallace. Pedestrian & bicycle signs at Burson /hwy 12 stop sign

22) Please list specific locations (intersections or roadways) where there should be wider shoulders and/or bike lanes for people bicycling?

- Jenny lind and Milton Rd
- Hwy 4
- Highway 4 from Murphys to Avery
- Highway 4 north and south of Murphys town and south to Angels Camp. Also on highway 49 near intersection of highway 49 and hwy 4.
- Moke brig
- along 4 in "downtown" Arnold
- Rte 4
- Little John, Copper Cove
- 49 between Angels Camp and Glory Hole  
Murphys Grade Road
- Keep them separated as

- Just about anywhere in Mt Ranch San Andreas, Moke Hill.
- People may want to put bike lanes on Obyrnes Ferry or Little John Road, our two main roads but that is a bad idea. Speeding cars and trucks are a CONSTANT PROBLEM HERE AND NO BIKE LANE would make anyone safe except perhaps for just a couple of people who take risks to ride.
- HWY 26 FOR SURE
- Same as 21
- all the state highways in Calaveras county
- Pine Street, West Point to West Point Cemetery
- Lake Melones
- 1) Highway 4 between blue lake springs and big trees market
- 2) Moran road
- Hwy 4 for beginners. Subdivisions.
- Everywhere in Calaveras county
- Rt 4 south of dorrington, all of rt 49, Murphys Grade Rd.
- N/A
- O'Byrnes from 4 to 120
- Vista Del Lago and Hogan Dam Road
- All of valley springs
- All intersections on Vista Del Lago
- All downtown valley springs
- There is nowhere to safely ride a road bike in Calaveras.
- Downtown Murohys
- All of Angels Camp
- ?
- The whole town of Valley Springs needs help. They don't have any recreational things for people around the town. Nobody the park is dirty and terrible.
- Everywhere.
- 49 thru AC
- Murphys Grade Road
- N/A
- Camp Connell to Arnold
- Avery to Murphy's
- Angels Camp to Copperopolis
- Bike lane needed little John in copperopolis
- And copper cove drive
- Murphys Grade Road, Six Mile Road, Pool Station Road, O'Byrnes Ferry Road, Rock Creek Road – just about every major street in Calaveras County.
- none
- Everywhere

- Every where
- Around the schools for a 2 mile radius. Consider major roads for events where the road can be modified easily to include a specific bike lane or shoulder for Bicyclists
- Little John
- Angel oaks drive & Stockton rd
- Highway 26 – in Valley Springs/Rancho Calaveras
- No shoulders, walkways on copper cove, qual hill, Areowhead, little John, oberns Ferry
- From north angels to south
- Hwy 4, 49, Dogtown Road
- Pool Station Rd, any streets in San Andreas that run parallel to HWY 49
- Oak Dr and Hwy 4
- East St. Charles Street
- Same as above.
- Along Stockton
- All of HWY 49 out to the fairgrounds
- Mountain Ranch Rd/Railroad Flat Rd
- Lakes, schools, and parks
- Hwy 26
- Vista Del Lato
- None
- No where stop trying to turn our small town into Sacramento
- Gold Strike Rd. St. Charles. Bike route through downtown San Andreas connecting St Charles to Gold Strike.
- see above
- Rd 26 in Valley Springs
- Hwy 26 and Baldwin St
- See previous respinses
- Hogan dam rd
- N/A
- Highway 4 in Arnold
- vista del lagoon to Hogan dam road.
- ldk
- Anywhere along 26 ESPECIALLY the corner by dayo
- Same as above
- Hwy 26 between Rancho Calaveras and downtown Valley Springs
- Downtown Arnold
- I dont believe biking is safe on highway 12. You cant change the driver behavior
- All along highway
- Rail Road Flat Road, Mountain Ranch Road. The whole length of both.
- Murphys grade rd and Pennsylvania gulch rd.

- Along highway and main roads
- Little John Road
- Along Hwy 12 and 26, specifically heading towards ~Taco Bell and ~La Contenta.
- Finegann lane to centennial st.
- Valley spring to lake hogan.
- Obrynes, highway 4
- Same as above
- NA
- All around New Hogan Lake and through town
- in town
- 26 from La Contenta to town
- Hwy 4 in Arnold
- None
- No where
- Highway 26, Highway 12, Hogan Dam Rd, Paloma Rd, Burson Rd, Camanche Pkwy
- Hogan dam road and hey 26
- MarVal area through to the La Contenta area
- Same as above, including roads leading toward the lake
- Same was walking
- Same answer as 21
- All!
- All public roads in Valley Springs.
- All of 49 going through town. I see a lot of people riding their bikes through town without any bike lanes in the area.
- Same
- 26 and 12
- All of valley springs
- Ditto above
- Baldwin—full stretch. Off Hwy 26 with a clear path to town and lake
- Along our road ways.
- Rancho area
- Hwy 12
- See above
- Same as above.
- Hwy 26. Rancho Calaveras. Jenny Lind
- Messing pettinger rd, Burson red area, valley springs town
- Does Not Apply To Me.
- Vista Del Lago
- H12, pettinger, southworth
- Hartvickson and Baldwin.
- Baldwin st

- Along highway 26 from La Contenta to the y.
  - Rancho Calaveras, Hwy's 12 and 26
  - All of Valley Springs
  - 12 and 26
  - None
  - From town to lake Hogan, and from town to Gold Creek.
  - Vista Del Lago to Hwy 12
  - Every year there's a big bike ride that comes along southworth and there is not enough room for them to ride 3-4 bikes wide and they will not go single file. It's poor etiquette on the bikers part to take over the roadway in this manner and I suppose not even legal. Bike lane would be nice but the fact is, they would likely still have poor manners and take over the roadway in a community they don't even live in. So I would be opposed at this point to any bike lanes due to the current and past experiences I have had with these bike clubs that come in from other cities and take over. Also, we are COUNTRY living and I like the look of our country roads without bike lanes.
  - Around lake hogan, all through the main town of valley springs
  - Highway 4 between Arnold, Murphy's, and Moran-4 turnoff
  - Between La Contenta and downtown Valley Springs
  - Try expanding your vision of what you should really be doing. Again, this question is yet another perfect example of Governmental singularly focused moronic idea, that will create an expensive, inadequate plan that does NOT meet the desired goals of the People.
  - Whenever possible. I'm aware of living upcountry and in mountain towns the roads tend to be more curvy/windy and narrow, but when available, please widen it. And where possible in communities offer parks, trails, paths, etc that would encourage outdoor activity and possible engagement from outsiders(tourists)
  - All around Murphys.
  - Hwy 26 Silver Rapids to Hwy 12, 26 four way stop.
  - Lakeshore Drive Kiva Little John
- Copper cove drive
- O'Byrnes Ferry
- Highway 4
- Little John
- Highway 120/108
- Highway 49
- N/A
  - Hwy 4 between Dorrington and Ebbets Pass
  - Main Street from Highway 4 to Big Trees Road, Jones Street from Highway 4 to Main Street, Scott Street and down 6 Mile, S. Algiers Street
  - From La Contenta to downtown Valley Springs. From La Contenta to pizza factory.
  - Highway 4 from downtown Murphys to Michelson elementary
  - south side of Hwy 4 between Penn Gulch and Big Trees Rd.

- Hwy 4 from Angels Camp to Murphys
  - All along hwy 4 through Arnold.
  - downtown Arnold
  - N/a
  - Hwy 12, Burson Rd, Pettinger Rd, Hwy 26, Pool Station Rd.
  - Hwy 26
  - None around here.
  - Camanche Parkway S
  - Bike trail parallel to Highway 4 in Arnold, through old Meadowmont Golf Course
  - 26 going into downtown Valley Springs
  - Hwy 49. To San Andreas and to New Malones
  - See previous questions
  - Hwy 26, Baldwin
  - N/A
  - Hartvickson Lane, Baldwin Lane, and Highway 26 in Valley Springs.
  - All of highway 4, all of Moran Road
  - Hwy 26/12
  - Highway 49 outside of Angels Camp going towards Sonora and Highway four to Murphys
  - Anywhere along Hwy. 49 in Mokelumne Hill and Hwy. 26.
  - Hwy 49 from Six Mile to Murphys, or even all the way from Angels to Murphys.
  - Agin, all of valley springs the high way 26 into town is nuts is nuts
  - Hwy 26, Hwy 12, Vista Del Lago, Hogan Dam Road.
  - Arnold/Big Trees/Dorrington,
  - Maintenance on Murphy's Grade!
- Calaveritas, San Andreas to Angels Camp
- Paloma road outside of valley springs.

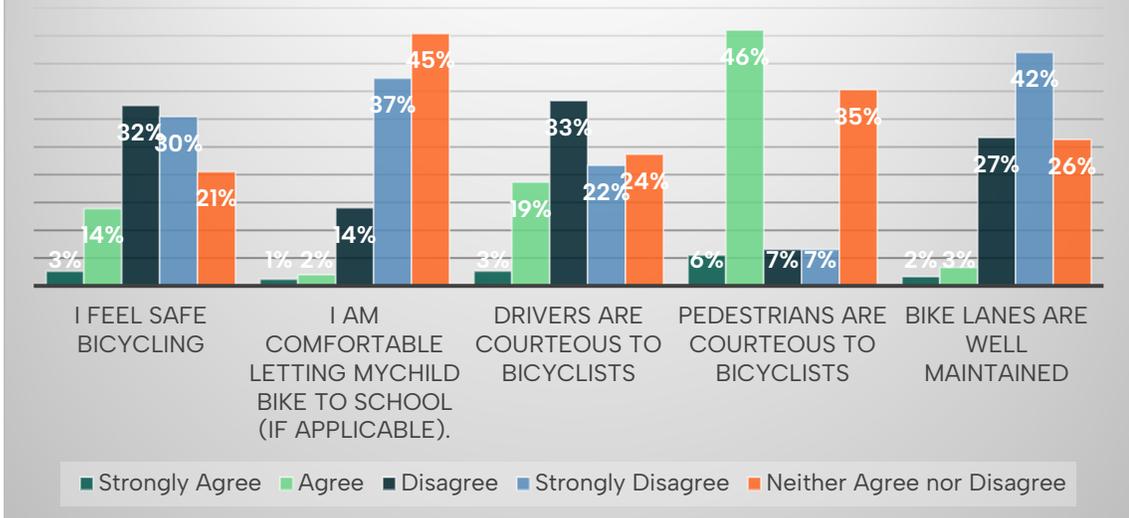
Baldwin st (vs)

Hartvickso (vs)

23) Check the box for which statement applies best:

- I feel safe bicycling in Calaveras County.
- I am comfortable letting my child bike to school (if applicable).
- Drivers are courteous to bicyclists in Calaveras County.
- Pedestrians are courteous to bicyclists in Calaveras County.
- Bike lanes are well maintained in Calaveras County.

## Check the box for which statement applies best:

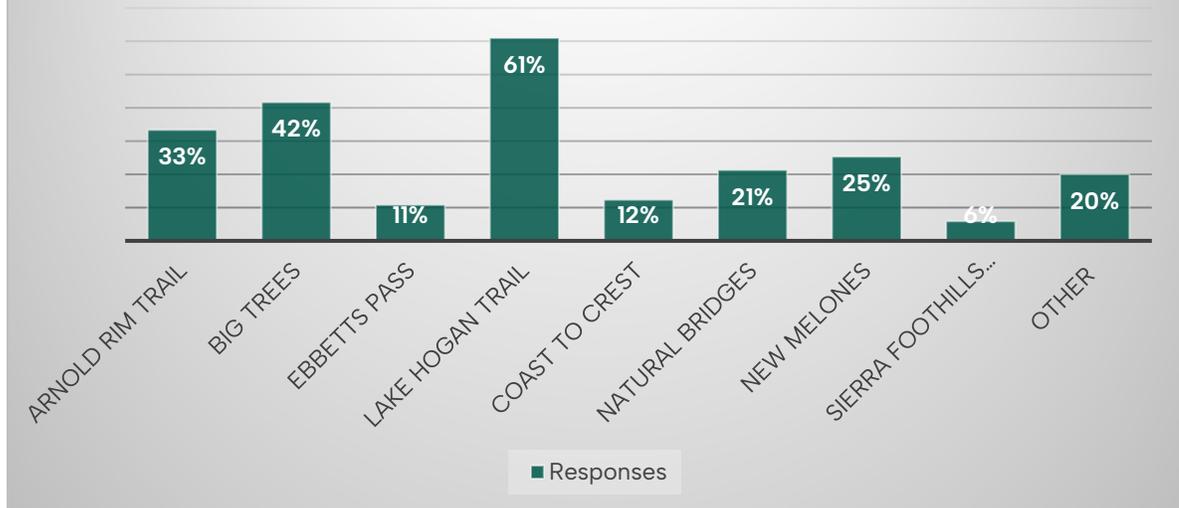


24) How often do you use the recreational trails in your area?



25) Which trails do you use most often? (Check all that apply)

## Which trails do you use most often? (Check all that apply)



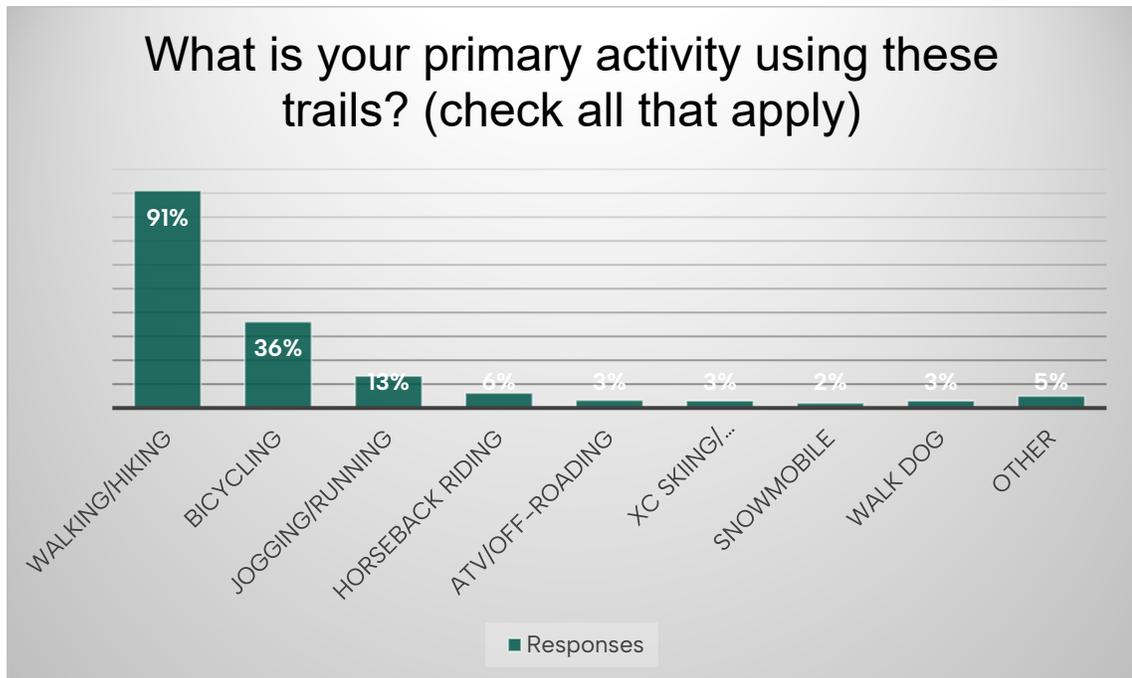
### Other:

- Tuttle town
- Flume trails
- Didn't know about these areas can't rank #27 questions
- White Pines
- Table Mountain
- NONE IN COPPEROPOLIS. I walk around a parking lot at Town Square. If a trail could be installed with the cooperation of the owners of Town Square, CV Partners, it could be a win win for them and for people who want to stroll around Town Square .
- All of these areas are way away from my home .
- Hadn't known any trails
- white pines lake
- N/A
- Peoria
- Outside calaveras county in surrounding counties
- None.
- Peoria Flats
- Blue Lake Springs
- None!! I dont want to drive 7 miles to walk on a trail.
- Green horn
- I take my dogs to Hogan, but I have to drive there. I would ride my bike there but you'll get killed on Highway 12 between Burson and Valley Springs.
- None in A C
- Lake Alpine trails

- I use the trails in the Greenhorn Creek neighborhood that are maintained by the Greenhorn Creek LLD
- None of the above
- Bear creek
- Library to Government Center
- Up behind Valley Springs Elementary
- Quail trails
- Fire trails in the hills
- Alex Quinones ball park trails
- Local trail.
- Stanislaus National Forest
- 70's
- Gov Center. Gold Strike Rd.
- Wallace Lakes Estates trails
- The somewhat trails at hogan lake
- N/A
- West Point and Railriad flat SPI and blm lands
- To the cross behind VSE
- N/A
- none
- EBMUD trails
- Trail of Skulls, Camp 9, trail from Briski Hill to lake
- Walking trail through Greenhorn.
- My personal
- None here in other areas.
- All trails around lake hogan.
- Blackcreek park
- Black creek park in copperopolis
- Not sure, whatever park area is available by VSE
- Bear valley
- Backroads
- Hogan
- Behind BD elementary
- No trails in Murphys.
- River of skulls trail
- Hogan
- Comanche
- New Hogan
- All at some point
- I don't know where any of these are. I tried finding a hiking trail in Sonora and trail heads were blocked.

- Several on Stanislaus National Forest
- stanislaus river access routes, Camp 9, and Stanislaus NF around Spicer/Union/Utica areas
- OHV trails
- Wallace Lake walking trail
- Comanche trails
- SPi Land

26) What is your primary activity using these trails? (check all that apply)

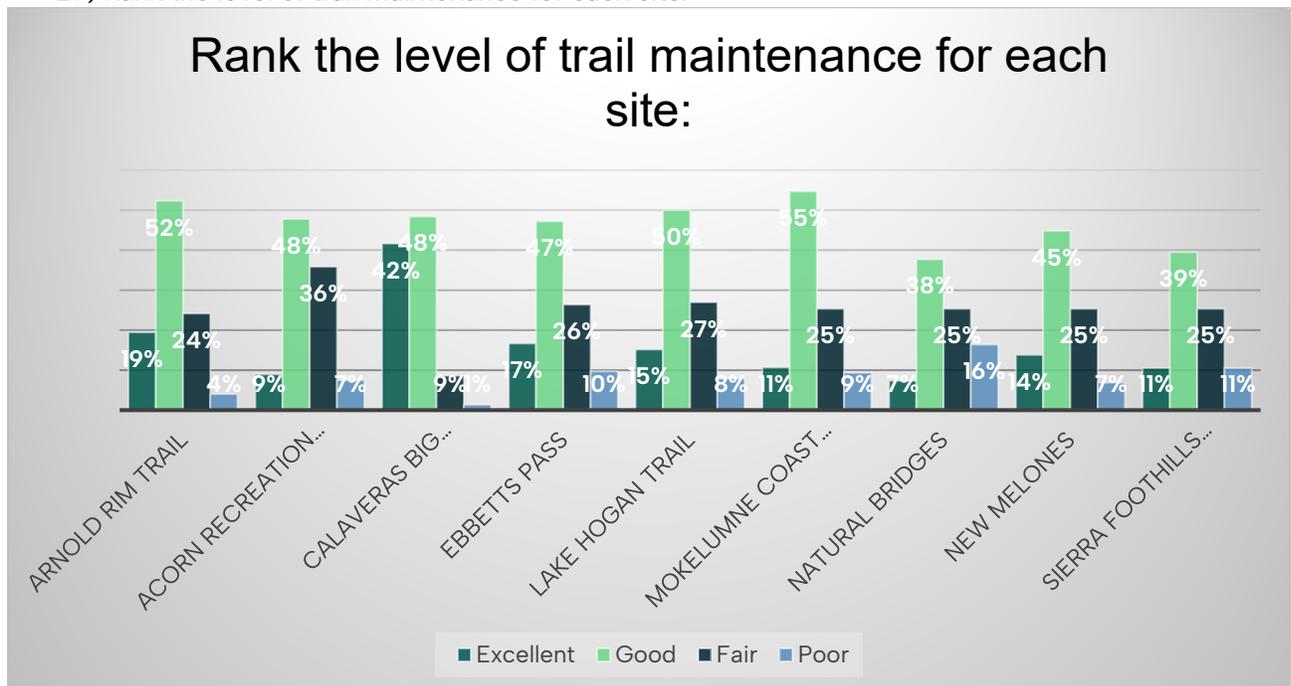


Other:

- O
- O
- N/A
- Walk dog
- Don't use them, as they are poorly maintained
- Ebike to handle hills
- Walking my dogs
- Dog walking
- None
- .
- N/A
- Dog walking
- N/A
- n/a
- Dog walks

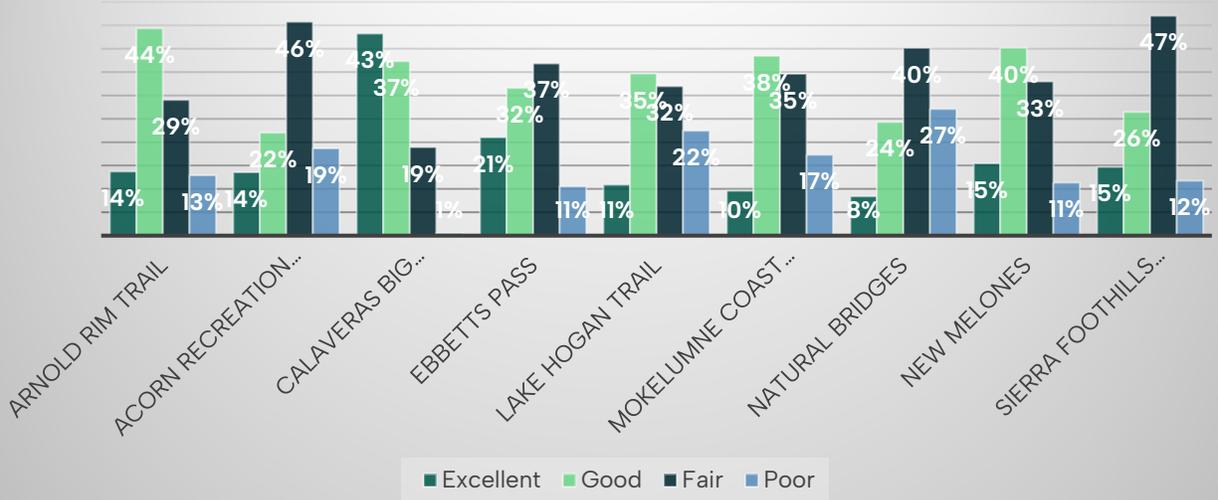
- Walking the dogs
- Walking dogs
- Hunting
- Horseback riding
- Dog walking
- Photography
- Dog adventures
- Walking the dog
- K
- Rock crawling
- mountain biking

27) Rank the level of trail maintenance for each site:



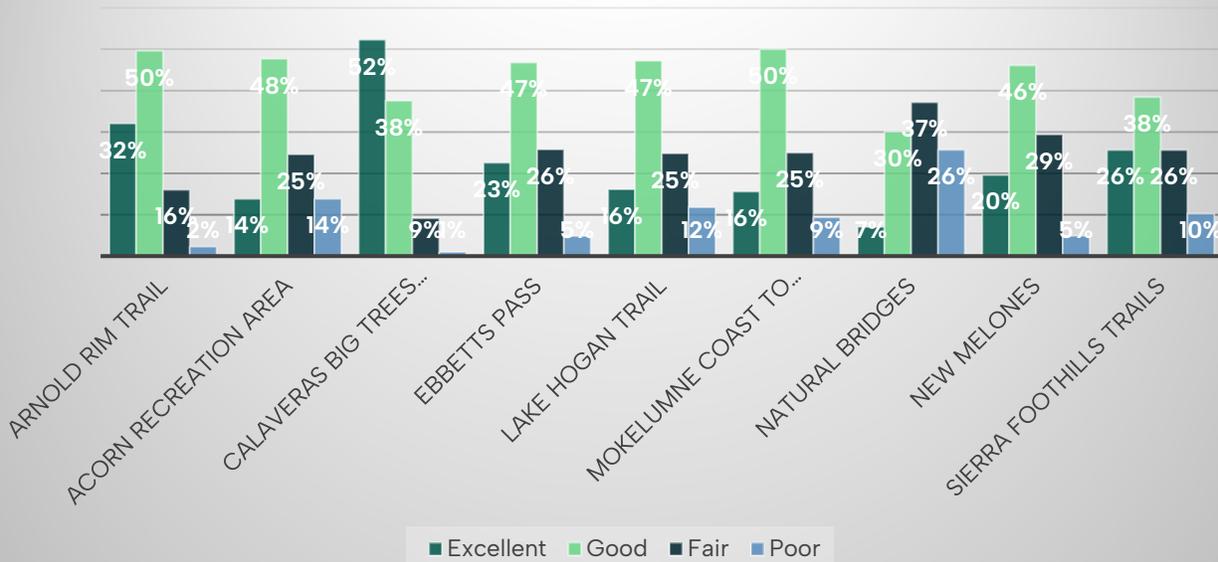
28) Rank the level of trail security and safety for each site:

## Rank the level of trail security and safety for each site:



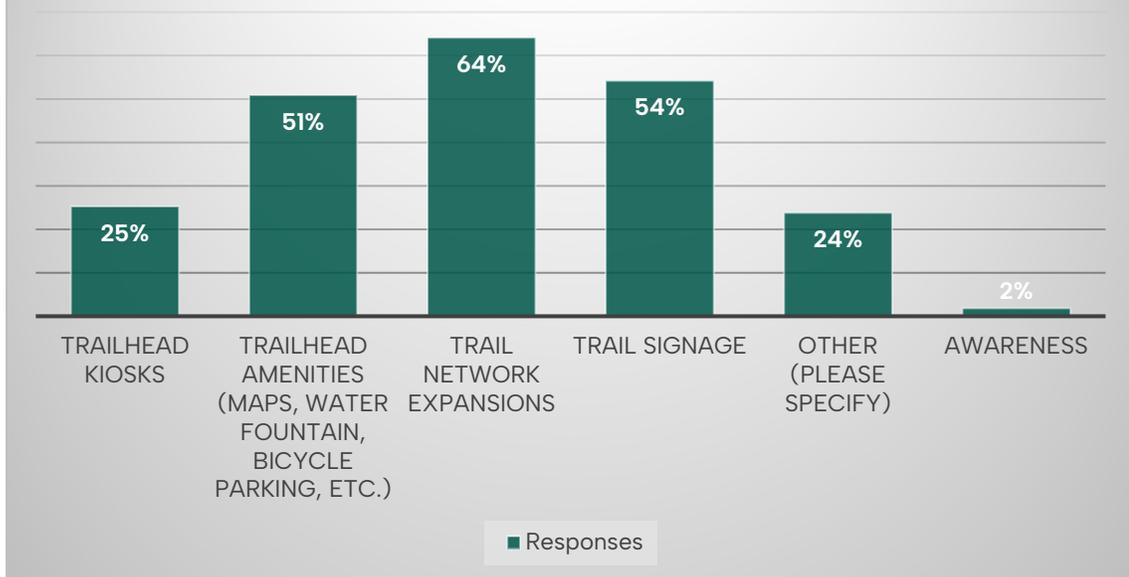
29) Rank the level of trail cleanliness for each site

## Rank the level of trail cleanliness for each site:



30) What would you like to see more of?

## What would you like to see more of?



### Other:

- More LOCAL community awareness of location
- O
- ADA trails
- N/A
- Trails connect to each other and communities in Calaveras
- More bike trails in Blue Lake Springs and access to Big Trees more bike trails in Big Trees State Park
- Trails.
- I think these are great!
- More walking in Angels Camp
- Trails around Lake Tulloch.
- more trails in the Copperopolis area, please
- Paved bike paths
- none
- Signage with distance would be helpful
- Would be nice to have a flyer or site that communicates all the trail heads in our County. I wasn't aware of many of these locations having "trails". I'm familiar with Acorn (one at Hogan and one at Melones), but didn't know of a hiking trail there, just thought they were campgrounds.
- Nothing in Valley Springs
- Trash cans
- Dog parks
- Poison Oak mitigation
- .

- Trails locally so we don't have to drive so far.
- Nature being left as it is
- N/a
- Mokelumne coast to crest trail starting at Camanche is not safe for horseback riding anymore and has been washed away with loose rocks on steep hills.
- Usually I have friends with me, and I show them the places where we live.
- More horse trailer staging areas and open up access all year....every season it's closed for something!
- N/A
- More funds go into road maintenance and not wasted on isles trails and sidewalks
- idk
- Ponderosa way on BLM at Doster that used to be accessible for mountain biking before the Butte Fire
- Portable bathroom
- I don't know where to go to find these trails
- Horse trails!!!
- N/A
- Better parking
- Bathrooms
- Bike path from GC/LC to town
- Nothing
- Paved trails
- More hiking and backpacking camping trails
- Mixed use roads and trails for ATV and motorbikes.
- Shade arrea
- Maybe repurpose old railways and have them become hiking and biking trails like other states have started doing.
- Walking trail in Murphys
- Where the heck is the Mokelumne Coast to Crest Trail? Some trails are unknown to me and I am sure I'm not alone.
- Safe sidewalks
- Trail patrols to keep people safe
- Paved trails preferably at Hogan lake
- More people out there. Not so remote and worrisome to be alone
- Nothing
- More horse trails
- Benches
- More trail knowledge
- ALL trails should be accessible by Bike (and E-Bikes), Walking/Hiking, Horseback riding.

- There is a lot of graffiti at natural bridges. It's super upsetting to see and I stopped hiking there because it's so overrun with graffiti. The cave interior and the trail just leading up to the cave have graffiti.
- Copperopolis neighborhood to trail access
- connector trails to other sites/parks and community
- all-weather access to and parking at key trailheads, e.g., Arnold Rim Trail at Valley View
- Rails to trails
- Mountain bike specific FEATURES!
- Garbage cans and dog waste receptacles
- Local should not have to pay to access the resources that are in our backyard. The county has no interest in raising wages in the community and requiring people to pay to have healthy habits is ridiculous
- more trails
- Please more trails for Mountain bikes.
- Trash cans . Restrooms

31) Where (if any) do there need to be more recreational trail networks or expansions to existing recreational trail networks?

All over

Would be nice if/when downtown Angels camp has an official trail to new melones

New to area so I'm not sure

N/a

South end of ART

Ridge crests

More trails on Calaveras Big Trees State Park. Could they put one in along the Stanislaus River? Or another along the way to the South Grove?

A small walking trail around the Town Square at Copperopolis if the developers/owners would allow it. People come to the center but have to walk around the parking lot if they stay at the hotel or live here.

Almost everywhere, just not enough

From Angels Camp to both New Melones and to San Andreas.

A recreation trail that goes from

Arnold/avery to murphys. Possibly along the creek next to highway 4.

My major concerns are to create a useful countywide recreational system. The only true park areas are in Hoia walls. Let's take Copperopolis. Just recently have received a small park area at end of country next to the bridge leading to Tolumne County that is constantly the scene of truck accidents and other accidents. The only park in Copperopolis is a strange bunch of old mine equipment dumped on the ground and couple of splinter ridden wood tables. The largest recreational area in the county has no public access to it. Lake Tulloch. No public boat ramp, trail system to it, no walking trail. The cry after this survey will be "We have no money to do anything ". I feel sad for a child growing up in Calaveras County most of all.

West Point. I do not know of any trails in West Point.

Our daughter uses power wheelchair.

Calaveras Big Trees trail has got pretty rough in places although it was slightly improved around the former Pioneer tree so now can get through with some difficulty. We know it's a huge expense so understand they're hard to keep smoother for wheelchairs!! Lake Hogan trail has got pretty rough also !

Big trees park, Rim Trail and White pines lake.

Better access from Arnold to Murphys

All over Calaveras county. Personally for me. A safe trail from gold creek to new hogan lake connect the rim trail to bike paths around Arnold so folks could easily get there from their homes or other main areas.

N/A

Peoria, Copperopolis

Hogan Dam Road access to the trail head bike trail. The bike trail is fine. Getting there is dangerous.

Yes, would be nice to travel from la contenta to Hogan Lake to shopping centers safely with our dog and be able to play fetch.

Everywhere

Pioroa Flats

Melones, Murphys. Arnold and higher- we live in the mountains there could be so many awesome trails.

Blue Lake Springs to Big Trees State Park

All through Murphys. But where? A leisurely walk on a shaded flat surface would be ideal.

I've been happy with what we have.

We need trails leading from Valley Springs to Hogan Dam, We need better walkways to the town of Valley Springs and lighting and crosswalks

Connecting bear valley to Arnold to murphys to Angels camp

Lake Tulloch

Near Utica Park, but I think that's in the works. There's a trail that goes from near the Mark Twain school to HWY 49 and kids use that (or used to at least) as a shortcut to school. As far as I know it's not an official trail so usually there's tweekers back there. Sad, when it could actually be utilized as a real trail that would be kept up with.

New Hogan

Rim trail needs some updating. And also some picknick areas

Angels camp.

more trails in the Copperopolis area, please

Copperopolis

Valley Springs

I feel that Calaveras County has plenty of hiking and mountain biking trails. I would prefer focus on safe areas to cycle.

Mokelumne Hill River, access to the river with hiking trails

We already have plenty of trails. No more are needed.

Make the old railroad beds into bike trails

? Don't know

Angels Camp

Downtown VS to Hogan. Paloma to downtown VS. Maybe even via Gillam (which needs a lot of grading at minimum) to 12, with bike lanes to get to downtown and Hogan.

In the hills - not in towns

From downtown angels to new melones

Would love to see a back way to get to Sonora from Angels camp using some of the Melones trails

Trails are a very low-cost and low-maintenance amenity when considering the total project lifespan. Outdoor activities such as hiking have gained popularity steadily and consistently over time. These activities bring not only economic benefits from out-of-county tourism, they also bring health benefits to county citizens and give young people more reasons to choose to live and work in the county rather than move elsewhere.

In short, you should consider having recreational trail networks anywhere that current stake holders and land-use plans would allow for expansions or new trail networks.

The general public is not necessarily aware of what locations qualify for trail development projects, and so it is important for govt and citizens to collaborate together to identify both \*all\* possible trail network sites, and then also a prioritized list of most-preferred trail network sites.

on the south end of Arnold Rim Trail

San Andreas could really use a recreational trail network

Melones

Copperopolis

From Angels Camp (along Finnegan) to New Melones.

Hogan

New Melones

San Andreas/Mountain Ranch/Railroad Flat

Schools, parks, lakes, and existing trails.

Not wure

Everywhere

None

N/a

The Gov Center walking loop around campus (using paved trails and sidewalks) needs to be completed. This needs to be linked to trails going to Alex Quinones, the hospital campus, and pretty resting points in Downtown San andreas like Main St and the little park by the creek down there.

Any trails what we have in Calaveras County they're need constant maintenance, maintenance, maintenance.... Thank you.

Gold creek to Valley Springs town and connecting to lake hogan

After reading thru these questions, I have to say it doesn't really apply to the Glencoe area. We aren't developed to that extent, nor do most want it to be so.

Please finish the mokelumne coast to crest project in calaveras county! I would love to help and think it should work with fire roads as a fire prevention and management feature in partnership with private land owners along the canyon and SPI and Calfire.

pilarmajors@gmail.com

N/A

ldk

Ponderosa way on BLM at Doster that used to be accessible for mountain biking before the Butte Fire

All the current existing recreational trails in Calaveras County

Anything connected to anything, lol

Hogan and comanche

The trail in angels camp that will follow angels creek to Melones needs to wrap up! Let's get it done!

I would love to have better resources to know about some of the local trails

New Melones would be nice if more connected around the lake and if horses were allowed. Can't find great access to horse trails in murphys area/ways to ride near Murphys Grade rd.

Copperopolis

Rancho Calaveras

Up the highway, four corridor, connecting to Arnold and Bear Valley

N/A

Copperopolis

Anywhere around valley springs town area. More challenging trails around lake hogan.

The old unused section of highway 4 between Angels and Copper. Along Finnegan lane and Angels creek/irrigation ditch

In copperopolis more trails are required as blackcreek Park has very minimal trail

Copperopolis

i don't know

None

I think it's fine the way it is! Bikers should stay off highways

Valley Springs. It was a big mistake that the county didn't do anything with the old railroad line. Perfect bike path.

No where

Hogan Lake connection to Coast to Crest Trail

N/a

There needs to be a more "in your face" way to let my family and others know what our recreational activity options are in this county.

Lake Hogan

Hogan

Anywhere. Give us more trails in calaveras county

Arnold Rim and anywhere else

If you want to put Calaveras and n the map as a recreation hub, consider outside the box concepts. Think like Moab and some other areas in NorCal that allow ATVs to operate on backroad and side roads through town. You will then attract visitors who have resources and will bring revenue to our county. We need it.

Take a look at "A trail for everyone" short film. It explains how an area is being revitalized by allowing families to operate their ATVs on certain roads.

San Andreas

I would like most trails to be wider and for weeds to be kept down in the middle

Valley springs needs more to do in general.

Lake Hogan trails that connect to the community

Rancho Calaveras and the Township of Jenny Lind

Between town. Maybe repurpose old logging rds and old railways for trails.

Rancho Calaveras

Hogan

By La Contenta golf course to town (VS)

Murphys

Jenny Lind to Hogan Lake area.

ALL of District 2 could benefit from recreational trails. There are none that I am aware of.

I'm not sure where the options are. But I love hiking, so anywhere that it is an option.

Lake Hogan, there are trails but not enough and some are very difficult and beat up. A trail around the lake would be great.

All over Valley Springs, and connect San Andreas to Valley Springs

Main to frogtown

Lake Hogan. I have heard tales of women being chased by shady looking men when walking their dogs by themselves

All around hogan lake access. Trails need widened and maintained.

We need a skate park somewhere in valley Springs area

We don't need any more. We have a ton!

Expand the Coast to Crest trail south from Campo Seco toward Lake Camanche. Also connect Valley Springs to Hogan via bike rideable trail.

Jenny Lind

Around Valley Springs

More access to maps and the difficulty of the trails please

Every year there's a big bike ride that comes along southworth and there is not enough room for them to ride 3-4 bikes wide and they will not go single file. It's poor etiquette on the bikers part to take over the roadway in this manner and I suppose not even legal. Bike lane would be nice but the fact is, they would likely still have poor manners and take over the roadway in a community they don't even live in. So I would be opposed at this point to any bike lanes due to the current and past experiences I have had with these bike clubs that come in from other cities and take over. Also, we are COUNTRY living and I like the look of our country roads without bike lanes.

Around hogan trail

All over the area

Maybe a thru trail up to lake Alpine for hiking and biking

Not sure. I need to check out more trails.

Im worried you'll bring asphalt

( I'm allergic to it)or cement to

"Pave Paradise & Put Up A Parking Lot" We've lost so much of Arnold's "charm" to "progress".

I've seen the street lights going up. So much for our dark sky initiative. Everything you're asking about his millions of dollars...we are one of the poorest counties in the state. Budgets are being slashed...

Copperopolis.

Connect ALL of the trails to form a complete network of non-gas-motorized trails. I'd say E-Bikes might be acceptable, if kept to controlled speeds (posted).

I don't know what a recreational trail network or expansion is to answer this question.

There should be more clear trail marking to get down to the Stanislaus river from places like the quarry, or down love creek road

N/A

Copperopolis

Everywhere. There are not enough trails. I would also like to see more fire roads that I could ride on.

Dog friendly trails in the parks

Around Hogan Lake.

There needs to be more trails and biking trails all around Calaveras county. It would be nice if more were paved and ADA accessible, which is also helpful for strollers as well.

angels Camp

ART expansion to link with Bear Valley trails.

BLM parcels north of Murphys, connections between Arnold Rim Trail and Big Trees State Park to the east, Dorrington to the north (via Waterline), Murphys to the south (those BLM parcels), Mokelumne Coast to Crest Trail to the northwest (via Summit Level), ART trail extension to San Antonio Falls (private property), completion of 12-mile loop of singletrack trail in San Domingo Canyon (ART) with 3/4 mile connector

Community trail connectivity and more purpose built bike trails that cater to ALL skill levels, not just experienced riders

N/a

Hogan reservoir

Lake Hogan, Valley Springs

Throughout the East Bay MUD property around Lake Camanche and Lake Pardee. As well as the property around Hogan Lake which is owned by the city of Stockton I think. It would be huge to make an area for trail riding OHV's, specifically side by sides.

N/a

A walking/biking path in Arnold off the highway.

A walking/biking path in Murphys, possibly along the creek and in the wooded areas.

A trail away from the Hwy to New Malones.

It would be nice for locals to get free admission to trails such as New Malones and Big tress. Paying \$10 to walk in my own backyard seems un fair. Perhaps a discounted annual pass into these "paid entery" trail heads.

Valley Springs area

Around the rivers, biking to the rivers and other lakes

Expand Arnold Rim Trail system. More mountain bike features and jumps!

Expand Bear Valley trails. More machine-built bike trails!

Lake Hogan and surrounding areas

Mokelumne Coast to Crest Trail

there is a trail near my house and feel the trail called "river of skulls" should be open to cyclist as weel sine i rarely see and one there

Lake Hogan, the trails are to hard for beginners and families. Trail around the lake would be so nice. Beautiful scenery but no trails ;-(

Assistance with funding for Community Parks that have walking opportunities but limited budgets.

Avoidance of conflict on Arnold Rim Trail between equestrians, cyclists and pedestrians is critical.Physical separation could be a route to achieving this.

Angels Camp to Murphys

Hogan and EBAYMUD

PARDEE campground

## Interactive Map Comments

Idea about biking	Allow all forms of recreation (including bikes). Distances between access points are too large for most to enjoy on foot.
Idea about biking	More trails to river access.
Idea about biking	Wayfinding Sign alerting drivers
Idea about biking	Wayfinding Sign to alert drivers
General comment	HAWK light For Safety
Idea about biking	Wayfinding Sign to Bear Valley
Idea about biking	Wayfinding sign for vehicles alert

Idea about biking	Kiosk with Suggested Bike Routes
Idea about biking	Share the Road Signs
General comment	There is no safe walking/biking to downtown VS
Idea about biking	Share the Road Sign
Idea about biking	Share the Road Sign
Idea about biking	Share the Road Sign
General comment	Bike Parking
General comment	Bike Parking
Idea about biking	Wayfinding Sign to alert vehicles
Idea about biking	Wayfinding Sign to alert vehicles
Idea about biking	Share the Road
General comment	Wayfinding sign to alert vehicles about walkers and cyclists
General comment	Bike Parking and Kiosk Re Bike/Walking
General comment	Bike Parking and Kiosk for local bike routes
General comment	Bike Parking and Kiosk for local bike routes
Idea about biking	Share the Road Sign
Idea about biking	Share the Road Sign
Idea about biking	We need share the rd. signs On Hogan Dam Rd. between Silver Rapids and Hwy. 26. We also need a few on Vista Del Lago in La Contenta.
Idea about biking	Biking and walking in Valley Springs from Vista Del Lago to town. There is no bike lane no shoulder no anything on Highway 26 and I see kids having to walk on it at night which is very very scary
General comment	We need to widen Hwy 49 for bike lanes. The bike lanes could double as emergency evacuation lanes when needed.
Idea about biking	I would love to see Parrots Ferry rd improved for safe biking. It is a beautiful route and would really help connect Tuolumne and Calaveras Counties. It could also bring in tourism for bike tourists looking for trips in the foothills.
Idea about biking	Social Media Comment Received: "Be nice if there was a trail, for bikes and golf carts, that connected all the subdivisions to the grocery store and restaurants". Two residents agreed
General comment	Social Media Comment Received: "I think one big thing we need is more walkable "downtown" sidewalk and bike lanes along the Arnold stretch of Highway 4. Murphys feels much easier to walk around and explore but Arnold feels dangerous with the highway being so fast and no sidewalk"
General comment	Two residents agreed
Idea about recreational trail	a non-motorized, multi-use Recreational trail around White Pines Lake with a uniform walking surface and a bridge across the outlet.
Idea about recreational trail	Develop non-motorized multi-use trail system on large BLM parcels north of Murphys
General comment	Improve Valley View Drive to provide year around all weather access to Arnold Rim Trail trailheads.
Idea about walking	one possible extension of the rim trail closer to more people
Idea about walking	one possible extension of the rim trail closer to more people. this goes along an existing fire road that was graded for the canyon fire decades ago.
Idea about walking	one possible extension of the rim trail closer to more people
Idea about biking	Improving access for bicycles on roads to make biking a safe alternative to driving would be my biggest objective.

- Idea about walking Shoulder widening between Mustang and Rainy Drive would make it more comfortable to walk between Meadowmont and Fly-In Acres.
- Idea about walking Public Comment: Biking and walking in Valley Springs from Vista Del Lago to town. There is no bike lane no shoulder no anything on Highway 26 and I see kids having to walk on it at night which is very very scary.
- Idea about walking Public Comment: There should be a class I for walking and biking between Gold Creek and the gym
- Idea about walking Public Comment – There should be a walking/biking connection between all of the businesses south of the Mar Val shopping center and the Mar Val shopping center. No easy way to walk to Starbucks or CVS, Thai, etc.
- Idea about walking Many people walk along 6-Mile, which is a beautiful walk that takes you from Downtown Murphys to Ironstone. There is no pedestrian path, and it feels dangerous, especially when cars speed down the road. It would be great to add a pedestrian path along portions of this path where there are sharp turns to create safer buffers for pedestrians.
- Idea about walking This could be developed as a walking or biking trail to connect the Rocky Hill neighborhood to the creek. There is some kind of road with a gate across that goes from Bret Harte Rd. behind the Gateway Press buildings and looks to go to the creek. This road might belong to UPUD? It also seems to go behind the east houses on Rocky Hill, but now might be someone's driveway. However, I'm unsure if there is any property left that isn't private after the construction of the new subdivision along the creek.
- Idea about walking It was surely a missed opportunity.
- Idea about hiking add 1/2 mile of trail to existing system to complete 10-mile loop in San Domingo Canyon
- Idea about biking We need a bike lane along Highway 4 because there are kids who bike to school regularly from the subdivisions behind Downtown Murphys.
- We need a creek trail and it should be a requirement for anyone developing properties that abut it, including retroactively for the new current housing tract
- There should also be a public restroom somewhere on the eastern end of the trail or at the western end near the sewer station.
- Idea about walking A bicycle trail could be incorporated into the creek trail and run past the sewer station, either along creek on rejoining the Grade Rd briefly before joining the flume right of way and continuing to Angels Camp using the utica water right of way and easement to Ross reservoir and thence to Angels through Tryon and Rolleri properties where the easement exists. This would negate the need to enter into any further agreements with property owners using this right of way wherever practical, will not be a major encroachment on existing right of way agreements, and it would be a major asset for those wanting to safely use alternate transportation (bicycles or walking) to and from Murphys and Angels Camp.
- Idea about biking For the kids who bike to school, create a safe path to Michelson Elementary. There was an improvement proposed in the Safe Routes to School study. Please implement it.
- General comment There should be a full connection for walking and biking on Vista Del Lago between 26 and Lake Hogan
- Idea about hiking There should be a recreational trail connecting Gold Creek and the lake

Idea about walking	We should put in a walking/biking path that would provide non-vehicular access to the shopping center
Idea about walking	Shoulder widening between Mustang and Rainy Drive would make it more comfortable to walk between Meadowmont and Fly-In Acres.
Idea about walking	Public Comment: Biking and walking in Valley Springs from Vista Del Lago to town. There is no bike lane no shoulder no anything on Highway 26 and I see kids having to walk on it at night which is very very scary.
Idea about walking	Public Comment: There should be a class I for walking and biking between Gold Creek and the gym
Idea about walking	Public Comment - There should be a walking/biking connection between all of the businesses south of the Mar Val shopping center and the Mar Val shopping center. No easy way to walk to Starbucks or CVS, Thai, etc.
Idea about walking	Many people walk along 6-Mile, which is a beautiful walk that takes you from Downtown Murphys to Ironstone. There is no pedestrian path, and it feels dangerous, especially when cars speed down the road. It would be great to add a pedestrian path along portions of this path where there are sharp turns to create safer buffers for pedestrians.
Idea about walking	This could be developed as a walking or biking trail to connect the Rocky Hill neighborhood to the creek. There is some kind of road with a gate across that goes from Bret Harte Rd. behind the Gateway Press buildings and looks to go to the creek. This road might belong to UPUD? It also seems to go behind the east houses on Rocky Hill, but now might be someone's driveway. However, I'm unsure if there is any property left that isn't private after the construction of the new subdivision along the creek.
Idea about walking	It was surely a missed opportunity.
Idea about hiking	add 1/2 mile of trail to existing system to complete 10-mile loop in San Domingo Canyon
Idea about walking	Walking path maybe not directly on the street
Idea about walking	Need more walking crosswalks
General comment	Social Media Comment Received: "Be nice if there was a trail, for bikes and golf carts, that connected all the subdivisions to the grocery store and restaurants". Two residents agreed
Idea about biking Destination you would like to walk/bike/hike to	Allow all forms of recreation (including bikes). Distances between access points are too large for most to enjoy on foot.
Idea about recreational trail	This USFS property has been masticated (and already put through NEPA) and is ripe for new multi-use trails between the forest roads. Plans for a walking, hiking, biking path from Angels via Angels Creek (Finnegan Lane) to connect with New Melones Reservoir near the Buck Brush Trailhead have been talked about for years. I would like to join in planning for such an access connection. This would open many opportunities for enjoying New Melones without reliance on autos as well as providing fishing, vistas and trails adjacent to Angels Creek.
Idea about biking	Improving access for bicycles on roads to make biking a safe alternative to driving would be my biggest objective.

Idea about walking	We need better sidewalks and walking access on the secondary streets.
General comment	Bike Parking and Kiosk for local bike routes
Idea about biking	We need a protected bike lane here!
Idea about biking	We need to widen Hwy 49 for bike lanes. The bike lanes could double as emergency evacuation lanes when needed.
Idea about biking	Wayfinding Sign alerting drivers
Idea about biking	Wayfinding Sign to alert vehicles
Idea about recreational trail	Multi-use community connector trail, off highway between Dorrington and Bear Valley.
Idea about biking	Add way finding go help people know where to go.
Idea about recreational trail	Develop non-motorized multi-use trail system on large BLM parcels north of Murphys
General comment	Many Schoolchildren from the Hilmont area west of 49 cross the highway here. A safe crosswalk is imperative.
Idea about walking	one possible extension of the rim trail closer to more people
Idea about walking	Cross walk is needed to 7-11
Idea about biking	We need a new downhill-only bike-only Flow trail here. This is the best gravity-focused area of the rim trail system, and there are plenty of multi-use trails that can be used to climb.
Idea about walking	actual flat bike path walking path around the lake. possibly ADA. would need a bridge to get across San Antonio creek..
General comment	Improve Valley View Drive to provide year around all weather access to Arnold Rim Trail trailheads.
Idea about biking	Yabba Dabba Doo is the best biking trail on the Rim Trail System. But it needs to be improved: more jumps, bigger berms, more rock features to make it even more attractive to people who ride.
Idea about biking	Kiosk with Suggested Bike Routes
Idea about biking	We need share the rd. signs On Hogan Dam Rd. between Silver Rapids and Hwy. 26. We also need a few on Vista Del Lago in La Contenta.
Idea about biking	I would love to see Parrots Ferry rd improved for safe biking. It is a beautiful route and would really help connect Tuolumne and Calaveras Counties. It could also bring in tourism for bike tourists looking for trips in the foothills.

Idea about walking	Prioritize safe bike and ped crossing of SR-4.
Idea about biking	We need share the rd. signs On Hogan Dam Rd. between Silver Rapids and Hwy. 26. We also need a few on Vista Del Lago in La Contenta.
Idea about walking	There should be a walking path between Hogan Dam Road/26 (by gym) to Gold Creek. People walking on that "shoulder" are making things treacherous.
General comment	HAWK light For Safety
Idea about biking	Wayfinding Sign to Bear Valley
Idea about biking	For the short term, ask Caltrans to remove all edgeline rumble strips with shoulder widths of less than 2 feet.
General comment	Bike Parking and Kiosk Re Bike/Walking
Idea about walking	one possible extension of the rim trail closer to more people
Idea about biking	skills course for beginner and novice bicyclist
General comment	The crosswalk here is VERY dangerous. Cars in the outer lanes are often fooled by drivers who stop in the middle lane for a pedestrian. Outer lane drivers blast on through often narrowly missing a pedestrian in the middle lane area which is blocked by the middle car. The crosswalk should be moved directly to High School St with only TWO lanes in that area. Or, flashing warning lights should be installed if kept by Russels Rd.
Idea about recreational trail	more signage for trails and trail heads and maps of trails
Idea about biking	Adding a biking trail/ walking trail through this lot that would connect from SR26 at Vista Del Lago to the center of Valley Springs. This would be ideal for people wanting to bike from La Contenta area and protect people from walking alongside the highway.
Idea about recreational trail	Build safe off highway connection from Arnold to Murphys. Currently over half built with portions of Arnold Rim Trail. Connection options using San Domingo Creek or Angels Creek areas.
Idea about biking	Share the Road Signs
General comment	Bike Parking
General comment	it would be amazing to have a hiking and biking trail all the way around the lake, there are alot of active people living here who would really love it
Idea about walking	We should add a mountain bike trail
Idea about biking	Share the Road Sign
Idea about biking	Wayfinding Sign to alert vehicles

Destination you would like to walk/bike/hike to	if you don't have a car getting between HWY 4 and parrotts ferry is impossible! Would be great to have a bike trail around here
General comment	There is no safe walking/biking to downtown VS
Idea about biking	For the short term, ask Caltrans to remove all edgeline rumble strips with shoulder widths of less than 2 feet.
Idea about biking	More trails to river access.
General comment	Bike Parking
Idea about biking	Share the Road Sign
	This portion of Sunset Loop needs a reroute. We could get 1/2 mile more out of the trail by rerouting, creating bermed-turns, and making rollers and jumps.
Idea about biking	Share the Road
Idea about biking	
Destination you would like to walk/bike/hike to	Secure public access to San Antonio Falls, which is on private property. USFS system trail ends at property boundary about 200' from falls.
Idea about recreational trail	place a trail head info booth in the parking lot of Mountain Aloha Mtb Co. We need a walking path in Arnold – desperately! Need to be able to walk from Sierra Framing/Ebbetts Pass Sporting Goods, down to the Meadow (note, your map is old – Meadowmont Golf Course hasn't been there for 14 years). If you create a path, extend it around to Blagen road so we can safely walk to the Post Office and library.
	Will be helpful for increasing business if visitors attending the many fairs on Hwy 4 can safely walk around.
Idea about walking	This is vital to our economic development.
	The Interface OHV area has a very large number of fallen trees, and the Forest Service has not cleared them from trails. Much of the system along Summit Level road is non-usable because of this.
General comment	one possible extension of the rim trail closer to more people. this goes along an existing fire road that was graded for the canyon fire decades ago.
Idea about walking	
	Finishing the middle Mokelumne section of the Mokelumne Coast to Crest Trail
Idea about walking	Trolls under the Treat st. bridge.
Idea about walking	Complete original vision of Arnold Rim Trail as a loop. Return loop potentially on the north rim of the Stanislaus Canyon from Candy Rock to Douds Landing to Mckays Point.
Idea about recreational trail	
	a non-motorized, multi-use Recreational trail around White Pines Lake with a uniform walking surface and a bridge across the outlet.
Idea about recreational trail	No biking should be allowed on Copper Cove Drive whatsoever. The road is dangerous as it is and bikers and vehicles would be at risk even with a shoulder
Idea about biking	If you create a walking trail in center of Arnold so you can walk from Ebbetts Pass Sporting Goods down to Cedar Centrr, it can connect to the walking paths that Martin Huberty is working to get through the Arnold Meadow to Big Trees Market. Your path can start on Ebbetts Pass sporting goods and cross Hwy 4 at some point – with a cross walk to the other side.
Idea about walking	Could be flashing lights. Right now it's hazardous to cross Hwy 4 anywhere!
Idea about biking	Wayfinding Sign to alert drivers

General comment	Lots of children cross over mountain ranch road from toyonza this 3 way inter section is severely unsafe for kids walking to school
Idea about biking	Share the Road Sign
Idea about biking	For the short term, ask Caltrans to remove all edgeline rumble strips with shoulder widths of less than 2 feet. Social Media Comment Received: "I think one big thing we need is more walkable "downtown" sidewalk and bike lanes along the Arnold stretch of Highway 4. Murphys feels much easier to walk around and explore but Arnold feels dangerous with the highway being so fast and no sidewalk"
General comment	Two residents agreed
Idea about biking	Wayfinding sign for vehicles alert
Destination you would like to walk/bike/hike to	Calaveras Big Trees Park's current policy is to prohibit mountain bikes on all singletrack. This is a badly outdated policy, and needs to be changed. The park can handle mountain bikes on singletrack outside of North Grove without issue.
General comment	Biking and walking in Valley Springs from Vista Del Lago to town. There is no bike lane no shoulder no anything on Highway 26 and I see kids having to walk on it at night which is very very scary
General comment	Because this cross walk is up on a hill when the light hits a certain way its severely hard to see children cross the road
General comment	Wayfinding sign to alert vehicles about walkers and cyclists
Idea about biking	Share the Road Sign
Idea about walking	Cross walk to west side of hwy
Idea about walking	A walking or bike path is needed to Jenny Lind Elementary School that is not HWY 26!
General comment	Bike Parking and Kiosk for local bike routes
Idea about biking	Share the Road Sign
Idea about walking	Cross walk needed to west side of hwy
General comment	This intersection is ripe for pedestrian and recreational fatalities. A modern traffic roundabout would work phenomenally here to slow traffic to the speed limit, and to maintain throughput.

# Appendix D - Walking and Biking Facilities Toolkit

## Introduction

This appendix discusses best practices for bicycle and pedestrian infrastructure projects and non-infrastructure programs. It is focused on recommendations useful for Calaveras County. Because no general design guide can cover the unique characteristics of every location, this guidance should be used in conjunction with study of each individual location, engineering judgment, and other necessary considerations as appropriate for each individual application.

New projects and programs are most likely to be successful when implemented in partnership with the community. Strategies for public engagement include the following:

- Talking to the community to understand their desires and priorities
- Implementing new types of facilities incrementally to generate feedback and support
- Publicizing projects and educating the public on the changes to be implemented and their benefits

This guide draws on research and emphasizes engineering judgment, design flexibility, documentation, and experimentation.

## Resources

This appendix is based on a review of existing studies, guidelines, and manuals related to pedestrian and bicycle infrastructure and strategies. The following documents are general resources for these topics:

- NACTO Urban Bikeway Guide, 2nd Edition (2014)
- NACTO Urban Streets Design Guide (2013)
- NACTO Transit Street Design Guide (2016)
- FHWA Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (2018)
- FHWA Small and Rural Multi-Modal Networks Guide (2016)
- FHWA Separated Bicycle Lane Planning and Design Guide (2015)
- FHWA Bikeway Selection Guide (2019)
- AASHTO Guide for the Development of Bicycle Facilities, 5th Edition (2024)
- Caltrans Highway Design Manual (2020)
- Caltrans Design Information Bulletin (DIB) 94 Complete Streets: Contextual Design Guidance (2024)
- Caltrans Class IV Bikeway Guidance (DIB 89-02) (2022)
- League of American Bicyclists Benchmarking Bike Networks (2022)
- Design Manual for Bicycle Traffic (CROW Manual) (2017)
- ITE Recommended Practices on Accommodating Pedestrian and Bicyclists at Interchanges (2016)
- Association of Pedestrian and Bicycle Professionals Essentials of Bicycle Parking: Selecting and Installing Bicycle Parking That Works (2015)

## Bikeways

Several types of bikeways and supporting facilities come together to form a complete bicycle network. The ATRTP includes the following bicycle facility types, arranged in order from least separated and protected to most.

- Bike Route
- Paved Shoulder
- Bike Lane
- Separated Bikeway
- Shared-Use Path/Sidepath

Table D-1 displays suggested bikeway treatment type for users of all ages and abilities based on speed and volume.

Table D-1 - Suggested Treatment Type for All Ages and Abilities Facilities based on Speed and Volume <sup>1</sup>						
Speed and Volume		Facility Type				
Speed	Average Daily Traffic (ADT)	Bike Route	Paved Shoulder <sup>2</sup>	Bike Lane	Separated Bikeway	Shared - Use Path/ Sidepath
25 MPH or less	<3,000					
	3,000-7,000					
	>7,000					
30 MPH	<3,000					
	3,000-7,000					
	>7,000					
35 MPH	<3,000					
	3,000-7,000					
	>7,000					
40 MPH	<1,000					
	>1,000					
45 to 55 MPH	>1,000					
	<1,000					

<sup>1</sup>Recommendations are based on guidance documented in the Federal Highway Administration (FHWA) *Small Town and Rural Multimodal Networks* (2016) and *Bikeway Selection Guide* (2019) and the American Association of State Highway and Transportation Officials (AASHTO) 5<sup>th</sup> Edition *Bike Guide* (2024). Criteria was generally developed for two lane roadways but may be applicable on roads with three or more lanes.

<sup>2</sup>In some locations, a "paved shoulder with designated recreational route signage" or "buffered paved shoulder with bike route" signage is recommended. A "paved shoulder with designated recreational route" signage is recommended in locations where bicyclists and pedestrians are the anticipated user and a "buffered paved shoulder with bike route" signage is recommended in locations where recreation bicyclists are the anticipated user.

Recommended Appropriate Facility for All Ages and Abilities

Potentially Appropriate Facility (May not be appropriate for all ages and abilities)

Inappropriate Facility

## Bikeway Selection

These recommendations are primarily based on guidance documented in the Federal Highway Administration (FHWA) Small Town and Rural Multimodal Networks (2016) and Bikeway Selection Guide (2019), and the American Association of State Highway and Transportation Officials (AASHTO) 5th Edition Guide for the Development of Bicycle Facilities (2024). The following three goals should be prioritized when selecting the appropriate facility type for a specific roadway segment.

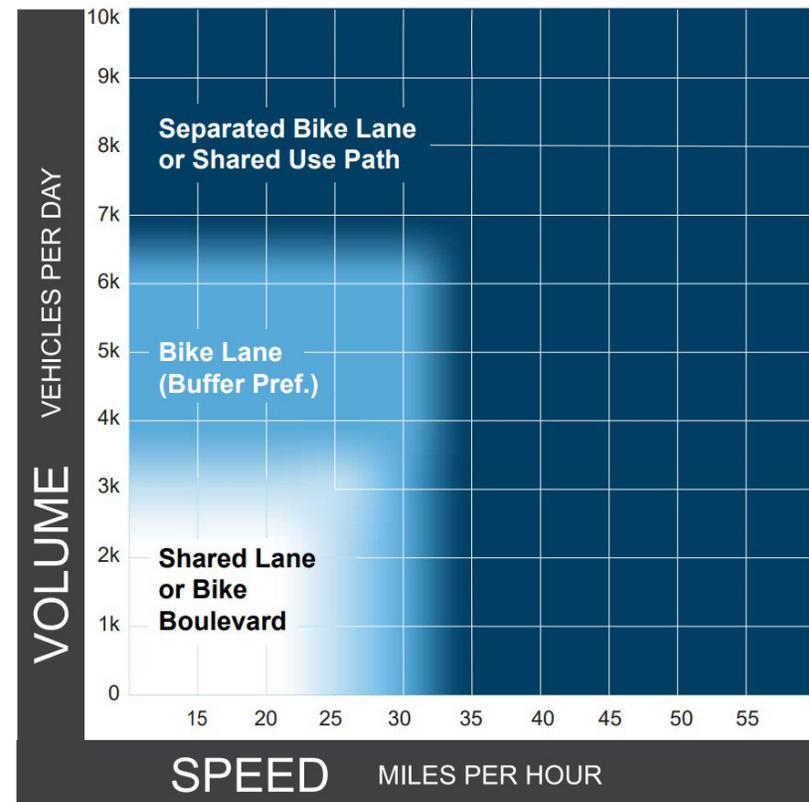
- **Safety:** Reducing the frequency and severity of crashes and minimizing conflict between users.
- **Comfort:** Minimizing stress, anxiety, and safety concerns for the target design user. Comfort and safety are closely related and ensuring facility types accommodate both can lead to an increase in active transportation users.
- **Connectivity:** Providing direct and convenient access to all destinations served by the roadway network with seamless and clear transitions between the active transportation facility and general roadway.

The following graphic from the guide indicates the ideal bikeway type based on vehicle volume and speed. In this graphic and in the following section, bikeways are arranged in order from the least separation and protection from traffic to the most.

Other factors such as available right-of-way and cost may also influence bikeway selection, especially when retrofitting bikeways onto existing streets. Curb-to-curb width and parking considerations in older neighborhoods can present challenges to design. As described in the guide, other such factors include the following:

- Unusually high peak hour motor vehicle volumes
- High percentages of trucks and buses
- High parking turnover or curbside activity
- Frequent driveways or intersections
- High concentrations of vulnerable populations such as children and older adults

If the preferred bikeway cannot be provided, the next best bikeway should be considered, as it still may increase comfort and safety for more confident bicyclists. Alternative parallel routes may also be considered.



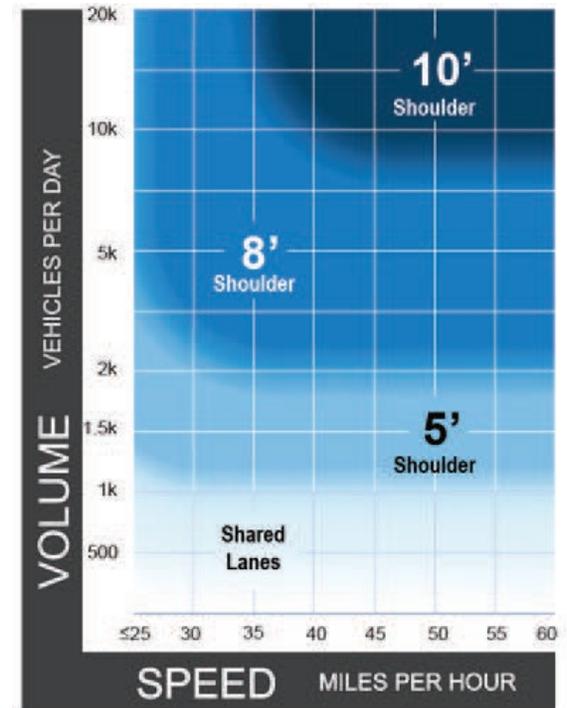
## D-18

While a shared-use path or separated bikeway are generally recommended for facilities with speeds greater than 35 miles per hour or where ADT exceeds 7,000, the Bikeway Selection Guide notes that in rural areas, paved shoulders may also be appropriate in certain locations depending on anticipated usage, user type, and available right-of-way. In many cases, highways provide the primary (or only) connection between communities. For Calaveras County specifically, the availability for a vehicle to pull onto the shoulder is also a key consideration when determining whether a paved shoulder, bike lane, or separated bikeway is appropriate. By providing a paved shoulder in lieu of a bike lane or separated bikeway, vehicles can pull into the paved shoulder if necessary for maintenance or during emergency situations while this would be prohibited if a formal bike lane or separated bikeway was constructed. The following graphic displays the FHWA Bikeway Selection Guide's preferred shoulder widths for rural roadways.

As described in the Bikeway Selection Guide, other factors noted below will also influence the selected facility type:

- Right-of-way constraints (existing curb-to-curb widths, utilities, etc.).
- Unusually high motor vehicle peak hour volumes.
- High percentage of trucks and/or buses.
- High parking turnover or curbside activity.
- Frequent driveways or intersections.
- High concentrations of vulnerable populations such as children or older adults.
- Cost

If the preferred facility cannot be provided, the next best facility should be considered as it may still increase comfort and safety when compared to the existing condition. In regards to paved shoulders specifically, the Bikeway Selection Guide states "In highly constrained conditions where sufficient shoulder width cannot be achieved, it is preferable to provide a narrow shoulder rather than no shoulder." It is also noted that adding or widening shoulders has been proven to reduce certain collision types, particularly roadway departure related collisions on horizontal curves, and certain safety related funding may be available to assist with systemic implementation of paved shoulders if these collisions are prevalent in the County<sup>1</sup>.



### Notes

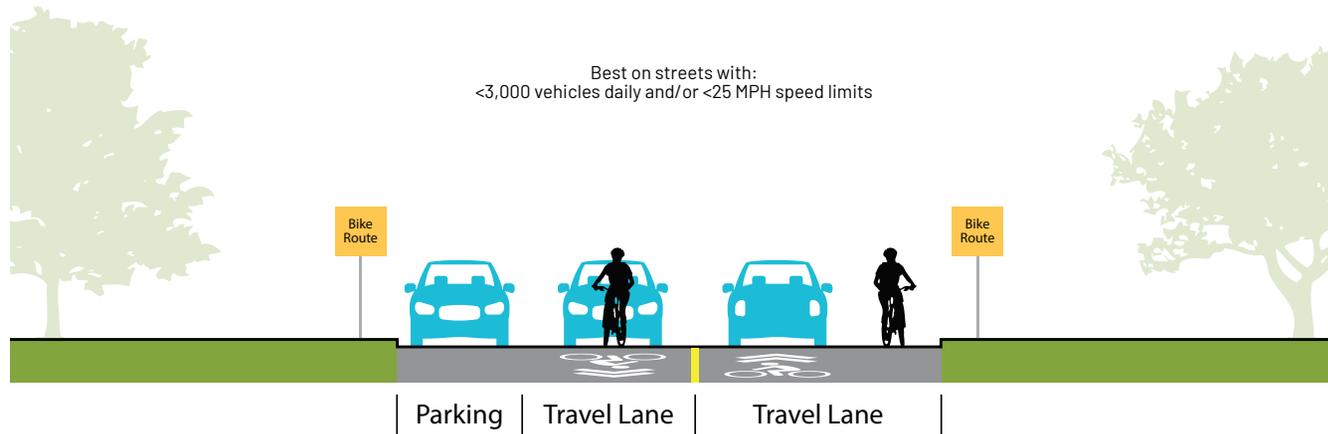
- <sup>1</sup> This chart assumes the project involves reconstruction or retrofit in constrained conditions. For new construction, follow recommended shoulder widths in the AASHTO-Green Book.
- <sup>2</sup> A separated shared use pathway is a suitable alternative to providing paved shoulders.
- <sup>3</sup> Chart assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.
- <sup>4</sup> If the percentage of heavy vehicles is greater than 5%, consider providing a wider shoulder or a separated pathway.

<sup>1</sup> <https://highways.dot.gov/safety/proven-safety-countermeasures/roadside-design-improvements-curves>

## Bike Route

Bike routes, also referred to as a Class III Bike Route in the Highway Design Manual and in some cases, as a Bike Boulevard, are low-stress shared roadways designed to offer priority for bicyclists traveling within a roadway shared with motor vehicles. Bike Routes are most appropriate for low-speed, low-volume roadways and include signage and in some cases, shared-lane markings (sharrows), to alert drivers to the presence of bicyclists. Additional traffic calming features such as speed humps or tables, raised crosswalks, chicanes, etc. can be paired with signage and striping to reduce speeds and increase comfort.

Bike routes are most beneficial on streets with 3,000 or fewer ADT and posted speed limits of 25 MPH or less. Refer to Chapters 8 and/or Chapter 9 of the AASHTO Guide for Development of Bicycle Facilities, 5th Edition (or latest source) for additional design related guidance for bike routes on roadways and intersections.



Existing Bike Route in West Point, CA. Source: Fehr & Peers, 2021

# Bike Lane

Bike lanes, also referred to as a Class II Bike Lane in the Highway Design Manual, are on-street facilities that use striping, stencils, and signage to designate an exclusive or preferential space for bicyclists. A bike lane is located directly adjacent to motor vehicle traffic and follows the same direction of travel as motor vehicle traffic.

The width of a bike lane is highly context sensitive as it has a direct impact on a bicyclists' comfort and safety. Table 9-1 in the AASHTO Guide for the Development of Bicycle Facilities, 5th Edition provides various recommended widths based on context.

The following design principles should also be considered when implementing bike lanes:

- Minimize vehicle travel and parking lane widths to reduce speeds and provide maximum bike lane widths.
- Consider painted buffers where roadway width permits a bike lane 7' or greater to discourage motor vehicle use of bike lane for parking or driving<sup>1</sup>.
  - Buffer should be between 1.5 - 4' or wider. Two solid lines separated by 12" or less space may be used for narrower buffers (less than 2') and diagonal or chevron hatching should be used for wider buffers.
  - Left-side painted buffers improve separation between bicyclists and the motor vehicle lane. Right-side painted buffers adjacent to parallel parking improves separation from the door zone.
- Bike lanes should be carefully designed at intersections and along roadways with heavily used merging areas<sup>2</sup>.
- Bike lanes should consist of a smooth, rideable surface. Conduct maintenance check frequently to prevent and remedy roadway hazards such as potholes and debris.
- Refresh faded striping and repair/replace damaged or faded signage.

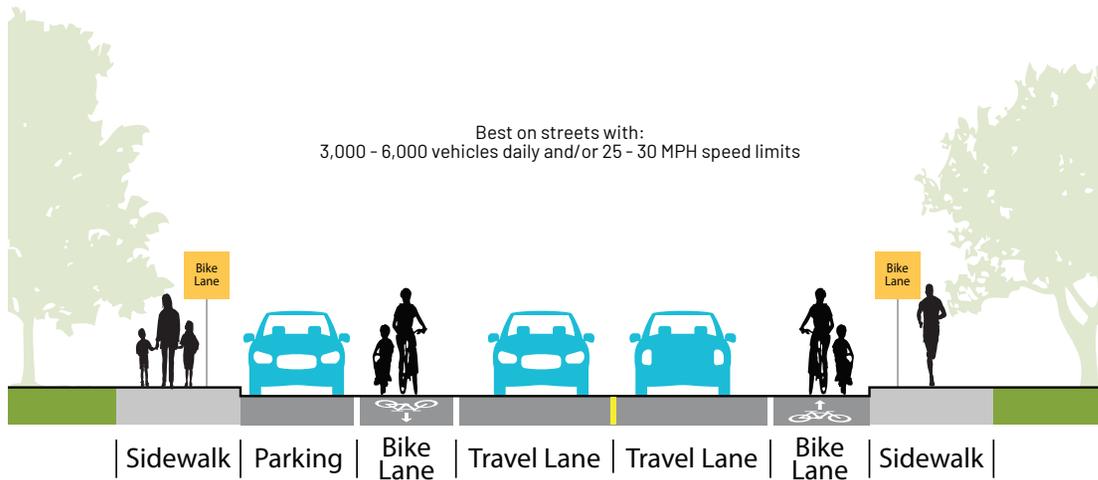


Table 9-1: One-Way Standard Bicycle Lane Widths

One-Way Standard Bicycle Lane Widths				
Bike Lane Context	Practical Minimum (ft)	Recommended Lower Limit (ft)	Recommended Upper Limit (ft)	Practical Maximum (ft)
Adjacent to edge of Pavement	4 <sup>1</sup>	5	7	8 <sup>2</sup>
Adjacent to curb (exclusive of gutter)	5 <sup>1</sup>	6	7	8 <sup>2</sup>
Between through lanes and turn lanes <sup>2</sup>	5 <sup>1</sup>	6	7	8 <sup>2</sup>
Between buffers	4	5	7	8 <sup>2</sup>
Adjacent to parking	5	6	7	8 <sup>2</sup>
To allow occasional passing or side-by-side bicycling <sup>4</sup>	6.5	8 <sup>3</sup>	10 <sup>3</sup>	11 <sup>3</sup>

Notes

<sup>1</sup>Shoulders should be provided in lieu of narrow bicycle lanes to avoid confusion below the practical minimum width.

<sup>2</sup>Buffers are desirable where bicycle lanes are located between through lanes and turn lanes, especially as motorist speeds exceed 30 mph.

<sup>3</sup>Buffered bike lanes or separated bike lanes should be considered in lieu of wider bicycle lanes to avoid confusion with a parking or travel lane.

<sup>4</sup>A minimum of 6.5 ft is necessary for occasional passing and 8 ft or more for comfortable side-by-side bicycling.

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



Existing Bike Lane in Valley Springs, CA. Source: Fehr & Peers, 2025

<sup>1</sup> Refer to Section 9.5. of the AASHTO Guide for the Development of Bicycle Facilities, 5th Edition for design guidance for buffered bike lanes.

<sup>2</sup> Refer to Section 9.12. of the AASHTO Guide for the Development of Bicycle Facilities, 5th Edition for design guidance for bike lanes at intersections and merge areas.

## Paved Shoulder

A paved shoulder is a paved area on the edge of the roadway which can be enhanced to serve as a functional travel space for bicyclists and pedestrians in the absence of other facilities with more separation. Ideally, paved shoulders designed for both pedestrians and bicyclists should have a minimum clear space width between 5' (for lower volume or lower speed roads) and 10' (for higher volume or higher speed roads); however, 4' can technically be used to accommodate both bicyclists and pedestrians.

For locations primarily anticipated to serve only bicyclists, minimums and maximums displayed in Table 12-1 of the AASHTO Guide for the Development of Bicycle Facilities, 5th Edition can be used.

Paved shoulders should be provided on both sides of the roadway when possible. In constrained locations, especially hilly terrain, a wider shoulder on one side of the road may be more appropriate than a narrow shoulder on both sides. In extremely constrained locations, a narrow shoulder is preferred over no shoulder.

A paved shoulder may be particularly appropriate for:

- Roadways with constrained right-of-way where a multi-use path or other separated facility may not be feasible.
- Roadways where pedestrian “walking along roadway” or “bicyclist struck from behind” crashes occur.
- Roadways where vehicles may need to utilize the shoulder for maintenance or emergency purposes.
- Roadways which may be utilized by farm equipment or horseback riders.
- Roadways where the intended user type is highly or somewhat confident bicyclists (typically adult recreational cyclists traveling long distances).

Adding or widening shoulders is a proven FHWA safety countermeasure for reducing roadway departure related collisions and certain safety related funding may be available to assist with systemic implementation of paved shoulders if these collisions are prevalent in the County.

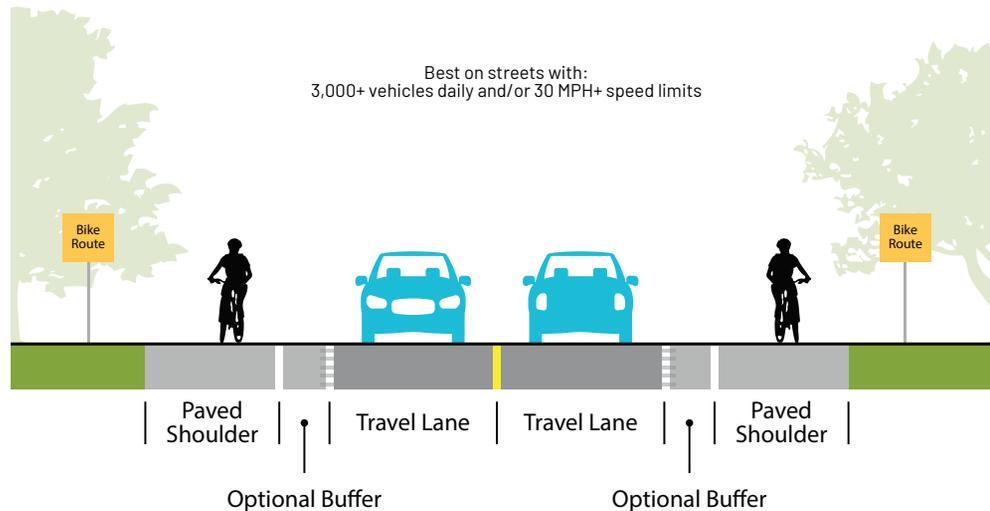


Table 12-1: Paved Shoulder Widths for Bicycling (see Chapter 12 References: FHWA, 2016b)

Design Year Average Daily Traffic (ADT) and Posted Speed (MPH) Thresholds	Practical Minimum <sup>a</sup>	Recommended Range		Practical Maximum
		Lower Limit <sup>a</sup>	Upper Limit	
< 2,000; all speeds	2 ft	3 ft	5 ft <sup>a</sup>	10 ft
2,000 - 6,000; all speeds	2 ft	4 ft	6 ft <sup>a</sup>	10 ft
6,000 - 10,000; all speeds	4 ft	6 ft	8 ft <sup>a</sup>	10 ft
> 10,000; ≤ 35 mph	5 ft	6 ft	8 ft <sup>a</sup>	12 ft <sup>a</sup>
> 10,000; > 40 mph <sup>b</sup>	5 ft	6 ft	10 ft <sup>a</sup>	12 ft <sup>a</sup>

Notes  
<sup>a</sup>See Section 12.5.1 for rumble strip design considerations.  
<sup>b</sup>Where roadside barriers, walls, or other vertical elements are present, they should be offset a minimum of 2 ft from the outer edge of the rideable shoulder to provide minimum shy distance to bicyclists (see Section 2.5.3.2.)  
<sup>c</sup>Where >10 percent of traffic consists of trucks.  
<sup>d</sup>Shared use paths are preferred.

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



Paved Shoulders with Rumble Strips on SR 12 in Wallace, CA.  
 Source: Fehr & Peers, 2025

## Buffered Paved Shoulder

In addition to the clear space of the paved shoulder, a 1.5-4' buffer can be beneficial for increasing comfort and increasing the distance between bicyclists/pedestrians and vehicles. The ATRTP specifically recommends buffered paved shoulders for some locations (generally areas with high speeds and/or volumes) and does not differentiate between buffered and non-buffered in others. However, a buffer can and should be evaluated for all locations where a paved shoulder is recommended, it is just more critical to provide in locations with higher motor vehicle speeds and/or volumes.

The buffer may contain additional striping and/or a rumble strip. The location and design of striping versus rumble strips should be carefully considered. Rumble strips can be loud negatively impacting residents that live near the road and can negatively impact bicycle travel if they are poorly constructed.

If rumble strips are desired, the dimension, design, and placement should be optimized to limit impacts to bicyclists. The following guidance is provided:

- 12 inch spacing center-to-center.
- 6-8 inches long, perpendicular to the roadway.
- 6 inches wide, measured parallel to the roadway.
- 3/8 inches deep.
- Ideally placed to overlap with the roadway edgeline (known as edgeline rumble strips).
- Provide a bicycle gap pattern to allow bicyclists access into and out of the paved shoulder area. The gap pattern should consist of a 12'-15' clear gap every 40'-60' and approaching intersections.

If rumble strips are desired for motor vehicle safety but the roadway is constrained, the rumble strip could be placed on the right side of the paved rideable area. This is recommended where the rideable surface is less than 4' and bicyclists are likely operating at > 15 MPH or the route serves a high number of bicyclists.

Colored pavement may also be used to differentiate the shoulder from the travel lane if desired. With or without colored pavement, the edge of the travel lane should always be clearly delineated to separate the travel lane from the shoulder, particularly for shoulders designed for both bicycle and pedestrian accessibility.

The Small Town and Rural Multimodal Networks Guide provides optional guidance for edgeline treatments that may be appropriate in rural settings. Additional guidance for intersections is also provided.

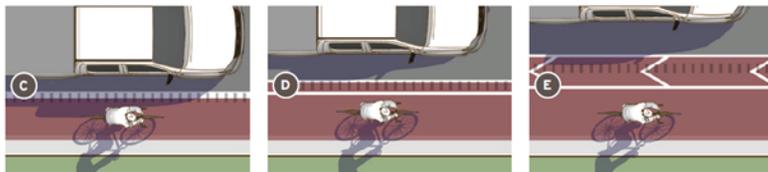
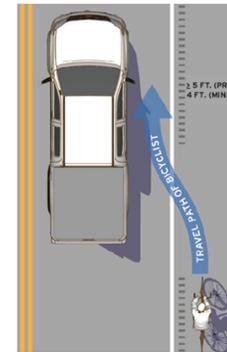


Figure 3-3. Longitudinal markings along shoulders should be selected in response to shoulder width, and the desire to discourage encroachment by motor vehicles.



Source: Small Town and Rural Multimodal Networks

Signage is important for communicating to motorists that bicyclists or pedestrians may be present in the shoulder. The ATRTP recommends paved shoulders with designated recreational route signage and paved shoulders with bike route signage. Recreational route signage is recommended for locations anticipated to serve both bicyclists and pedestrians. Bike route signage is recommended for locations anticipated to primarily serve bicyclists.

Signage for each respective facility type should be consistently used countywide to increase motorists awareness and recognition that they are driving on a road that may have bicyclists and/or pedestrians. Signage can also serve as wayfinding for bicyclists and pedestrians so they know which routes should be used. Signs should be intuitive, easily recognizable, and consistent throughout the County.

Section 12.4.2 and Chapter 14 of the AASHTO Guide for the Development of Bikeways, 5th Edition provides detailed guidance on which types of bike route signs should be used for shared roadways depending on the specific location, shoulder width provided, and goal of the facility (e.g. is it a destination-based bike route or a route-based bike route). While this guide focuses on bikeways specifically, the wayfinding signage guidance in Chapter 14 can be applicable for the recreational routes intended to serve both bicyclists and pedestrians. The specific sign types would just need to be modified to indicate the route is intended for bicyclists and pedestrians.

# Separated Bikeway

Separated bikeways, also referred to as cycle tracks, protected bike lanes, or Class IV Separated Bikeways in the Highway Design Manual, are physically separated bicycle facilities located within or directly adjacent to the roadway that are designed for exclusive use by bicyclists. The type and characteristics of separation can vary but may include raised medians, flexible delineator posts, parked vehicles, or an elevation change between the bikeway and roadway.

Separated bikeways contain two fundamental elements:

- Separation from motor vehicles with vertical elements.
- Separation from pedestrians with a vertical element, change in elevation, or detectable change in surface materials.

They are most appropriate for roadways with high vehicle speeds and/or volumes and areas with an anticipated high level of bicycle and pedestrian volumes. If pedestrian and bicyclist volumes are anticipated to be relatively low, a shared-use path/side path may be considered and typically requires less right-of-way. Separated bikeways may be constructed at street level, sidewalk level, or an intermediate level between the street and sidewalk and may be designed for one-way or two-way travel<sup>1</sup>.

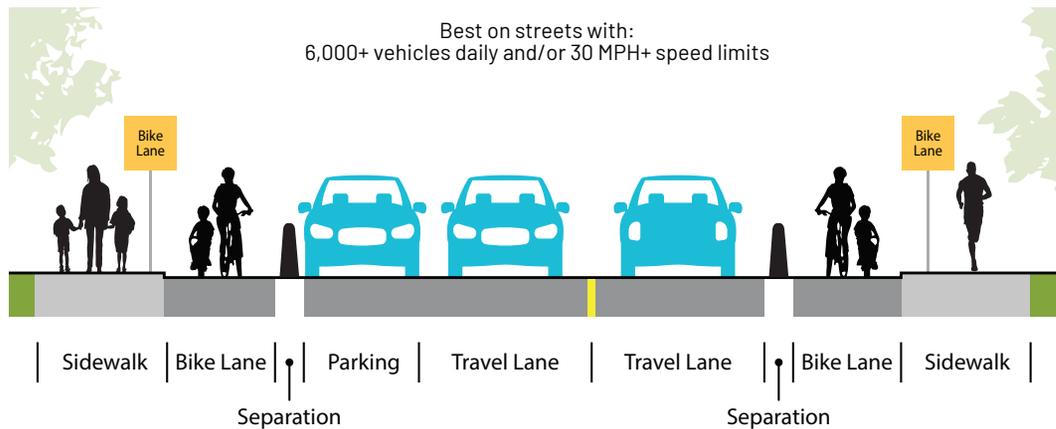
For areas with less than 150 bicyclists during the peak hour, bike lane width should be:

- 6.5-8.5' between vertical curbs without gutter (practical minimum 4.5').
- 6-8' adjacent to one vertical curb (practical minimum 4').
- 5.5-7.5' between sloped curb, at sidewalk level, or adjacent to curb and gutter (practical minimum 4').

Practical minimums should only be used in constrained conditions and for short distances. Wider bike lanes are necessary for areas with higher peak hour bicyclist volumes and where two-way bike lanes are desired<sup>2</sup>.

Separation: Street buffer width can vary between 2' (minimum) and 6' (preferred) and is measured from the white edge line, or face of vertical element where white edge lines are not provided. With on-street parking, at least 4' is needed to eliminate door zone conflicts<sup>5</sup>.

Sidewalk buffer can be more narrow and can consist of a curb, continuous landscape bed, or street furniture. A continuous detectable edge should be provided in the sidewalk buffer so blind or visually impaired individuals can distinguish between the sidewalk and bikeway.



Source: Small Town and Rural Multimodal Networks

Table 7-2: Separated Bike Lane Configurations on a Two-Way Street

	One-way SBL Pair	Two-way SBL	Median Two-way SBL
<b>Corridor-level Planning Considerations</b>			
<b>Access to Destinations</b>	Full access to both sides of street	Limited access to other side of street	Limited access to both sides of street
<b>Network Connectivity</b>	Accommodates two-way bicycle travel		
<b>Crash Risk</b>	Lower because pedestrians and turning drivers expect concurrent bicycle traffic	Higher because pedestrians and turning drivers may not expect counterflow bicycle traffic	Higher because pedestrians and turning drivers may not expect counterflow bicycle traffic, but median location may improve visibility and create opportunities to separate conflicts
<b>Intersection Operations</b>	May use existing signal phases; bike phase may be required depending on volumes	Typically requires additional signal equipment; bike phase may be required depending on volumes	

Note: All characterizations are relative to other options in the table and not other facility types.

Note: Median Two-way SBL is rarely recommended and should be used with extreme caution. Source: AASHTO Guide for the Development of Bicycle Facilities, 5th Edition

**Utilities and Maintenance:**  
 Bike lane should be free from obstructions and maintenance needs, drainage, and utility placement should be carefully considered when developing the design<sup>3</sup>.  
**Intersections:**  
 Careful design of appropriate intersection treatments is critical<sup>4</sup>.

<sup>1</sup> Refer to Section 7.2 of the AASHTO Guide for the Development of Bicycle Facilities, 5th Edition (AASHTO Bike Guide).  
<sup>2</sup> Refer to Table 7-3 and 7-4 in the AASHTO Bike Guide.  
<sup>3</sup> Refer to Section 7.7 of the AASHTO Bike Guide.  
<sup>4</sup> Refer to Section 7.9 of the AASHTO Bike Guide.  
<sup>5</sup> Refer to Section 7.4 of the AASHTO Bike Guide.

## Shared-Use Path/Sidepath

Shared-use paths, often referred to as a Class I Bike Path in the Highway Design Manual, are off-street facilities that provide exclusive use for non-motorized travel by both bicyclists and pedestrians. They are often utilized for both recreational and commute trips and are the preferred facility type for interested but concerned bicyclists. Shared-use paths are often referred to as sidepaths when located directly adjacent to a roadway. Because the broader facility design considerations (width and mix of user types) are the same for shared-use paths and *sidepaths*, they are grouped together for the purposes of this ATRTP.

Shared-use paths should provide two-way travel and can be located on one or both sides of the street or away from the roadway network entirely. They are often used recreationally and should be designed to support socialization and side-by-side travel<sup>1</sup>.

Shared-use paths should be between 10-12' but may be 8' in constrained locations.

Wider paths are recommended where:

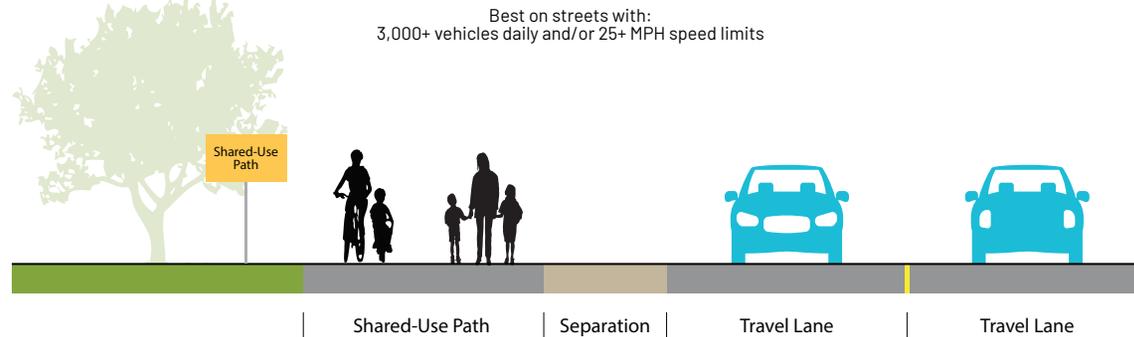
- High bicycle or pedestrian volumes are anticipated.
- Side-by-side travel and passing is desired.
- Bicyclists operating speed of 20-30 MPH is desired.
- The path is a regionally significant bicycle travel corridor.
- Pedestrians, skaters, children, adult tricycles, or other users are likely to exceed 30 percent of path traffic.
- Path is used by larger maintenance vehicles.
- There are steep grades, curves, tunnels, or other conditions that feel constrained.

A path width of 8' may be used for the entire corridor where:

- Less than 50 bicyclists per hour are anticipated.
- Pedestrian use of facility is occasional or would not exceed 30 percent of the total volume.
- Horizontal and vertical alignments provide frequent, well-designed passing and resting opportunities.
- The path will not be regularly subjected to maintenance vehicle loading conditions.
- Negative environmental impacts associated with recommended path width cannot be mitigated.
- A 2' shoulder should be provided on each side of the path, kept clear of vertical elements or obstructions.

Additional Guidance:

- Provide a 6.5' separation (5' minimum) from the roadway. Separation narrower than 5' is not recommended but may be accommodated by incorporating a physical barrier. If landscaping is used, provide a 2' horizontal clearance between trees and path, 4' between trees and the road, and a 10' vertical clearance.
- Edge lines should be marked on paths expecting evening use and centerlines should be considered for paths with a high volume of bidirectional traffic.
- Signs should be posted for path users traveling in both directions. Wayfinding signage should be included for recreational or destination-based paths.



South Lake Tahoe, CA - Population 21,380  
Source: Small Town and Rural Multimodal Networks

<sup>1</sup>Refer to Chapters 6 and 7 of the AASHTO Guide for Development of Bicycle Facilities, 5th Edition for design guidance regarding path widths, buffer widths, lighting, intersections, crosswalks, drainage, and more.

## Complementary Bicycle Treatments

### Green-Colored Pavement

Green markings used in high volume intersections and busy driveway locations. Use skipped green in weaving areas or conflict zones. May be installed with either paint or thermoplastic. Thermoplastic is initially more expensive, but less expensive when considering maintenance life cycle costs. Although not yet incorporated into the California MUTCD, the FHWA MUTCD provides guidance on its use.

#### Use

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- Supplemental marking in high conflict areas to improve safety

#### Benefits

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- Calls attention to vehicle/bicycle conflict areas

#### Challenges

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- Less effective if overused

### Through Bike Lanes

Through bike lanes reduce conflicts at intersections by allowing bicyclists to follow the preferred travel path, ideally a straight connection from the preceding bike lane. Traveling at intersections can be particularly challenging if the bike lane ends prior to the intersection forcing a merge with vehicle traffic. Continuing the bicycle lane to the intersection approach provides bicyclists the opportunity to avoid conflicts with turning vehicles. Through bike lanes should be placed to the left of the right-turn only lane. Dotted lines are used to signify the merge area that motorists traverse to get to the right-turn lane.

#### Use

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- Intersections where vehicle lanes conflict with bike lanes

#### Benefits

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- Reduce conflict between through bicyclists and turning vehicles

#### Challenges

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- Typically used with Class II bike lanes and not appropriate for use with Class IV separated bikeways



Source: Fehr & Peers

## Bicycle Boxes

Dedicated visible space for bicyclists to wait in front of vehicle traffic at a signalized intersection. Provide bicyclists priority crossing major streets. May span the entire approach, allowing bicyclists safe waiting zones for left turns, or may be placed only in front of the right-turn lane. Colored pavement, typically green, should be used to encourage compliance by motorists.

### Use

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- At signalized intersections with a high volume of bicycles, especially those making left turns

### Benefits

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- Facilitate left-turn movements for bicyclists
- Reduce right-hook conflicts with right-turning vehicles
- Also reduce vehicle encroachment into crosswalks

### Challenges

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- Requires restriction of right turns on red
- Colored pavement increases maintenance costs



Source: NACTO

## Pedestrian Facilities

Pedestrian facilities include sidewalks and crosswalks, which, with some exceptions, are primarily for pedestrian use. Some types of facilities are shared by both pedestrians and bicyclists, including Class I shared-use paths, which are described earlier in the toolkit.

### Sidewalks

Paved areas immediately adjacent to the vehicular right-of-way for the exclusive use of pedestrians. They may be used by people riding bicycles unless prohibited.

#### Design principles

- Usable width should generally be five feet or more
- Crossings of driveways should be at grade
- Street trees and landscaping provide shade and comfort
- Slower vehicle speeds on the adjacent roadway increase comfort
- Pedestrian-scale lighting can increase safety and security for pedestrian walking outside of daylight hours.

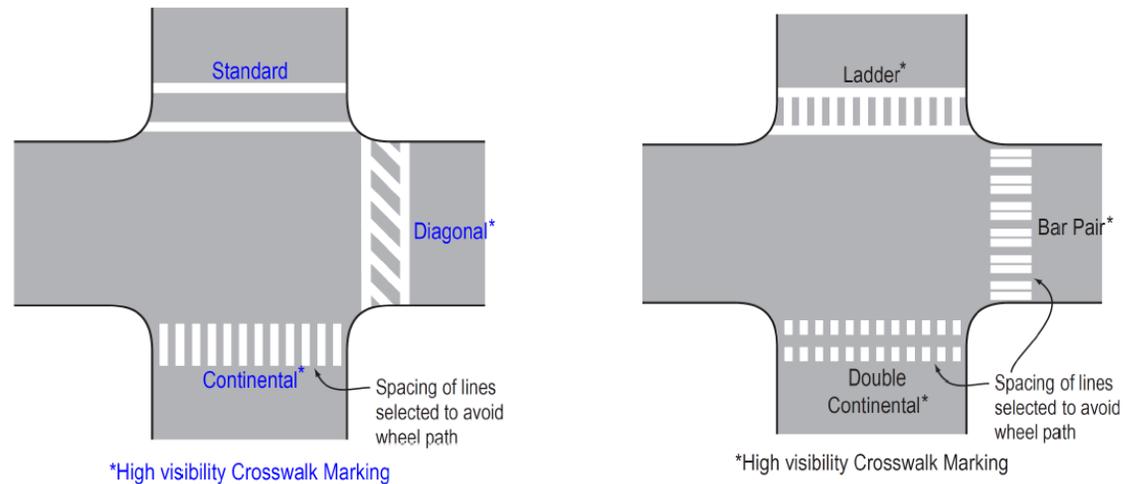
## Marked Crosswalks

Marked crosswalks feature striping and other enhancements. These features may be used to raise awareness of the crossing and to delineate the best place to cross. There are two types of marked crosswalks:

- Controlled: With vehicle stop signs or traffic signals.
- Uncontrolled: Without stop signs or traffic signals. Under California law, drivers are legally required to yield to pedestrians at uncontrolled crosswalks.

#### Design principles

- Although not yet incorporated into the California MUTCD, the FHWA MUTCD provides guidance on when to mark a crosswalk.
- Of the six designs below from the California MUTCD, all except the Standard markings are considered to be high visibility, more easily discerned by drivers.
- Lines in a Continental, Double Continental, or Bar Pair marking should be spaced to avoid the wheel path of vehicles and thus reduce striping maintenance.
- Use stop lines and yield lines in conjunction with signs at crosswalks, as described in the California MUTCD, to improve driver yielding to pedestrians.



Source: Caltrans, 2024. California Manual on Uniform Traffic Control Devices, Figure 3B-19.

## Complementary Pedestrian Treatments

The following treatments should be used with sidewalks and crosswalks as warranted. The FHWA Guide for Improving Pedestrian Safety and Uncontrolled Crossing Locations contains detailed guidance for selecting appropriate treatments, as shown in the table at the right. Key inputs are roadway configuration (including number of lanes and presence of a median), vehicle annual average daily traffic (AADT), and posted speed limit. Refer to the Guide for additional recommendations on treatment application.

The Guide also provides information on pedestrian collision analysis and selection of countermeasures based on collision analysis. Use that information when applying countermeasures in response to collision history or systemic safety analysis.

Roadway Configuration	Posted Speed Limit and AADT								
	Vehicle AADT <9,000			Vehicle AADT 9,000–15,000			Vehicle AADT >15,000		
	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph	≤30 mph	35 mph	≥40 mph
<b>2 lanes</b> (1 lane in each direction)	① 2 4 5 6	① 7 9	① 5 6 ⑦ ⑨	① 4 5 6	① 5 6 7 9	① 5 6 ⑦ ⑨	① 4 5 6 7 9	① 5 6 7 9	① 5 6 ⑨
<b>3 lanes with raised median</b> (1 lane in each direction)	① 2 3 4 5	① ③ 5	① ③ 5	① 3 4 5	① ③ 5	① ③ 5	① ③ 4 5	① ③ 5	① ③ 5
<b>3 lanes w/o raised median</b> (1 lane in each direction with a two-way left-turn lane)	① 2 3 4 5 6 7 9	① ③ 5 6 7 9	① ③ 5 6 ⑨	① 3 4 5 6 7 9	① ③ 5 6 ⑦ ⑨	① ③ 5 6 ⑨	① ③ 4 5 6 7 9	① ③ 5 6 ⑨	① ③ 5 6 ⑨
<b>4+ lanes with raised median</b> (2 or more lanes in each direction)	① ③ 5 7 8 9	① ③ 5 7 8 9	① ③ 5 8 ⑨	① ③ 5 7 8 9	① ③ 5 ⑦ 8 ⑨	① ③ 5 8 ⑨	① ③ 5 ⑦ 8 ⑨	① ③ 5 8 ⑨	① ③ 5 8 ⑨
<b>4+ lanes w/o raised median</b> (2 or more lanes in each direction)	① ③ 5 6 7 8 9	① ③ 5 ⑥ 7 8 9	① ③ 5 ⑥ 8 ⑨	① ③ 5 ⑥ 7 8 9	① ③ 5 ⑥ ⑦ 8 ⑨	① ③ 5 ⑥ 8 ⑨	① ③ 5 ⑥ ⑦ 8 ⑨	① ③ 5 ⑥ 8 ⑨	① ③ 5 ⑥ 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.* The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.					<ol style="list-style-type: none"> <li>1 High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs</li> <li>2 Raised crosswalk</li> <li>3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line</li> <li>4 In-Street Pedestrian Crossing sign</li> <li>5 Curb extension</li> <li>6 Pedestrian refuge island</li> <li>7 Rectangular Rapid-Flashing Beacon (RRFB)**</li> <li>8 Road Diet</li> <li>9 Pedestrian Hybrid Beacon (PHB)**</li> </ol>				

\*Refer to Chapter 4, 'Using Table 1 and Table 2 to Select Countermeasures,' for more information about using multiple countermeasures.  
\*\*# should be noted that the PHB and RRFB are not both installed at the same crossing location.

## Curb Extensions

Curb extensions, also known as bulb-outs, decrease the pedestrian crossing distance at intersections and improve the visibility of pedestrians waiting to cross the street.

### Benefits:

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- Reduces time pedestrians are exposed to vehicles

### Challenges:

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- Potential for higher cost due to drainage accommodations



Source: Fehr & Peers

## Median Refuge Islands

Allow pedestrians to cross one direction of traffic then wait in the center of the street to cross the other direction of traffic.

### Design principles

- Use on roadways with few gaps in traffic
- Consider in locations with existing medians.
- If no medians are existing, consider creating space by eliminating on-street parking or narrowing vehicle travel lanes.
- Split pedestrian crossover refuge islands, generally used at uncontrolled mid-block locations, encourage pedestrians to look towards the oncoming direction of traffic before completing the crossing.

### Benefits

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- Reduce time pedestrians are exposed to vehicles
- Narrow roadway, reducing speeds

### Challenges

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- May restrict or inhibit left turning vehicles



Source: Fehr & Peers

## Warning Signage

Improves visibility of crosswalks and increases the likelihood that a driver will yield or stop to pedestrians. Additional signage in school zones helps alert drivers that children, who are known to make unpredictable movements, may be present.

### Design principles

- In-street signs are ideal for streets with low vehicle speeds and two lanes. They can be permanently installed or movable for peak hours such as pick-up/drop-off times at schools.
- Overhead signs are more impactful at busier, wider streets. These are typically installed at mid-block crossings or intersections.



Source: Fehr & Peers

## Raised Crosswalk

Pedestrian crossings raised to sidewalk level or just below. Act as traffic calming device.

### Design principles

- Should not be constructed on streets with sharp curves or steep grades.
- Tactile treatments are needed at the sidewalk/street boundary so that visually impaired pedestrians can identify the edge of the street.

### Benefits

- Effective in reducing vehicle speed.
- Allow pedestrian to cross at a nearly constant grade without requiring curb ramps.

### Challenges

- May have higher costs due to drainage infrastructure.



Source: NACTO

## Rectangular Rapid Flashing Beacons

Rectangular Rapid Flashing Beacons (RRFBs) are a type of pedestrian activated warning beacon that improve driver-yielding rates. They consist of rapid-flash system LED beacons that are similar in operation to emergency flashers on police vehicles.

RRFBs have generally shown the greatest effectiveness among the types of pedestrian activated warning beacons. Some jurisdictions also use signs with flashing LEDs within the border of the sign itself. However, these treatments have not been demonstrated to have efficacy comparable to RRFBs.

### Benefits

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- Increase driver yielding
- Can lead to reduction in pedestrian crashes

### Challenges

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- Require pedestrian activation
- Do not stop traffic, but require vehicles to yield



Source: Fehr & Peers

## Pedestrian Hybrid Beacon

Pedestrian Hybrid Beacons (PHBs), also known as High-intensity Activated crosswalks or HAWK signals, require vehicles to stop at a red light to allow pedestrians to cross. PHBs are ideal for roadways that are higher speeds and volumes, but do not require a full pedestrian signal. They should only be installed in locations that include a marked crosswalk. The California Manual on Uniform Traffic Control Devices (MUTCD) provides details on use of PHBs.

PHBs operate with the following phases:

1. Flashing Yellow – Upon actuation, beacon flashes yellow
2. Solid Yellow – Alerts drivers pedestrians will soon cross
3. Solid Red – Drivers must stop and remain stopped
4. Flashing Red – Drivers stop and proceed when clear, as they would with a stop sign
5. No Indication – When not actuated, signal is dark

## Benefits

- Increases driver yielding
- Can lead to reduction in pedestrian crashes

## Challenges

- Similar cost to a pedestrian signal



Source: Fehr & Peers

## Traffic Signal

When warranted based on the applicable signal warrants in the California MUTCD, a traffic signal to allow pedestrians to utilize a marked crosswalk safely may be appropriate. Countdown pedestrian signal heads should be used at all traffic signals, except where pedestrian crossing is prohibited.

### Benefits

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- Reduces pedestrian-vehicle conflict points

### Challenges

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- May increase waiting times for pedestrians and drivers
- High cost

## Leading Pedestrian Interval

A leading pedestrian interval (LPI) allows pedestrians to begin crossing a signalized intersection before vehicles begin moving by providing a walk signal three to seven seconds before the corresponding vehicle signal turns green.

### Benefits

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- Makes pedestrians more visible
- Emphasizes pedestrian right-of-way

### Challenges

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- May increase waiting times for drivers

## Tighter Curb-Return Radii

Tighter curb-return radii require vehicles to slow to turn more sharply at intersections. Reduced vehicle speeds increase driver awareness and thus reduce collision frequency. Slower vehicle speeds also decrease injury severity when collisions occur.

### Design principles

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- Design should limit turning speeds to 15 miles per hour or less.
- Land use context and design vehicles should be considered when reducing radii; industrial areas with frequent truck traffic may require larger radii than commercial or residential areas.

### Benefits

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- Reduce vehicle speeds
- Reduce pedestrian crossing distances

### Challenges

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- Can be costly to retrofit on existing streets
- Drainage and storm sewers need to be considered especially when retrofit

## Pedestrian Scramble

Intersection treatments that include a pedestrian-only phase in the traffic signal cycle, when pedestrians are able to cross in all directions including to the opposite corner by traveling through the middle of the intersection. Pedestrian scrambles and diagonal crosswalks allow pedestrians to cross more efficiently, directly to their destination. Recommended for intersections with high pedestrian volumes crossing multiple crosswalks.

### Benefits

- Allows pedestrians to cross more directly
- Emphasizes pedestrian right-of-way
- Eliminates conflict between turning vehicles and pedestrians

### Challenges

- Pedestrian-only phase may increase vehicle waiting time



Source: Google Maps

## Other Treatments and Support Facilities

Some improvements can serve both bicyclists and pedestrians and can be used in combination with other treatments.

### Traffic Calming

Traffic calming devices include a wide range of design treatments capable of reducing vehicle speeds and thus improving the safety and comfort of the transportation network for all users. Reducing vehicle speeds makes travel safer for both bicycles and pedestrians.

Vertical deflection devices cause drivers to experience a physical response that is aggravated when traveling at high speeds. Many existing streets can be retrofitted with vertical measures.

Horizontal deflection devices are used to deflect vehicles from traveling at high speeds. Horizontal deflection measures require drivers to navigate laterally and consequentially reduce speed.

Narrowing traffic calming devices are a sub-category of horizontal deflection traffic calming devices. Wider roads are associated with greater crash rates and higher impact speeds. Narrowing roadways often leads to decreased vehicle speeds and improves safety.

Restriping narrower travel lanes for vehicle traffic via centerline and edgeline striping can reduce motor vehicle speed. Cross-hatch pavement marking applied to outer edge of a roadway to create a shoulder and reduce lane widths if the space is not used for a bike lane or parking. In many locations, interior traffic lanes can be narrowed to 10 feet or less to encourage lower speeds. Narrow lanes can make room in the roadway right-of-way for painted medians, center turn lanes, bicycle lanes, or parking.

## Road Diets

Road diets reduce the number of travel lanes. This is typically done by converting a four lane road into a three lane road with a two-way-left-turn lane and bike lanes. The space created by removing lanes can also be used for painted medians or parking.

### Design principles

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- Use on roadways with current and expected future ADT approximately 20,000 or less.

### Benefits

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- Help to reduce speeds.
- Reduce conflicts at crossings.
- Can increase the separation of pedestrians from traffic.

### Challenges

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- Can be expensive

## Lighting

Sufficient lighting on bicycle and pedestrian facilities prevents collisions that occur due to decreased visibility. Pedestrian walkways should have lighting that allows people to identify faces from a distance of about 30 feet. Lighting should be consistent to reduce deep shadows and avoid excessive glare. It is necessary to maintain conventional light fixtures regularly, keeping lamp bowls clean and promptly replacing bulbs that have burnt out. Newer light emitting diode (LED) fixtures, which have much longer bulb life, have greatly decreased maintenance requirements.

## Wayfinding

Wayfinding refers to the network of informational signage posted to guide pedestrians or bicyclists to their destination. Good wayfinding signage presents destination, direction, and distance information in a manner that is easy to read and interpret. Bicycle specific wayfinding must be tailored so that bicyclists can see the information from a comfortable distance. Signs posted at trail junctions and intersections of trails with arterials are particularly helpful. Guidance on sign design and installation is available in Chapter 9B of the California MUTCD, National Association of City Transportation Officials (NACTO) design guidelines, and the AASHTO Bike Guide (5th Edition). Wayfinding signage can also be enhanced with average walk times and bike times to destinations and local branding.



Source: Fehr & Peers

## Non-Infrastructure Best Practices

In addition to physical changes to the transportation system, other programs can also benefit pedestrians and bicyclists.

### Education

#### Bicycle and Pedestrian Education for Children

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Safe Routes to School (SRTS) programs are effective ways to make walking and bicycling to school safer and more accessible for children, including those with disabilities, and to increase the number of children who choose to walk and bicycle. Creation of a SRTS Program typically includes identifying local stakeholders, identification of issues and solutions, and creation of a plan including encouragement, enforcement, education, and engineering strategies. These strategies should be accompanied by a timeline with prioritization and a funding approach. For more information, visit <http://guide.saferoutesinfo.org/steps/index.cfm>.

Educating school-aged children on safe bicycling is important to establish active habits and travel behaviors early in life. There are a number of different programs and approaches, both formal and informal, which are effective in educating kids about safe bicycling. Kidical Mass is one event, which closes sections of roadway to vehicles, usually a route near the local elementary school, to allow families to ride their bikes without traffic. This empowers kids and families to get on their bikes and familiarizes them with the bike route to school. For more information on Kidical Mass, visit <http://kidicalmassdc.blogspot.com/p/abcs-of-family-biking.html>.

#### Bicycle Education for Adults

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The League of American Bicyclists has a number of resources to teach safe bicycling including informational packets, curricula, and courses with trained instructors. The Smart Cycling Quick Guide (<http://bikeleague.org/quickguide>) is an easy-to-read booklet that outlines the basics of a bike, rules of the road, and the knowledge everyone needs to know to ride a bike on a range of facility types safely and confidently. For a short summary, the League of American Bicyclists has a page of Smart Cycling Tips (<http://bikeleague.org/content/smart-cycling-tips-0>) for biking safely including maintenance and trail etiquette.

### Bicycle Ambassadors

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Bicycle ambassadors are either volunteers from the community or employees of local advocacy groups that take a leading role in educating, encouraging, and activating the community to be a safer and more comfortable place for bicyclists. Ambassadors have undergone a safety education course and are also supplied with maintenance and educational resources to distribute to the community both formally and informally. This educational model empowers community members through a bottom-up approach to improving bicycle safety and mode share. Some examples of bicycle ambassador programs include:

- » Fort Collins: <http://bicycleambassadorprogram.org/>
- » Missoula: <http://www.ci.missoula.mt.us/DocumentCenter/Home/View/4604>
- » Washington, DC: <http://www.waba.org/programs/d-c-bike-ambassador/>

## Encouragement

Encouragement can occur through local groups and regular events and campaigns. Local schools can encourage biking and walking through bike rodeos, fun runs, walkathons, and bike/walk/roll to school events. Programs such as “walking school buses,” a program where kids and families walk to school in groups, are other good opportunities for neighborhood schools to encourage walking. Local running, walking, hiking, and biking events also encourage active engagement for adults. Bike to work events are also useful to encourage adult bicycling.

Typical campaigns are often focused on videos and downloadable materials or public advertisements on buses or public billboards. These campaign messages can be reformatted to reach wider audiences through social media communication tactics. Key messages can be finessed to reach target areas and groups.



Source: *May is Bike Month*, <https://sacbike.org/may-is-bike-month/>

## Enforcement

Proper enforcement is important to ensuring the safety of the street network for bicyclists and pedestrians. This is done through proper training of law enforcement, increasing the safety of bicyclists and pedestrians, theft prevention, and the proper pairing of education and enforcement.

Local law enforcement can partner with schools to step up enforcement of good motor vehicle behaviors around pedestrians and bicyclists at the beginning of the school year. Continuing this effort periodically throughout the school year and expanding it to other places frequented by pedestrians and bicyclists can further help active transportation.

## Training

It is important for the police department to include collision reporting and bicycle and pedestrian rules of the road into their training. There are a number of resources from other communities and national sources that can be used, such as this National Highway Traffic Safety Administration video: [http://www.nhtsa.gov/multimedia/bicycles/bicycle\\_safety\\_LE.wmv](http://www.nhtsa.gov/multimedia/bicycles/bicycle_safety_LE.wmv).

## Bicycle Patrol Units

Bicycle fleet officers improve the relationship between officers and bicyclists and improve the effectiveness of enforcement for all modes as it affects bicyclists' safety.

## Police Participation in Education

Safety, as discussed in the Education section, can also be applied as a responsibility of the police department. Officers practice this by distributing literature on safe pedestrian habits as part of enforcement efforts and meetings and events with students and the public. This can include education on proper helmet use, light giveaways, and targeting infractions.

## Bicycle Diversion Programs

Bicycle diversion programs provide bicyclists who are cited for certain infractions the option to attend a bicycle safety class rather than paying a ticket. This educational component is associated with a greater degree of lasting behavior change.

## Bike Theft

The fear and reality of bike theft can be a barrier to bicycling for all users. Recommendations for reducing bike theft include improving locking practices through education, providing adequate bicycle parking facilities, providing bicycle registration, providing recovery resources and programs, and offender detection such as bait bikes.



Source: MTBR, [reviews.mtbr.com/how-to-get-your-stolen-bike-back](https://www.reviews.mtbr.com/how-to-get-your-stolen-bike-back)

## Speed Management

Raising awareness of speeding is important at a neighborhood level and can be achieved through local events and education. Residents are less likely to speed if they know their neighbors.

Speed monitoring programs train residents in using radar detectors which then distribute warnings to speeding vehicles. This type of program helps residents understand that this is a local and personal issue and the importance of driving the speed limit. Pairing education with enforcement by distributing warnings and educational materials before giving tickets provides drivers with a deeper understanding of the law and its value.

Speed feedback signs and radar trailers that display real-time signs and flash when drivers exceed the limit. Radar trailers are appropriate on a temporary basis only. These treatments are useful on corridors with prevalent cases of speeding that lack room for physical measures or in conjunction with recent construction of physical measures.

However, speed monitoring and feedback signs may have only temporary effectiveness as drivers grow accustomed to their presence.



## Electric Mobility Devices

Electric bicycles (e-bikes) and other electric mobility devices such as electric scooters are a rapidly growing new transportation alternative in various communities throughout California. Bike share companies that include electric bikes and electric scooter rentals are becoming more and more common, particularly in cities.

These devices provide a potential option to cover longer travel distances and steeper grades with less physical effort than walking or traditional biking. In particular, these devices provide an active transportation option that may be appealing to aging but active populations. The median age in Calaveras County is 52 and approximately 53% of the population is 50 and older. Given the terrain, summer heat, and distance between residential areas and key destinations that the ATRTP aims to provide access to, e-bikes, scooters, golf carts (in locations near golf courses) and similar devices could be a viable transportation option for many residents in the County that do not currently walk or bike. Incorporating these devices into communities should be carefully considered as there are positives and negatives associated with them. The following section describes various devices currently available and provides policy considerations regarding the incorporation of these devices.

## E-Bikes

California designates three classes of e-bikes (CVC Section 312.5):

- Class 1 – low-speed pedal-assisted electric bicycle: Bicycle equipped with a motor that provides assistance only when the rider is pedaling and that ceases to provide assistance when the e-bike reaches 20 mph.
- Class 2 – low-speed throttle-assisted electric bicycle: Bicycle equipped with a throttle-actuated motor that ceases to provide assistance when the e-bike reaches 20 mph.
- Class 3 – speed pedal-assisted electric bicycle: Bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the e-bike reaches 28 mph.

Class 1 and 2 e-bikes are generally treated similarly to regular bicycles:

- There is no minimum age to ride.
- Helmets are required for ages 17 and under.
- Allowed on all classes of bikeways, unless prohibited by the local jurisdiction (CVC Section 21207.5).

Class 3 e-bikes have more limitations on their use:

- Riders must be 16 years of age or older.
- A helmet is required for all riders.
- They are allowed on Class II bike lanes, Class III bike routes, and Class IV protected bikeways but not allowed on Class I shared-use paths (CVC Section 21207.5).

## Electric Scooters

California Vehicle Code defines an electric scooter as a “motorized scooter”: any two-wheeled device that has handlebars, has a floorboard that is designed to be stood upon when riding, and is powered by an electric motor. This device may also have a driver seat that does not interfere with the ability of the rider to stand and ride and may also be designed to be powered by human propulsion (California Vehicle Code Section 407.5). Limitations on their use include:

- Riders must use Class II bike lanes when they are present (CVC Section 21229).
- Motorized scooters shall not be operated on a roadway with a speed limit in excess of 25 miles per hour, unless within a Class II bike lane or Class IV separated bikeway. However, local authorities may, by ordinance or resolution, authorize operations outside of a Class II or Class IV on a roadway with a speed limit of up to 35 miles per hour.
- Motorized scooters are allowed on all other classes of bikeways unless prohibited by the local jurisdiction (CVC Section 21230).
- Riders are prohibited from using sidewalks, except when entering or leaving adjacent property.
- A helmet is required for all riders under 18 years of age.
- A valid driver’s license or instruction permit is required.
- Speeds are limited to 15 miles per hour,
- Leaving a scooter on its side on a sidewalk, or otherwise parking one so that there was not an adequate path for pedestrians, is prohibited.

### Electrically Motorized Boards

According to California Vehicle Code, the term “electrically motorized board” is any wheeled device that has a floorboard designed to be stood upon when riding with a maximum speed of 20 miles per hour. The device may be designed to also be powered by human propulsion (CVC Section 313.5).

- Use is restricted to roads with speed limits of 35 miles per hour or less, unless operated in a Class II or Class IV bikeway.
- Speed is limited to 15 miles per hour (CVC Section 21294).
- Riders must be 16 years of age or older.
- A helmet is required for all riders.

### Electric Personal Assistive Mobility Devices

According to California Vehicle Code, the term “electric personal assistive mobility device” (EPAMD) means a self-balancing, non-tandem two-wheeled device that can turn in place, with a maximum speed of 12.5 miles per hour (CVC Section 313). The most common example is the Segway. “Pedestrian” includes use of EPMADs (CVC Section 467). EPAMDs can operate on bikeways and sidewalks unless prohibited by the local jurisdiction, but must yield to pedestrians (CVC Sections 21281.5 and 21282).

### Bike and Scooter Share

In addition to private ownership, bikes, e-bikes, and scooters are available through short-term point-to-point rental or “shared” systems. Bike share systems at first were primarily based on docks, or unmanned physical locations where a bike could be rented or returned, with docks located at destinations across an area.

More recently “dockless” systems, where bikes or scooters, equipped with appropriate wireless technology, could be rented at any location or left at any location, have become more widespread. The systems can often be deployed and operated at lower cost than docked systems. However, concerns have arisen in some locations about dockless bikes or scooters being parked in inappropriate locations, in particular when they have blocked pedestrian flows. Some cities have responded to this by developing “corrals,” marked pavement locations where bikes or scooters can be left standing out of the way of pedestrians and other traffic.

### Access

As previously described, laws for each electric device are different. E-bikes generally have more options for locations to ride, as summarized in Table D-2.

**Table D-2: Permitted Access of Electric Mobility Devices in California**

Device Type	Bike Route	Paved Shoulder	Bike Lane	Separated Bikeway	Shared-Use Path/Sidepath
Class 1 E-Bike	A	A	A	A	A
Class 2 E-Bike	A	A	A	A	A
Class 3 E-Bike	A	A	A	A	P
Electric Scooter	A <sup>2</sup>	A <sup>2</sup>	A	A	A
Electronically Motorized Board	A <sup>2</sup>	A <sup>2</sup>	A	A	A
Electronic Personal Assistive Mobility Device	A	A	A	A	A

Notes: A = Allowed; P = Prohibited

<sup>1</sup>Based on California Vehicle Code as of 2025. Local jurisdictions may enact further restrictions.

<sup>2</sup> Device usage is restricted to roadways with certain speeds. See written summary of device type for specific limitations.

Source: California Vehicle Code, Fehr & Peers, 2025.

## Golf Carts and Low-Speed Vehicles/Neighborhood Electric Vehicles

Multiple golf courses exist in Calaveras County and during development of the ATRTP, residents expressed desire to utilize golf carts and/or low-speed vehicles (also referred to as Neighborhood Electric Vehicles [NEVs]) as a mode of transportation. In particular, residents in La Contenta and Gold Creek Estates in Valley Springs and Greenhorn Creek in Angels Camp expressed desire to utilize golf carts or NEVs to travel to/from their homes and nearby grocery stores, restaurants, and shopping areas. Golf carts are motor vehicles with a maximum speed of 15 miles per hour and are primarily intended for use on golf courses. Current state law allows golf carts to be operated on public roads with a posted speed limit of 25 miles per hour or less (unless otherwise authorized by local ordinance or resolution) within 1 mile of a designated golf course zone. NEVs are street legal electric vehicles with a maximum speed up to 25 miles per hour. NEVs have different safety features than golf carts including but not limited to seatbelts, turn signals, and headlights/taillights and require a driver's license to operate. NEVs are designed for low-speed, short-distance travel in residential neighborhoods and can be operated on public roads with a posted speed limit of 35 miles per hour or less (unless otherwise authorized by local ordinance or resolution). Local jurisdictions can adopt NEV plans expanding access to higher speed roads and to allow NEV infrastructure such as dedicated lanes, signage, and charging stations.

Given the median age in Calaveras County is 52 and approximately 53% of the population is 50 and older and fact that multiple golf courses exist in/near residential neighborhoods that are also located in close proximity to commercial areas, NEVs could be a viable mode of transportation for many residents and could be an effective tool for reducing single-occupancy vehicle trips and vehicle miles traveled. If the County or City wish to implement a successful NEV network, a NEV plan would be required in certain locations (for example Valley Springs given posted speed limits on SR 26 between La Contenta/Gold Creek and town exceed 35 miles per hour) and is recommended regardless to ensure adequate infrastructure, signage, and parking is provided.

## Considerations When Determining Access Policy

When determining access for electric bicycles and other electric devices, the following issues should be considered:

- Electric mobility devices provide increased mobility for users who are less able to walk or use regular bicycles due to age or disability.
- Terrain with frequent elevation changes and areas with high summer temperatures may discourage some people from walking or bicycling as transportation. Electric mobility devices or an NEV network may encourage more people, reducing use of motor vehicles.
- Higher-speed electric mobility devices may generally be faster than most bicycles and pedestrians.
- Some non-electric bike users and pedestrians may consider e-bikes and other powered devices to detract from their experience on bikeways and trails.
- Consideration should be given to regulating parking and storage of devices so that they do not impede pedestrian or other traffic, in particular through the use of corrals.
- The data that bike and scooter share companies collect can be valuable to a jurisdiction seeking to understand the movement of people and planning for them.

## Policy Options

Use of these devices is expected to continue to expand, and sharing services are expected to spread. Electric scooters have spread rapidly into different cities, which has caused some concern to arise. A large concern with scooters has been their mixing with much slower pedestrian traffic. Some cities have responded by prohibiting sidewalk use. However, on streets with fast vehicles and heavy traffic without bike lanes, those riding scooters may be forced to mix with vehicular traffic, which may be less comfortable or safe and reduce overall use. Speed limits for scooters are another option, but enforcement may be challenging.

Jurisdictions have several policy options for e-bikes and other electric mobility devices. Different policies may be enacted for each device.

Access options include the following:

- Continue with existing access as allowed by state law.
  - This option provides the most mobility and accessibility for those who use these transportation options.
- Prohibit access to sidewalks and Class I shared-use paths, where pedestrians are also present, but continue access to other bikeways.
  - This option separates the slowest and some of the fastest users of the path, but will not eliminate all fast riders, as regular bicycles may travel as fast as or faster than e-devices.

- This option would result in more e-devices mixing with motor vehicle traffic.
- In some locations, there may be no access for electric scooters, which are prohibited from roads with speed limits greater than 35 mph unless a bike lane or separated bikeway is available.
- For Class 3 e-bikes, prohibit access to all bikeways except Class III bike routes.
  - This option provides the greatest restriction and separation.
  - This option would force e-devices to mix with vehicular traffic, which may be less comfortable or safe and reduce overall use of e-devices, and under some conditions may be prohibited by state law.
- For NEVs, adopt an NEV plan identifying infrastructure needs and expanding NEV access to higher speed roadways.

When developing these policies, consideration should also be given to other issues:

- Develop policies considering parking and storage of these devices, especially sharing systems, to minimize impacts on flows of pedestrians and other vehicles. These policies may require use of corrals, prohibit blocking of entrances, or other aspects.
- Develop alternative improvement standards for facilities intended to accommodate e-bikes/devices and pedestrians such as wider pathways to provide more space for passing and/or striping indicating bikes

- should ride on one side and pedestrians should walk on the other.
- Develop data sharing agreements in conjunction with permitting new shared services.



Example Class I Facility in Folsom, CA  
Source: Fehr & Peers, 2025.

# Appendix E - Project Priorities and Cost Estimates

This appendix provides lists of planned improvements, including prioritized projects, including lengths, costs, and if the project is in a disadvantaged community, and explains how projects were prioritized and costs were estimated.

## Prioritization

As discussed in the Implementation chapter, the projects identified to develop the network were prioritized based on several criteria, including:

- Proximity to key destinations, including commercial areas, schools, community amenities such as parks, library, etc., recreational trails, and transit
- Population density
- Collision locations and perception of safety
- Disadvantaged community indicators
- Access to critical facilities documented in the Calaveras County Evacuation and Access Needs Assessment and Preparedness Plan (CCEANAPP)
- Community and/or agency support

Prioritized projects are displayed in Figures E-1 through E-7.

## Cost Estimation

Cost estimates are based on unit costs developed from recent local projects. These unit costs are identified in Tables E-1 below. All project cost estimates are high-level and more detailed study of each individual project will be required to refine them. Engineering, land acquisition, bridge widening, utility relocation, permitting costs, supplemental studies costs, etc. are not included. Specific costs will vary based on local conditions. It is noted that unit costs for bicycle facilities such as paved shoulder, buffered paved shoulder, bike lane, and separated bikeway include widening the roadway given that in most cases, existing roads in the County are not wide enough to accommodate more simple and less expensive restriping efforts. However, for specific priority projects (which are noted in Attachment E-1 - Table E-1A), the existing paved roadway is wide enough to accommodate proposed facilities and the unit costs have been modified to reflect this. Unit cost estimates are based on the feasibility analysis conducted for this project which is provided in Attachment E-2. The feasibility analysis also documents overall considerations for implementing proposed facilities and potential constraints for priority projects.

Pedestrian crossing improvements are based on the typical costs shown in Table E-2. These criteria are for cost estimating purposes, and the actual design of the crossing treatment will require additional study and must meet the California MUTCD standards. Costs for planned projects are provided in Attachment E-1 - Table E-2A.

**Table E-1: Bicycle and Pedestrian Improvement Unit Costs**

Facility	Cost <sup>1</sup>	Description	Assumptions
Bike Route	\$21,000	Sharrow markings and signage, no roadway widening	Includes mobilization, striping, signage, traffic control, and 30% contingency
Paved Shoulder	\$838,000	Widen roadway 10' for 7' paved shoulder and 3' separation with striping buffer	Includes mobilization, excavation, 4" AC over 8" AB paving section, striping, signage, traffic control, erosion control, and 30% contingency
Buffered Paved Shoulder	\$849,000	Widen roadway 10' for 7' paved shoulder and 3' separation with striping buffer with rumble strips	Includes mobilization, excavation, 4" AC over 8" AB paving section, striping, signage, rumble strip, traffic control, erosion control, and 30% contingency
Bike Lane	\$599,000	Widen roadway 7' for bike lane, painted stripe for buffer	Includes mobilization, excavation, 4" AC over 8" AB paving section, striping, signage, traffic control, erosion control, and 30% contingency
Separated Bikeway	\$922,00	Widen roadway 10' for 7' bike lane and 3' separation with flexible delineators	Includes mobilization, excavation, 4" AC over 8" AB paving section, flexible delineator posts, striping, signage, traffic control, erosion control, and 30% contingency
Shared-Use Path/ Sidepath	\$779,000	12' wide paved path, 5' minimum separation, pedestrian rated paving section	Includes mobilization, excavation, 2" AC over 4" AB paving section, striping, signage, traffic control, erosion control, and 30% contingency
Sidewalk	\$1,000,000	Vertical curb, gutter, & 6' wide sidewalk along existing street	Includes mobilization, excavation, 4" PCC over 6" AB section, traffic control, erosion control, and 30% contingency

Notes:

<sup>1</sup>Costs are per side per mile. Estimates are for construction costs only and do not include costs of engineering, environmental studies, permitting, relocation or adjustments to existing utilities, removal or replacement of existing curb, gutter & sidewalk, curb ramps, excessive grading operations, storm drainage infrastructure, or land acquisition unless stated in the description. These estimates are for planning purposes only and should be refined for individual projects

Source: WGA, 2025.

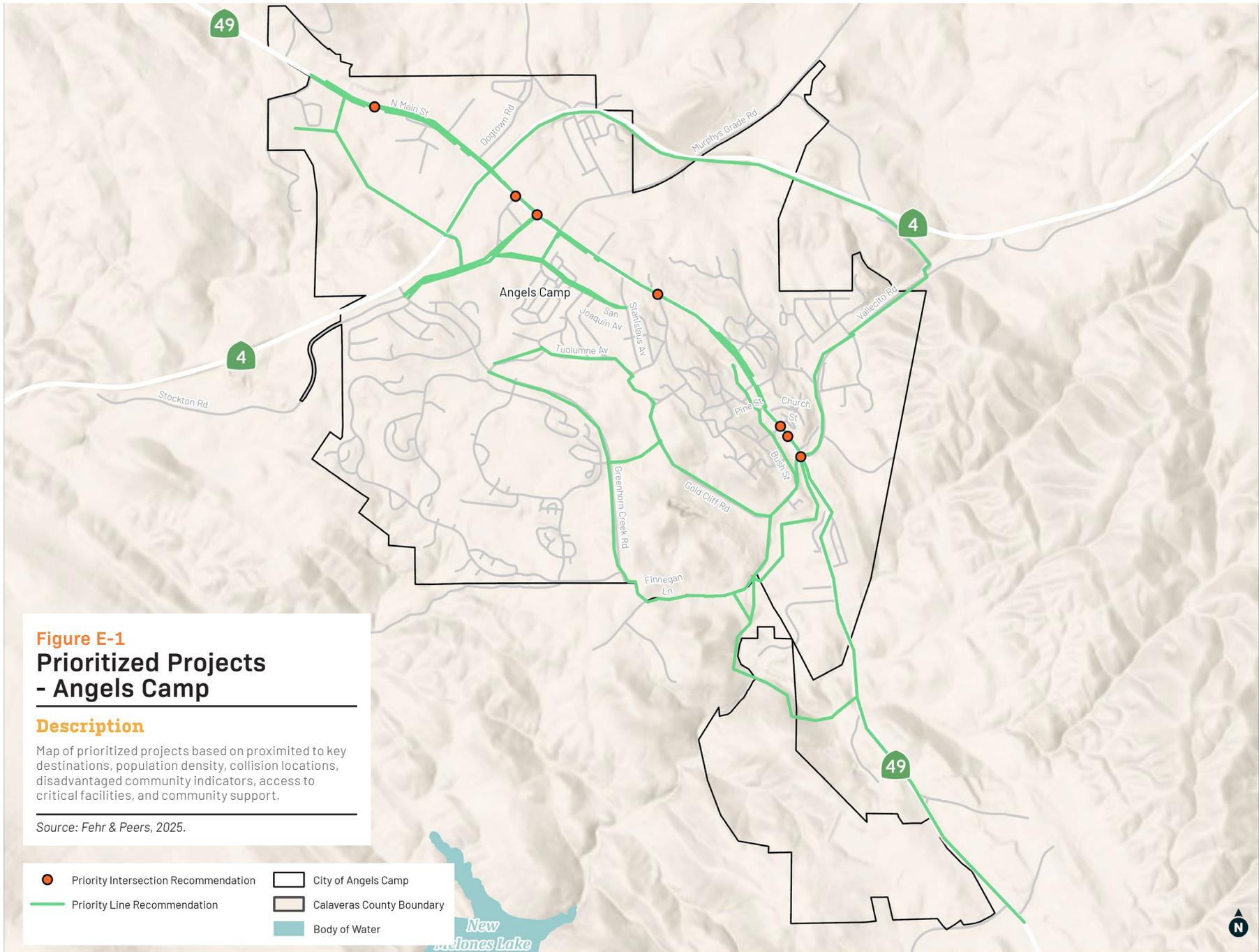
**Table E-2: Intersection Treatment Unit Costs**

Facility	Cost <sup>1</sup>	Description	Assumptions
High Visibility Crosswalk	\$6,000	Crosswalk striping and signage	Includes mobilization, striping, signage, traffic control, and 30% contingency
Bulb-Out/Curb Extension	\$41,000	Pavement saw cut, removal & patch, vertical curb & gutter, sidewalk, accessible ramps, crosswalk striping and signage	Includes mobilization, traffic control, erosion control and 30% contingency
Rectangular Rapid Flashing Beacon (RRFB)	\$65,000	Crosswalk striping, signage with push button activated lights, solar panel & electrical wiring	Includes mobilization, traffic control, and 30% contingency
Pedestrian Hybrid Beacon	\$236,000	Two poles with mast arm, signage, push button activated signal lights, electrical wiring, crosswalk striping and signage	Includes mobilization, traffic control, and 30% contingency
Pedestrian Refuge Island	\$25,000	Pavement saw cut, removal & patch, vertical curb & gutter, sidewalk, accessible ramps, crosswalk striping and signage	Includes mobilization, traffic control, erosion control and 30% contingency

Notes:

<sup>1</sup>Costs are per crossing except for bulb-out/curb extension which is per corner. Estimates are for construction costs only and do not include costs of engineering, environmental studies, permitting, relocation or adjustments to existing utilities, removal or replacement of existing curb, gutter & sidewalk, curb ramps, excessive grading operations, storm drainage infrastructure, or land acquisition unless stated in the description. These estimates are for planning purposes only and should be refined for individual projects

Source: WGA, 2025.

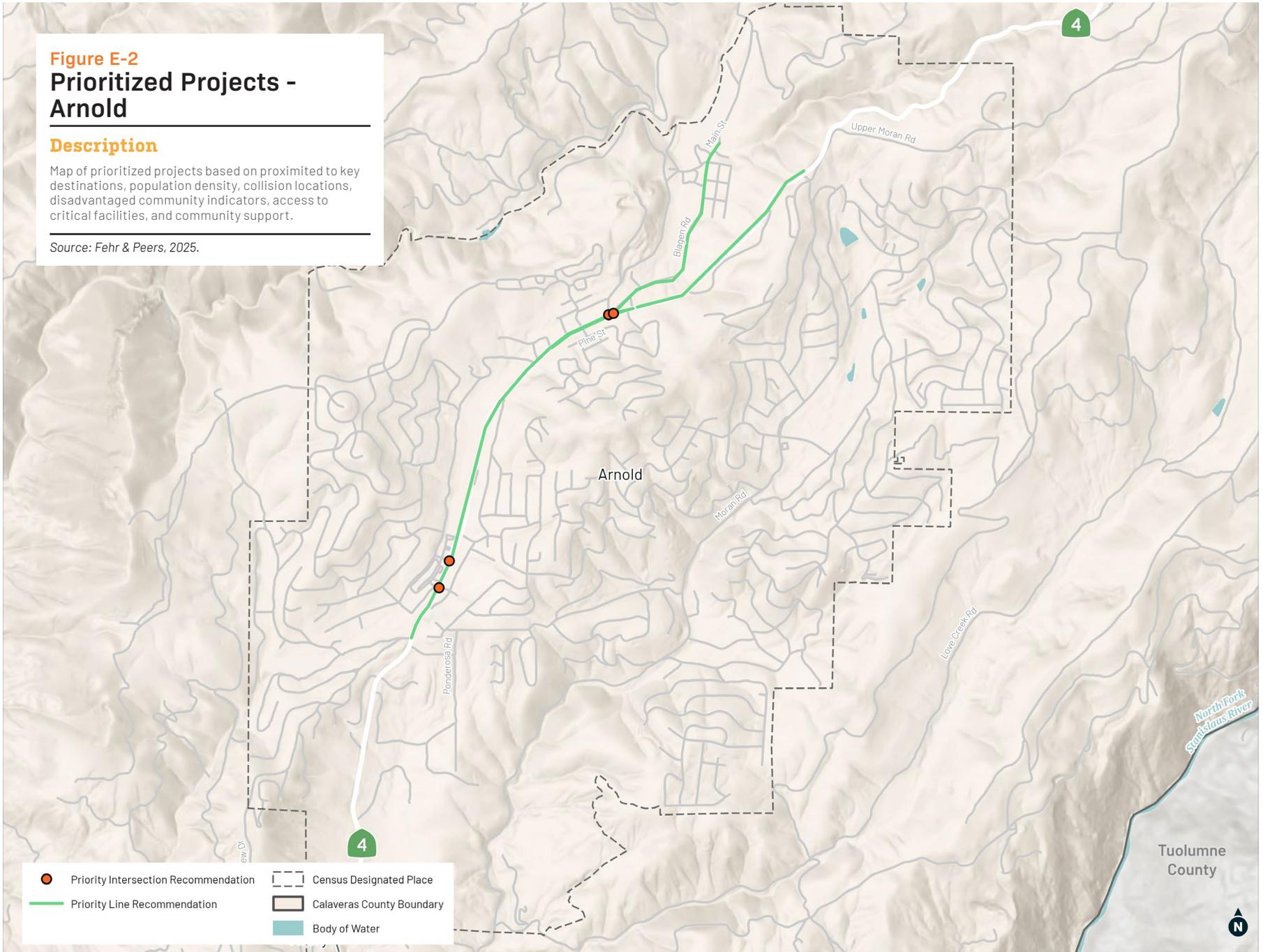


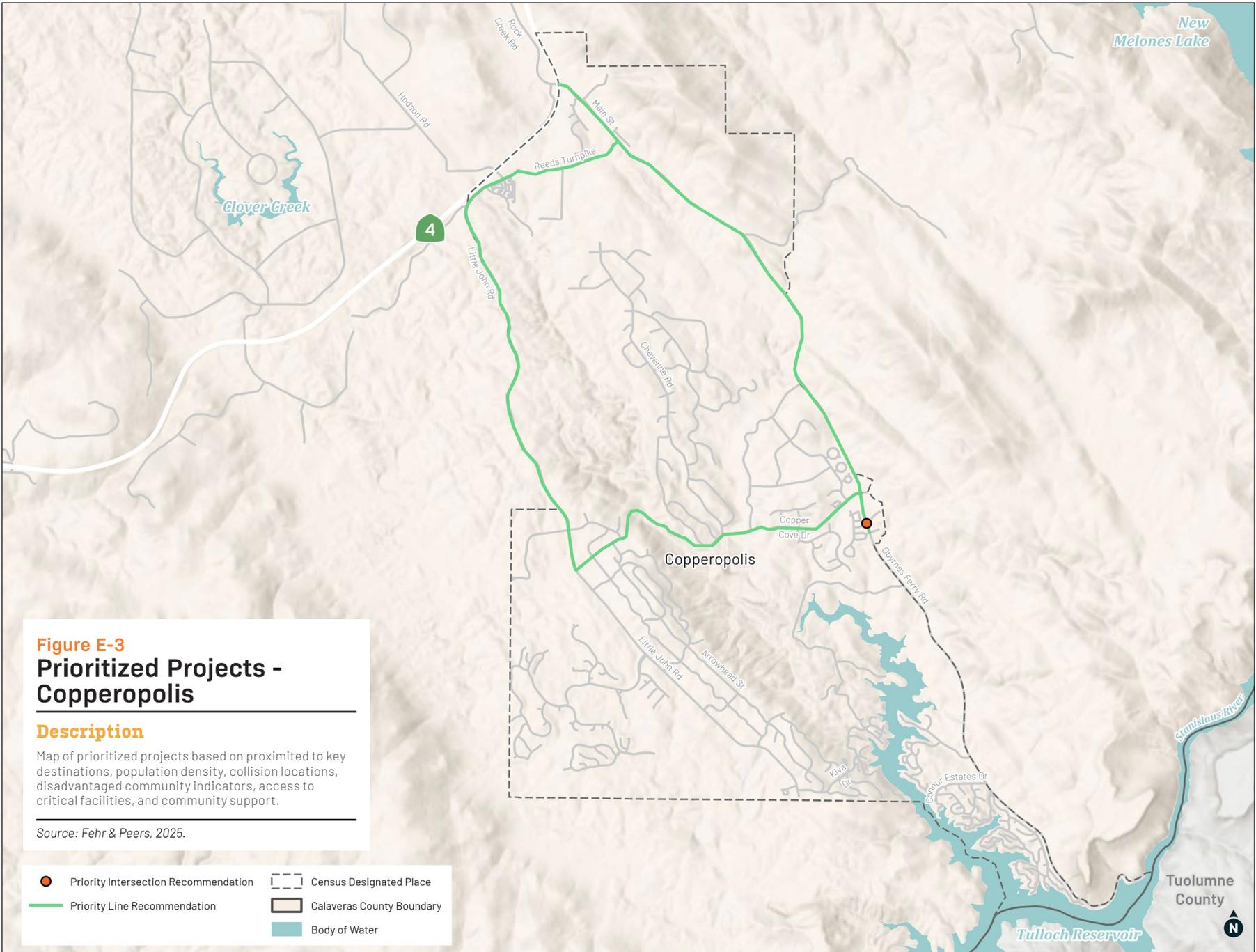
### Figure E-2 Prioritized Projects - Arnold

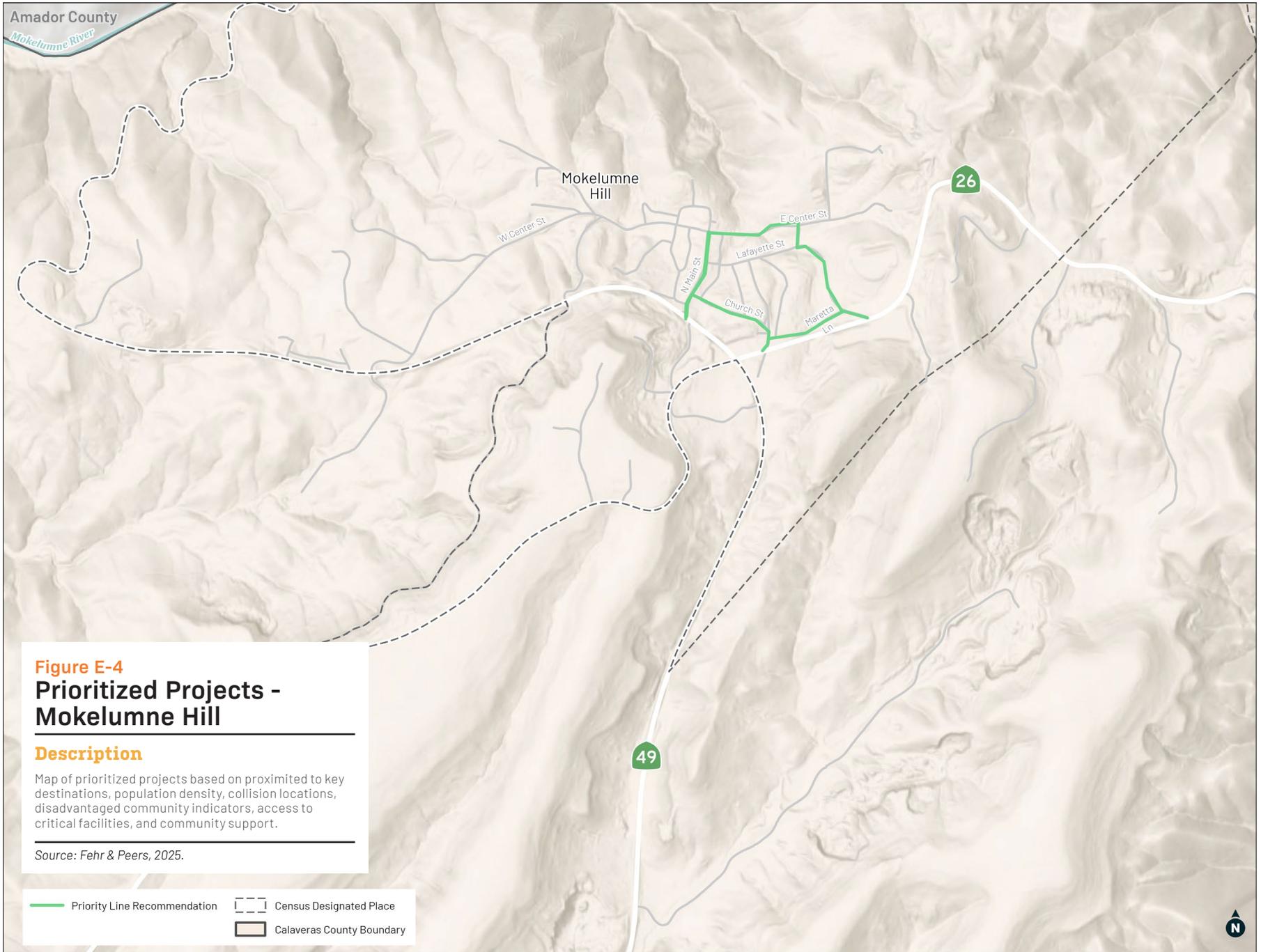
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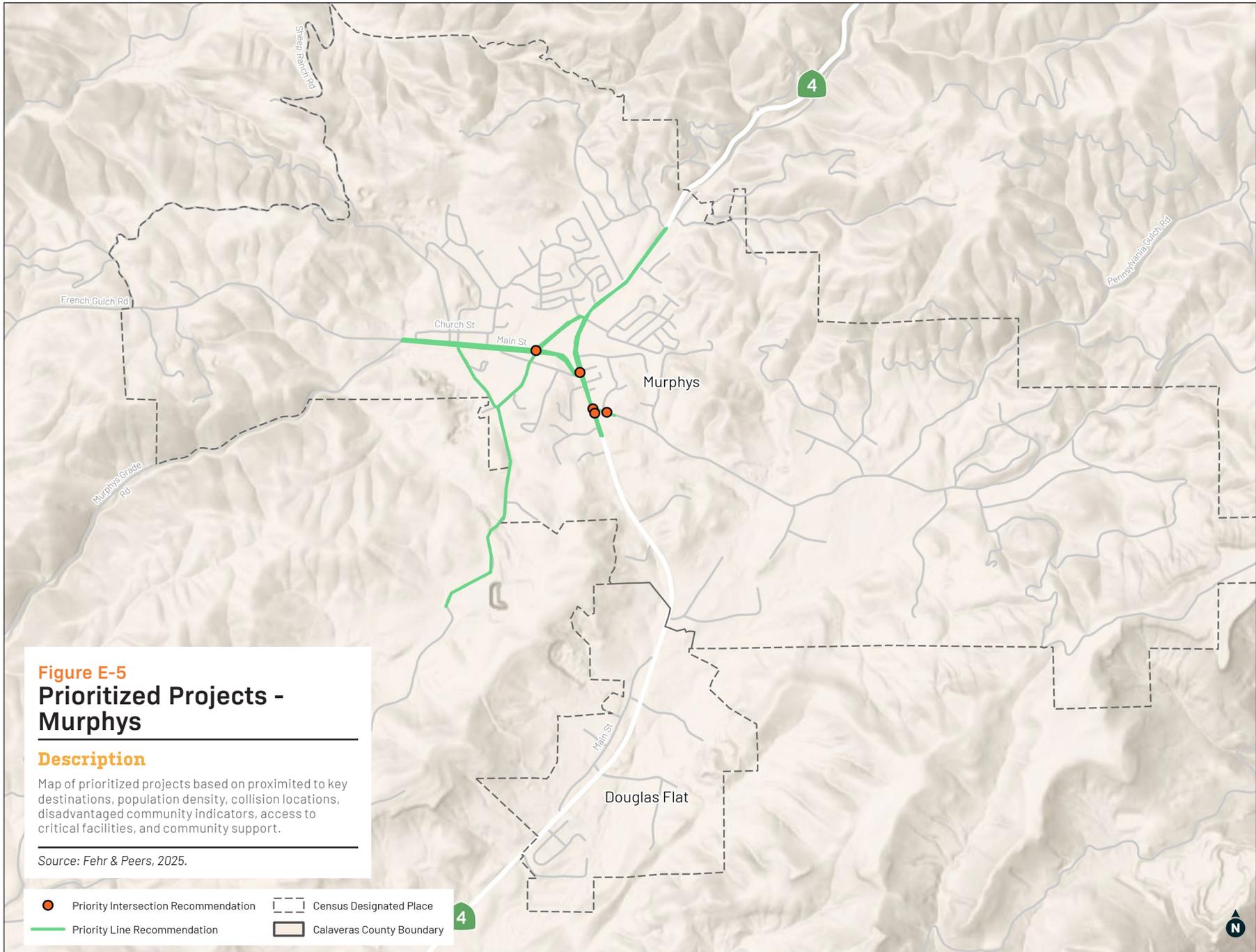
Map of prioritized projects based on proximity to key destinations, population density, collision locations, disadvantaged community indicators, access to critical facilities, and community support.

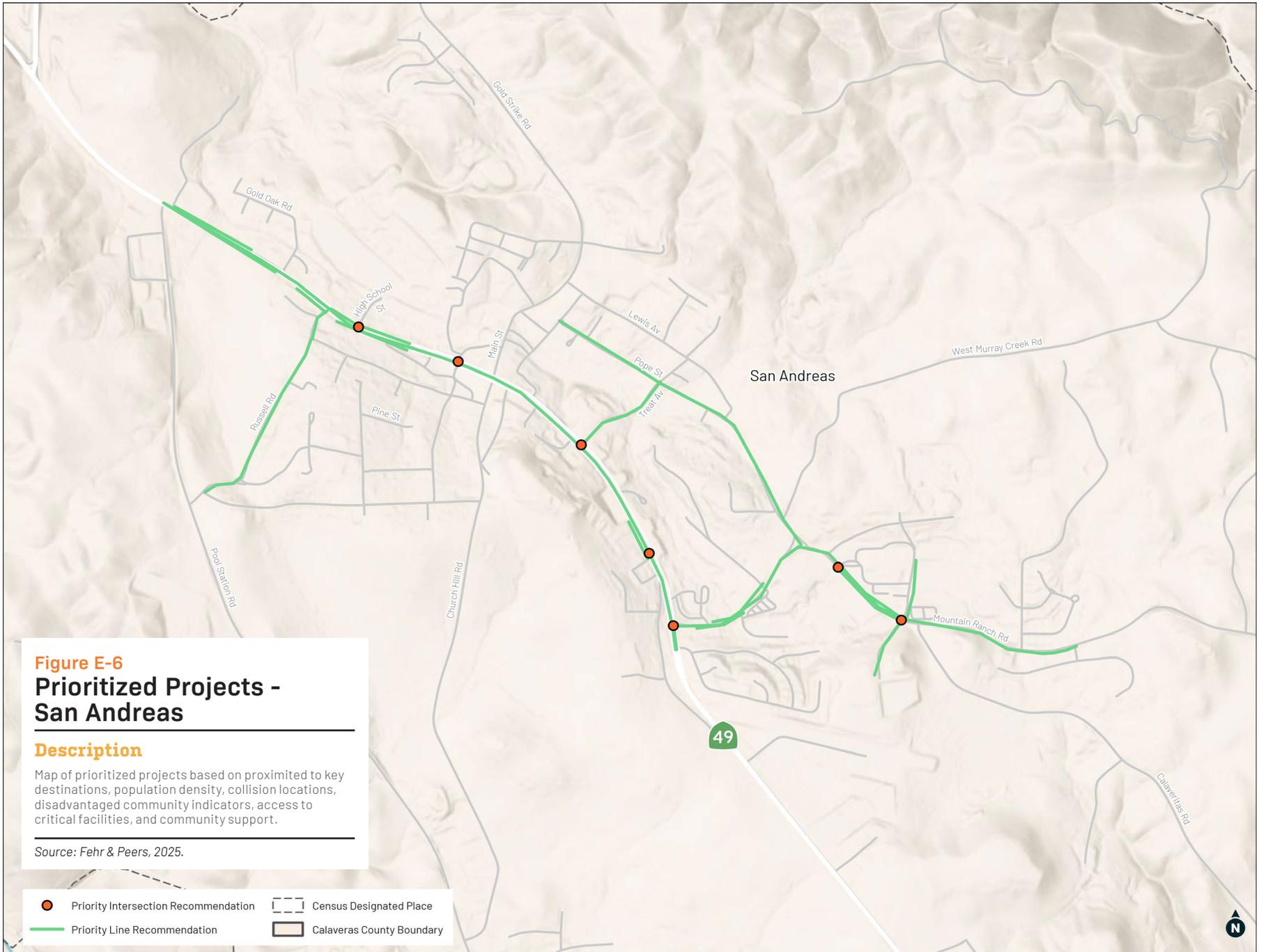
Source: Fehr & Peers, 2025.

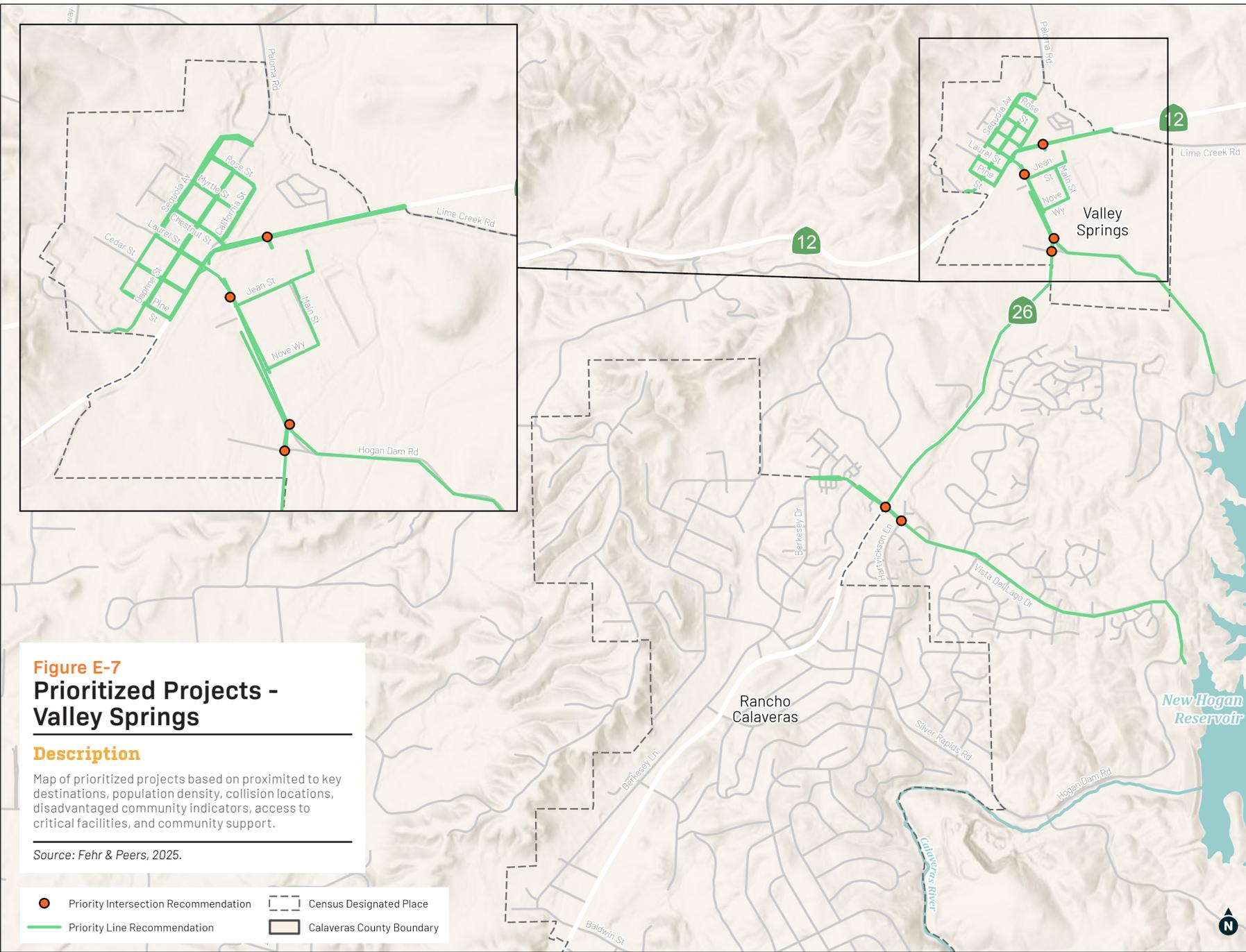












**Figure E-7**  
**Prioritized Projects -**  
**Valley Springs**

**Description**  
 Map of prioritized projects based on proximity to key destinations, population density, collision locations, disadvantaged community indicators, access to critical facilities, and community support.

Source: Fehr & Peers, 2025.

- Priority Intersection Recommendation
- Priority Line Recommendation
- Census Designated Place
- Calaveras County Boundary

Potential recreational trail improvements are provided in Attachment E-1 – Table E-3. Given recreational trail improvements and associated costs vary substantially depending on the width, intended use (walking/hiking, equestrian, ATV, bike, dirtbike, etc.), and topography, and this is a high-level planning document that describes general potential improvements rather than detailed alignment recommendations, cost estimates for potential recreational trail improvements are not provided.

# Attachment E-1: Project Cost Estimates

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
<b>Highway Projects</b>						
R-1	SR 12 West	SR 12 from San Joaquin County Line to Pine Street	Buffered Paved Shoulders with Bike Route Signage	9.72	\$16,504,560	
R-2	SR 12 Valley Springs Complete Streets <sup>1</sup>	SR 12 from Pine Street to Lime Creek Road	Sidewalks on both sides of road	1.24	\$1,388,800 <sup>2</sup>	High
			Separated Bikeway	0.62		
R-2A	SR 12 Valley Springs Complete Streets <sup>1</sup>	SR 12 from Pine Street to Lime Creek Road	Shared-Use Path/Sidepath on both sides of road	0.62	\$965,960	
R-3	SR 12 Central	SR 12 from Lime Creek Road to Pool Station Rd/SR 49 San Andreas	Buffered Paved Shoulders with Bike Route Signage	8.14	\$13,821,720	
R-4	SR 26 West	SR 26 from San Joaquin County Line to Olive Orchard/Garner Place	Buffered Paved Shoulders with Bike Route Signage	4.97	\$8,439,060	
R-5	SR 26 West	SR 26 from Olive Orchard/Garner Place to Silver Rapids Road	Buffered Paved Shoulders with Bike Route Signage	2.58	\$4,380,840	
R-6	SR 26 West	SR 26 Driver Road to Baldwin Street	Convert Existing Sidewalk to Shared-Use Path/Sidepath on east side of road	0.10	\$77,900	

<sup>1</sup> Valley Springs Town Center Connectivity Plan (CCOG, GHD; April 2020) identifies improvements on this segment. Recommendation differs slightly based on latest guidance for speed and/or volumes on this segment.

<sup>2</sup> Cost estimate does not include roadway widening.

**Table E-1A – Roadway Segment Project List**

<b>Project #</b>	<b>Project Name</b>	<b>Location</b>	<b>Recommendation</b>	<b>Length</b>	<b>Cost</b>	<b>Priority</b>
R-6A	SR 26 West	SR 26 Driver Road to Baldwin Street	Separated Bikeway adjacent to existing sidewalk to provide better connection to school	0.10	\$184,400	
R-7	SR 26 Valley Springs Main Street Complete Streets Phase 1'	SR 26 from SR 12 to Hogan Dam Road (north intersection)	Sidewalks on both sides of road to Hogan Dam Rd (north) on east side and to Hogan Dam Rd (south)/Mangili Rd on west side	1.04	\$1,138,400 <sup>2</sup>	High
			Separated Bikeway	0.41		
R-7A	SR 26 Valley Springs Main Street Complete Streets Phase 1'	SR 26 from SR 12 to Hogan Dam Road (north intersection)	Shared-Use Path/Sidepath on both sides of road	0.41	\$638,780	
R-8	SR 26 Main Street Valley Springs Complete Streets Phase 2	SR 26 from Hogan Dam Road (north intersection) to Vista Del Lago Drive	Shared-Use Path/Sidepath on east side of road	1.49	\$1,160,710	High
R-9	SR 26 Main Street Valley Springs Complete Streets Phase 3	SR 26 from Vista Del Lago Drive to Silver Rapids Road	Shared-Use Path/Sidepath on east side of road	0.80	\$623,200	
R-10	SR 26 Central	SR 26 from SR 12 to SR 49 in Mokelumne Hill	Buffered Paved Shoulders with Bike Route Signage	7.61	\$12,921,780	
R-11	SR 26 Mokelumne Hill Phase 1	SR 26 from SR 49 to Church Street	Shared-Use Path/Sidepath on north side of road	0.06	\$46,740	
R-12	SR 26 Mokelumne Hill Phase 2	SR 26 from Church Street to Mokelumne Hill Elementary School	Paved Shoulders with Recreational Route Signage	0.25	\$419,000	

**Table E-1A – Roadway Segment Project List**

<b>Project #</b>	<b>Project Name</b>	<b>Location</b>	<b>Recommendation</b>	<b>Length</b>	<b>Cost</b>	<b>Priority</b>
R-13	SR 26 North	SR 26 from Mokelumne Hill Elementary School to Main Street S	Buffered Paved Shoulders with Bike Route Signage	14.06	\$23,873,880	
R-14	SR 26 West Point	SR 26 from Main Street S to Main Street N	Paved Shoulders with Recreational Route Signage	0.54	\$905,040	
R-15	SR 26 North of West Point	SR 26 from Main Street N to County Line	Buffered Paved Shoulders with Bike Route Signage	1.66	\$2,818,680	
R-16	SR 4 South	SR 4 from Calaveras/San Joaquin County Line to Foundry Lane (approaching SR 4/49 intersection)	Buffered Paved Shoulders with Bike Route Signage	18.61	\$31,599,780	
R-17	<b>SR 4 Angels Camp (Bypass)</b>	<b>SR 4 from Foundry Lane to Rollerli Bypass (via SR 4 Bypass) to Vallecito Road/Kurt Drive/Depot Road (connecting to Angels Creek Trail)</b>	<b>Shared-Use Path/Sidepath on southeast side of road</b>	<b>2.38</b>	<b>\$1,854,020</b>	<b>High</b>
R-18	SR 4 Central	SR 4 from Rollerli Bypass Road/Vallecito Road to Pennsylvania Gulch Road	Shared-use Path/Sidepath on one side of road from Rollerli Bypass to Six Mile Road	1.80	\$10,062,000	
			Buffered Paved Shoulders with Bike Route Signage from Six Mile Road to Feeney Park in Murphys	5.10		
R-19		<b>SR 4 Pennsylvania Gulch to Main</b>	<b>Separated bikeway</b>	<b>0.15</b>		

**Table E-1A – Roadway Segment Project List**

<b>Project #</b>	<b>Project Name</b>	<b>Location</b>	<b>Recommendation</b>	<b>Length</b>	<b>Cost</b>	<b>Priority</b>
R-19	SR 4 Murphys Main Street Complete Streets <sup>3</sup>	SR 4 from Allen Lane to Pennsylvania Gulch Road to Apple Blossom Drive	Sidewalk on west side of road from Allen Lane to Pennsylvania Gulch Road, east side of road from Pennsylvania Gulch Road to Big Trees Road/Tom Bell Road	0.19	\$934,890 <sup>2</sup>	High
			Shared-Use Path/Sidepath on both sides of road from Main Street to Big Trees Road/Tom Bell Road and west side of road from Big Trees Road/Tom Bell Road to Apple Blossom Drive	0.91		
R-20	SR 4 Northern Central	SR 4 from Apple Blossom Drive to Lakemont Drive	Buffered Paved Shoulders with Bike Route Signage	9.62	\$16,334,760	
R-21	SR 4 Arnold Main Street Complete Streets Phase 1	SR 4 from Lakemont Drive to Oak Circle (north)	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	1.42	\$1,106,180	High
R-22	SR 4 Arnold Main Street Complete Streets Phase 2	SR 4 from Oak Circle (north) to Henry Drive	Shared-Use Path/Sidepath on both sides of road	0.80	\$623,200	High
R-23	SR 4 Main Street Complete Streets Arnold Phase 3	SR 4 from Henry Drive to Moran Road	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.96	\$747,840	High

<sup>3</sup> Murphys SR 4 Complete Streets Plan (CCOG, Placeworks; September 2019) identifies improvements on this segment. Recommendation differs slightly based on latest guidance for speed and/or volumes on this segment.

<sup>4</sup> Further study needed to determine which side of road improvement should be located on. Location may vary based on segment and crossings and wayfinding signage should be incorporated as needed if/when sidepath switches to alternate side of road.

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-24	SR 4 North	SR 4 from Moran Road to County Line	Buffered Paved Shoulders with Bike Route Signage	23.02	\$39,087,960	
R-25	SR 49 Mokelumne Hill	SR 49 from County Line to EBMUD Access Gate	Buffered Paved Shoulders with Bike Route Signage	1.60	\$2,716,800	
R-26	SR 49 Mokelumne Hill	SR 49 from EBMUD Access Gate to SR 26	Shared-Use Path/Sidepath on north side of road	1.64	\$1,277,560	
R-27	SR 49 North	SR 49 from SR 26 to SR 12/SR 49 near San Andreas	Buffered Paved Shoulders with Bike Route Signage	7.12	\$12,089,760	
R-28	SR 49 San Andreas Main Street Complete Streets <sup>5</sup>	SR 49 from Pool Station Road to Toyanza Drive	Separated Bikeway	1.40	\$1,396,000 <sup>2</sup>	High
			Sidewalks gap fill on both sides of road	1.06		
R-28A	SR 49 San Andreas Main Street Complete Streets <sup>5</sup>	SR 49 from Pool Station Road to Toyanza Drive	Shared-Use Path/Sidepath on both sides of road	1.40	\$2,181,200	
R-29	SR 49 Sidewalk Extension	SR 49 from Toyanza Drive south 600'	Sidewalks on west side of road	0.19	\$190,000	
R-30	SR 49 Central	SR 49 from Toyanza Drive to Copello Drive	Buffered Paved Shoulders with Bike Route Signage	9.33	\$15,842,340	
R-31			Separated Bikeway	2.21	\$4,240,400 <sup>2</sup>	High

<sup>5</sup> San Andreas SR 49 Commercial Gateway & Corridor Study (CCOG, GHD/Omni-Means; October 2017) identifies improvements on this segment. Recommendation differs slightly based on latest guidance for speed and/or volumes on this segment.

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
	SR 49 Angels Camp Main Street Complete Streets <sup>6</sup>	SR 49 from Copello Drive to Finnegan Lane/Vallecito Road	Sidewalk gap fill on both sides of road	3.71		
R-31A	SR 49 Angels Camp Main Street Complete Streets <sup>6</sup>	SR 49 from Copello Drive to Finnegan Lane/Vallecito Road	Shared-Use Path/Sidepath on both sides of road	2.21	\$3,443,180	
R-32	SR 49 Fairgrounds Connection to Angels Camp	SR 49 from Finnegan Lane/Vallecito Road/SR 49 intersection to the Angels Camp RV Entrance	Shared-Use Path/Sidepath on northeast side of road	1.85	\$1,441,150	High
R-33	SR 49 South	SR 49 from Angels Camp RV Entrance to Calaveras/Tuolumne County Line	Buffered Paved Shoulders with Bike Route Signage	4.16	\$7,063,680	
<b>Western Subregion Projects – Burson/Wallace and Rancho Calaveras/Valley Springs Area</b>						
R-34	Wallace/Burson Recreational Trail	Southworth Road (north) from SR 12 to Ospital Road; Ospital Road from Southworth Road (north) to Southworth Road (south); Southworth Road from Ospital Road to Pettinger Road; Pettinger Road from Southworth Road to SR 12	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	6.65	\$5,180,350	

<sup>6</sup> Angels Camp North Main Street Plan (CCOG, Caltrans, City of Angels; May 2020) identifies improvements on this segment from 4/49 intersection north to Copello. Angels Camp Main Street Plan Final Draft (CCOG, Caltrans, City of Angels; May 2017) identifies improvements on this segment from SR 4/49 intersection south to Finnegan Lane/Vallecito Road. Recommendation differs slightly based on latest guidance and speed and/or volumes.

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-34A	Wallace/Burson Recreational Trail	Southworth Road (north) from SR 12 to Ospital Road; Ospital Road from Southworth Road (north) to Southworth Road (south); Southworth Road from Ospital Road to Pettinger Road; Pettinger Road from Southworth Road to SR 12	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	6.65	\$11,145,400	
R-35	Lake Camanche Local Access Bike/Ped Recreational Trail Route	Camanche Parkway from SR 12 to Lake Camanche entrance; N Burson Road from Camanche Parkway to SR 12	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	8.12	\$13,609,120	
R-36	Messing Road Paved Shoulder	Messing Road from Pettinger Road to SR 12	Paved Shoulder	1.72	\$2,882,720	
R-37	Burson to Rancho Calaveras Paved Shoulder	Southworth Road from Pettinger Road to S Burson Road; S Burson Road from Southworth Road to Olive Orchard Road; Olive Orchard Road from S Burson Road to SR 26	Paved Shoulder	3.20	\$5,363,200	
R-38	Rancho Calaveras Recreational Trail	Baldwin Street from Milton Road to SR 26; Garner Place from SR 26 to Baldwin Street; Hartvickson Lane from Baldwin Street to Vista Del Lago Drive; Silver Rapids from SR 26 to Hogan Dam Road to Vista Del Lago Drive	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	11.26	\$8,771,540	

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-38A	Rancho Calaveras Recreational Trail	Baldwin Street from Milton Road to SR 26; Garner Place from SR 26 to Baldwin Street; Hartvickson Lane from Baldwin Street to Vista Del Lago Drive; Silver Rapids from SR 26 to Hogan Dam Road to Vista Del Lago Drive	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	11.26	\$18,871,760	
R-39	Hagen Court	Hagen Court from SR 26 to Driver Road	Bike Route	0.10	\$204,200	
			Sidewalks	0.20		
R-40	Driver Road	Driver Road from SR 26 to Jenny Lind Elementary	Bike Route	0.39	\$406,380	
			Sidewalk on west side of road	0.39		
R-41	Baldwin Lane	Baldwin Lane from SR 26 to Berkesey Lane	Bike Route	0.19	\$7,980	
R-42	Berkesey Lane	Berkesey Lane from Baldwin Lane to Silver Rapids Road	Bike Route	1.65	\$69,300	
R-43	Berkesey Lane	Berkesey Lane from Silver Rapids Road to Vista Del Lago Drive (planned extension)	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.74	\$1,240,240	
R-44	Silver Rapids Road	Silver Rapids Road from Heney Lane/Danaher Driver to SR 26	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.46	\$770,960	
R-45	Vista Del Lago Drive	Vista Del Lago Drive from Berkesey Lane (planned extension) to SR 26	Sidewalk gap fill on both sides	0.44	\$661,630	High
			Bike lane on northeast side of road	0.37		

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-45A	Vista Del Lago Drive	Vista Del Lago Drive from Berkeseey Lane (planned extension) to SR 26	Shared-use path between Berkeseey Lane and Vista Del Lago Dr if road extension is not constructed	0.13	\$101,270	
R-46	Vista Del Lago Drive	Vista Del Lago Drive from SR 26 to Hogan Dam Road to Esenolda Road (Cameron Trailhead)	Shared-Use Path/Sidepath on both sides of road from SR 26 to Hartvickson and on one side of road from Hartvickson to Hogan Dam Rd to Esenolda Road	1.81	\$1,409,990	High
R-46A	Vista Del Lago Drive	Vista Del Lago Drive from SR 26 to Hogan Dam Road to Esenolda Road (Cameron Trailhead)	Buffered Paved Shoulder with Designated Bike/Ped Recreational Route Signage	1.71	\$2,903,580	
R-47	Gold Creek Estates to Hogan Local Access Bike/Ped Recreational Trail	Harper Lane from Campbell Court to Hogan Dam Road, extending 400' south on Hogan Dam Road	Shared-Use Path/Sidepath on south/west side of road	0.51	\$397,290	
R-48	Hogan Dam Road	Hogan Dam Road from Vista Del Lago Drive to New Hogan Parkway	Bike Lane	1.24	\$1,485,520	
R-49	Hogan Dam Road	Hogan Dam Road from New Hogan Parkway to SR 26	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	1.04	\$810,160	High
R-49A	Hogan Dam Road	Hogan Dam Road from New Hogan Parkway to SR 26	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	1.04	\$1,743,040	
R-50	Hogan Dam Road	Hogan Dam Road from Silver Rapids Road to Whiskey Creek Trailhead	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	3.16	\$5,296,160	

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-51	Valley Springs Commercial Core Connection	Nove Way from SR 26 to Main Street; Main Street from Nove Way to Jean Street; Jean Street from SR 26 to southeast corner of Oak Tree Shopping Center	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.42	\$327,180	High
R-51A	Valley Springs Commercial Core Connection	Nove Way from SR 26 to Main Street; Main Street from Nove Way to Jean Street; Jean Street from SR 26 to southeast corner of Oak Tree Shopping Center	Bike Lane	0.42	\$1,343,160	
			Sidewalks on both sides of road	0.84		
R-52	Downtown Valley Springs Complete Streets – Laurel Street <sup>1</sup>	Laurel Street from SR 12/26 to Sequoia Avenue	Bike Lane	0.12	\$383,760	High
			Sidewalks on both sides of road	0.24		
R-53	Downtown Valley Springs Complete Streets – Cedar Street <sup>1</sup>	Cedar Street from SR 12 to Sequoia Avenue	Bike Route	0.12	\$245,040	High
			Sidewalks on both sides of road	0.24		
R-53A	Downtown Valley Springs Complete Streets – Cedar Street <sup>1</sup>	Cedar Street from SR 12 to Sequoia Avenue	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.12	\$93,480	
R-54	Downtown Valley Springs Complete Streets – Pine Street <sup>1</sup>	Pine Street from SR 12 to Sequoia Avenue	Bike Route	0.12	\$245,040	High
			Sidewalks on both sides of road	0.24		
R-54A	Downtown Valley Springs Complete Streets – Pine Street <sup>1</sup>	Pine Street from SR 12 to Sequoia Avenue	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.12	\$93,480	
R-55			Bike Route	0.14	\$285,880	High

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
	Downtown Valley Springs Complete Streets – Chestnut Street <sup>1</sup>	Chestnut Street from SR 12 to Sequia Avenue	Sidewalks on both sides of road	0.28		
R-55A	Downtown Valley Springs Complete Streets – Chestnut Street <sup>1</sup>	Chestnut Street from SR 12 to Sequia Avenue	Shared-Use Path/Sidepath on one side of road <sup>1</sup>	0.14	\$109,060	
R-56	Downtown Valley Springs Complete Streets – Myrtle Street <sup>1</sup>	Myrtle Street from California Street to Sequia Avenue	Bike Route	0.13	\$265,460	High
			Sidewalks on both sides of road	0.26		
R-56A	Downtown Valley Springs Complete Streets – Myrtle Street <sup>11</sup>	Myrtle Street from California Street to Sequia Avenue	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.13	\$101,270	
R-57	Downtown Valley Springs Complete Streets – Rose Street <sup>1</sup>	Rose Street from Daphne Street to Sequioa Avenue	Bike Route	0.06	\$122,520	High
			Sidewalks on both sides of road	0.12		
R-57A	Downtown Valley Springs Complete Streets – Rose Street <sup>1</sup>	Rose Street from Daphne Street to Sequioa Avenue	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.06	\$46,740	
R-58	Downtown Valley Springs Complete Streets – California Street <sup>1</sup>	California Street from Daphne Street to Chestnut Street	Bike Route	0.20	\$208,400	High
			Sidewalk on west side of road	0.20		
R-58A	Downtown Valley Springs Complete Streets – California Street <sup>1</sup>	California Street from Daphne Street to Chestnut Street	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.20	\$155,800	

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-59	Downtown Valley Springs Complete Streets – Daphne Street <sup>1</sup>	Daphne Street from Pine Street to Rose/California Street	Sidewalks on both sides of road (maintain existing bike lane)	0.72	\$720,000	High
R-60	Downtown Valley Springs Complete Streets – Daphne Street <sup>1</sup>	Daphne Street from Pine Street to Existing Class I	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.11	\$85,690	High
R-61	Downtown Valley Springs Complete Streets – Sequoia Avenue <sup>1</sup>	Sequoia Avenue from Laurel Street to Daphne Street	Bike Route	0.34	\$694,280	High
			Sidewalk on both sides of road	0.68		
R-62	Downtown Valley Springs Complete Streets – Sequoia Avenue <sup>1</sup>	Sequoia Avenue from Laurel Street to Pine Street	Existing colored paved shoulder on northwest side of road intended for bicycle/pedestrian use however, no signage or striping was included in project. Update to include bike/ped route signage and striping	0.14	\$5,880	High
R-63	Downtown Valley Springs Complete Streets – Valley Oaks Shopping Center	Valley Oaks Shopping Center Access Drive Aisle between Burger King/Taco Bell and SR 12	Sidewalks on both sides of road	0.06	\$60,000	High
R-64	Valley Springs to EBMUD Local Access Bike/Ped Recreational Trail Route	Paloma Road from Sequoia Avenue to Watertown Road; Watertown Road from Paloma Road to Camp Seco Equestrian Trailhead	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	2.78	\$4,659,280	

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
<b>North Central Subregion Projects – Mokelumne Hill/San Andreas Area</b>						
R-65	Mokelumne Hill Recreational Trail Loop	Main Street from SR 49 to Center Street	Bike Route	0.21	\$218,820	High
			Sidewalk on east side of road	0.21		
R-66	Mokelumne Hill Recreational Trail Loop	E Center Street from Main Street to Zumwalt Street; Zumwalt Street from E Center Street to Lafayette Street; Lafayette Street from Zumwalt Street to SR 26; Maretta Street from Lafayette Street to Church Street; Church Street from SR 26 to Main Street	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.93	\$724,470	High
R-66A	Mokelumne Hill Recreational Trail Loop	E Center Street from Main Street to Zumwalt Street; Zumwalt Street from E Center Street to Lafayette Street; Lafayette Street from Zumwalt Street to SR 26; Maretta Street from Lafayette Street to Church Street; Church Street from SR 26 to Main Street	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	0.93	\$1,558,680	
R-67	Mokelumne Hill Recreational Trail Loop	W Center Street from SR 49 to Main Street	Bike Route	0.93	\$39,060	
R-68	Russell Road	Russell Road from SR 49 to Sunset St	Sidewalk on east side of road from SR 49 to Market St	0.07	\$70,000	High

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
			<b>Shared-Use Path/Sidepath on one side of road<sup>1</sup> from Market St to Sunset St</b>	<b>0.40</b>	<b>\$311,600</b>	
R-69	Main Street	Main Street from SR 49 to Pixley Avenue	Bike Route	0.17	\$7,140	
R-70	N California Street <sup>7</sup>	N California Street from Lewis Avenue to Main Street (via parking lot)	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.15	\$116,850	
<b>R-71</b>	<b>Pope Street<sup>7</sup></b>	<b>Pope Street from California Street to Mountain Ranch Road</b>	<b>Shared-Use Path/Sidepath on one side of road<sup>4</sup></b>	<b>0.67</b>	<b>\$521,930</b>	<b>High</b>
R-72	Lewis Avenue <sup>7</sup>	Lewis Avenue from N California Street to Pope Street	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.40	\$311,600	
R-73	Treat Avenue <sup>7</sup>	Treat Avenue from Pope Street to SR 49	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.21	\$163,590	High
R-74	Court Street <sup>7</sup>	Court Street from SR 49 to existing sidewalk	Sidewalk gap fill on south/east side of road	0.05	\$50,000	High
R-75	Mountain Ranch Road	Mountain Ranch Road from SR 49 to Government Center Drive	Bike Lanes	0.57	\$1,192,860	High
			Sidewalk gap fill on both sides of road	0.51		
R-76	Mountain Ranch Road	Mountain Ranch Road from Government Center Drive to Oak Park Drive	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.35	\$272,650	High

<sup>7</sup> Consistent with San Andreas Pope Street and Safe Routes to School Gap Fill Plan (CCOG, Green DOT; August 2020).

**Table E-1A – Roadway Segment Project List**

<b>Project #</b>	<b>Project Name</b>	<b>Location</b>	<b>Recommendation</b>	<b>Length</b>	<b>Cost</b>	<b>Priority</b>
R-77	Mountain Ranch Road	Mountain Ranch Road from Oak Park Drive to Sheep Ranch Road	Buffered Paved Shoulders with Bike Route Signage	9.93	\$16,861,140	
R-78	Gold Hunter Road	Gold Hunter Road from Mountain Ranch Road to Forest Hill Drive	Shared-Use Path/Sidepath on one side of road	0.09	\$70,110	
R-79	Government Center Recreational Trail Extension	Government Center Drive from Mountain Ranch Road to existing sidewalk	Sidewalk gap fill on both sides of road	0.24	\$317,900	High
		Park Road from Mountain Ranch Road to Alex Quinones Park (existing trail network)	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.10		
R-80	Calaveritas Road	Calaveritas Road from Mountain Ranch Road to Edgewood	Shared-Use Path/Sidepath on one side of road	0.51	\$397,290	
R-80A	Calaveritas Road	Calaveritas Road from Mountain Ranch Road to Edgewood	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.51	\$854,760	
R-81	San Andreas to Angels Camp Recreational Bike Route	Calaveritas Road from Edgewood to Dogtown Road; Dogtown Road from Calaveritas Road to SR 49 in Angels Camp	Buffered Paved Shoulders with Bike Route Signage	14.42	\$24,485,160	
<b>Northeast Subregion Projects – West Point/Railroad Flat Area</b>						
R-82	Railroad Flat Road	Railroad Flat Road from Sheep Ranch Road to SR 26	Buffered Paved Shoulders with Bike Route Signage	14.66	\$24,892,680	
R-83	Sandy Gulch	Sandy Gulch Road to Associated Office Road between SR 26 and Railroad Flat Road	Buffered Paved Shoulders with Bike Route Signage	0.48	\$815,040	

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-84	Summit Level Recreational Bike Route	Summit Level Road from N Railroad Flat Road to Red Rock Road	Buffered Paved Shoulders with Bike Route Signage	2.71	\$4,601,580	
<b>Southwest Subregion Projects – Angels Camp/Copperopolis Area</b>						
R-85	Copperopolis Recreational Trail	Main Street from SR 4 to Reeds Turnpike Road; Reeds Turnpike Road from Main Street to Town Square Road; Little John Road from Town Square Road to Copper Cove Dr; Copper Cove Dr from O'Byrnes Ferry Rd to Little John Road; O'Byrnes Ferry Rd from Pheasant Run Dr to Reeds Turnpike	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	10.89	\$8,483,310	High
R-85A	Copperopolis Recreational Trail	Main Street from SR 4 to Reeds Turnpike Road; Reeds Turnpike Road from Main Street to Town Square Road; Little John Road from Town Square Road to Copper Cove Dr; Copper Cove Dr from O'Byrnes Ferry Rd to Little John Road; O'Byrnes Ferry Rd from Pheasant Run Dr to Reeds Turnpike	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	10.89	\$18,251,640	
R-86	Little John Rd Lake Connection	Little John Road from Copper Cove to Kiva Drive; Kiva Drive from Little John Road to Kiva Recreation Area	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	2.99	\$2,329,210	

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-86A	Little John Rd Lake Connection	Little John Road from Copper Cove to Kiva Drive; Kiva Drive from Little John Road to Kiva Recreation Area	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	2.99	\$5,011,240	
R-87	O’Byrnes Ferry Road	O’Byrnes Ferry Road from Pheasant Run Dr/Cosmic Ct to County Line	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	3.90	\$6,536,400	
R-88	Connor Estates Drive	Connor Estates Drive from O’Byrnes Ferry Road to Shoreline Drive	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.43	\$720,680	
R-89	Cheyenne Road	Cheyenne Road from Copper Cove Drive to Beaver Road	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	2.12	\$3,553,120	
R-90	Beaver Road Connection to Town Square	Beaver Road from Cheyenne Road to Olive Ranch Road via future planned extension; Olive Ranch Road from Beaver Road to Town Square	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.83	\$646,570	
R-91	Foundry Lane Extension <sup>8</sup>	Foundry Lane from Stockton Road, crossing SR 4, to SR 49 via planned extension	Bike Lanes	0.94	\$3,006,120	High
			Sidewalks on both sides of road	1.88		
R-92	Stockton Road	Stockton Road from Angel Oaks/Greenhorn Creek Drive to SR 49 near Shopping Center	Bike Lanes	0.54	\$1,726,920	High
			Sidewalks on both sides of road	1.08		
R-93	Demarest Street		Bike Lanes	0.28	\$655,440	

<sup>8</sup> Angels Camp State Route 4 and State Route 49 Gateway and Corridor Study (CCOG, Caltrans, City of Angels; January 2016).

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
		Demarest Street from Stockton Road to SR 49	Sidewalks on both sides of road along segment where none exist	0.32		
R-94	San Joaquin Avenue	San Joaquin Avenue from Demarest Street to Stanislaus Avenue (through Big Horn MHP)	Bike Lanes	0.34	\$997,320	High
			Sidewalks on both sides of road	0.59		
R-95	Stanislaus Avenue	Stanislaus Avenue from SR 49 to San Joaquin Avenue/Pacific Street/Mark Twain Elementary	Bike Lanes (maintain existing sidewalks existing on one side of road)	0.13	\$155,740	
R-96	Stanislaus Avenue	Stanislaus Avenue from Pacific Street to Gold Cliff Road	Bike Lanes	0.11	\$241,780	
			Sidewalk on west side of road	0.11		
R-97	South Angels Camp Recreational Trail Connector	Gold Cliff Road from Stanislaus Avenue to Tuolumne Avenue; Tuolumne Avenue from Gold Cliff Road to Angel Oaks/Greenhorn Creek Road via future extension of Sierra Avenue; Angel Oaks/Greenhorn Creek Road from Sierra Avenue to Finnegan Court; Moxie Way from Gold Cliff Road to Angel Oaks/Greenhorn Creek	Shared-Use Path/Sidepath on one side of road – desire to be small electric vehicle accessible to provide access from Greenhorn Creek to SR 49/Historic Downtown	1.7	\$1,356,220	High
		Gold Cliff Road from Tuolumne Avenue to Finnegan Lane	Bike Route	0.76		
R-98			Bike Route to Finnegan Court	0.67	\$269,630	High

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
	Angels Creek Trail Phase I <sup>9</sup>	Finnegan Lane from SR 49 to Finnegan Court to Angel Oaks/Greenhorn Creek Road	Shared-Use Path/Sidepath to Greenhorn Creek subdivision; desire to be small electric vehicle accessible to provide access from Greenhorn Creek to SR 49/Historical Downtown	0.31		
R-99	Angels Creek Trail Phase II <sup>9</sup>	Vallecito Road from Kurt Drive/Depot Road to SR 49/Finnegan Lane	Shared-Use Path with pedestrian bridge	0.53	\$412,870	High
R-100	Angels Creek Trail Phase III <sup>9</sup>	Trail connection from Finnegan Lane to City Wastewater Treatment Facility	Shared-Use Path with pedestrian bridge(s) – final alignment of trail and crossings to be evaluated during design phase	2.40	\$1,869,600	High
R-101	Angels Creek Trail Phase IV <sup>9</sup>	Trail connection from City Wastewater Treatment Facility to New Melones	Shared-Use Path	1.96	\$1,526,840	
R-102	Utica Park Bike Connection to Angels Creek Trail	Utica Lane from Utica Park to Bush Street; Bush Street from Utica Lane to Finnegan Lane	Bike Route	0.48	\$20,160	High
R-103	Utica Park Trail Connection to SR 49	Trail connection from Mark Twain Road near SR 49 to northern Utica Park near north Bush Street.	Shared-Use Path	0.17	\$132,430	

<sup>9</sup> Angels Creek Master Plan and Trail (City of Angels; January 2012).

**Table E-1A – Roadway Segment Project List**

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-104	Railroad Fairground Trail Connection <sup>10</sup>	Trail connection from SR 4/Vallecito Road to Calaveras County Fairgrounds via Depot Road Moose Trail Road, and existing railroad easement	Shared-Use Path	2.02	\$1,573,580	
R-105	Murphys Grade Road	Murphys Grade Road from SR 49 to Gardner Lane	Bike Route	0.23	\$9,660	
R-106	Murphys Grade Road	Murphys Grade Road from Gardner Lane to Main Street (Murphys) OR alternative route along French Gulch	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	6.15	\$10,307,400	
<b>Central Subregion Projects – Murphys Area</b>						
R-107	<b>Pennsylvania Gulch Road</b>	<b>Pennsylvania Gulch Road SR 4 to Michelson Elementary School</b>	<b>Shared-Use Path/Sidepath on south side of road</b>	<b>0.09</b>	<b>\$70,110</b>	<b>High</b>
R-108	Pennsylvania Gulch Road	Pennsylvania Gulch Road from Michelson Elementary School to Wingdam Road	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	1.05	\$1,759,800	
R-109	<b>Main Street</b>	<b>Main Street from SR 4 to Murphys Grade Road</b>	<b>Bike Lane</b>	<b>0.71</b>	<b>\$2,270,580</b>	<b>High</b>
			<b>Sidewalks on both sides of road</b>	<b>1.42</b>		
R-109A	<b>Main Street</b>	<b>Main Street from SR 4 to Murphys Grade Road</b>	<b>Bike Route</b>	<b>0.71</b>	<b>\$1,449,820</b>	
			<b>Sidewalks on both sides of road</b>	<b>1.42</b>		

<sup>10</sup> City of Angels Camp General Plan 2020 Appendix 3D. Resolution 24-28 (City of Angels; April 2024 Update)

Table E-1A – Roadway Segment Project List

Project #	Project Name	Location	Recommendation	Length	Cost	Priority
R-110	Ironstone Recreational Trail	S Algiers Road from Main Street to 6 Mile Road; Scott Street from Main Street to 6 Mile Road; 6 Mile Road from S Algiers Road/Scott Street to Ironstone	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	1.43	\$1,113,970	High
R-110A	Ironstone Recreational Trail	S Algiers Road from Main Street to 6 Mile Road; Scott Street from Main Street to 6 Mile Road; 6 Mile Road from S Algiers Road/Scott Street to Ironstone	Paved Shoulder with Designated Bike/Ped Recreational Route Signage	1.43	\$2,396,680	
R-111	6 Mile Road	6 Mile Road from Ironstone to SR 4	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	5.52	\$4,300,080	
R-112	Big Trees Road <sup>3</sup>	Big Trees Road from SR 4 to Main Street	Bike Lane	0.24	\$657,520	High
			Sidewalks on both sides of road	0.37		
R-112A	Big Trees Road <sup>3</sup>	Big Trees Road from SR 4 to Main Street	Bike Route	0.24	\$380,080	
			Sidewalks on both sides of road	0.37		
R-113	Jones Street	Scott Street to SR 4	Shared-use path/Sidepath on north side of road	0.17	\$132,430	
<b>Eastern Subregion Projects – Arnold/Avery Area</b>						
R-114	Sheep Ranch Road ARTA Connection	Sheep Ranch Road from Valley View Drive to SR 4 in Avery	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	1.08	\$1,810,080	

**Table E-1A – Roadway Segment Project List**

<b>Project #</b>	<b>Project Name</b>	<b>Location</b>	<b>Recommendation</b>	<b>Length</b>	<b>Cost</b>	<b>Priority</b>
R-115	Valley View Drive ARTA Connection	Valley View Drive from ARTA Cougar Rock Loop Trailhead to SR 4 in Arnold	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	1.17	\$911,430	
R-116	Meadowmont Trail	New connection from Meadowmont Way to Pine Drive through old golf course	Shared-Use Path	0.97	\$755,630	
R-117	Pine Drive ARTA Connection	Pine Drive from SR 4 to Pine Drive ARTA Trail Access	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.22	\$368,720	
R-118	Oak Circle ARTA Connection	Oak Circle from SR 4 to Oak Circle ARTA Trail Access	Shared-Use Path/Sidepath on one side of road <sup>4</sup>	0.27	\$210,330	
<b>R-119</b>	<b>Blagen Road ARTA Connection</b>	<b>Blagen Road from SR 4 to Forest Route 7N08</b>	<b>Paved Shoulders with Designated Bike/Ped Recreational Route Signage</b>	<b>0.95</b>	<b>\$1,592,200</b>	<b>High</b>
R-120	Dunbar Road	Dunbar Road from Blagen Road to Dunbar Road ARTA Trailhead	Paved Shoulders with Designated Bike/Ped Recreational Route Signage	0.24	\$402,240	
R-121	Upper Moran Road	Upper Moran Road from Moran Road to Big Trees Trail Entrance; Moran Road from SR 4 to Upper Moran Road	Bike Route	1.09	\$45,780	
Source: Fehr & Peers, 2025						

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
<b>Western Subregion Projects – Burson/Wallace and Rancho Calaveras/Valley Springs Area</b>				
P-1	SR 26/ Olive Orchard Rd/ Garner Pl	Marked/High-VIS Crosswalk on south leg and across SR 26		\$12,000
P-2	Driver Rd/ Hagen Ct	Marked/High-VIS Crosswalk on all legs		\$24,000
P-3	SR 26/ Baldwin Ln	Marked/High-VIS Crosswalk north leg and RRFB across SR 26		\$71,000
P-4	Baldwin St/Treosti Pl (north and south)	Marked/High-VIS Crosswalks on side streets and across Baldwin Ln (as necessary pending location of shared-use path)		\$18,000
P-5	Baldwin St/Hartvickson Ln	Marked/High-VIS Crosswalks on side streets and across Baldwin Ln (as necessary pending location of shared-use path)		\$18,000
P-6	Baldwin St/Bergsma Ln	Marked/High-VIS Crosswalks on side streets and across Baldwin Ln (as necessary pending location of shared-use path)		\$18,000
P-7	Baldwin St/Garner Pl	Marked/High-VIS Crosswalks on side streets and across Baldwin Ln (as necessary pending location of shared-use path)		\$18,000
P-8	Baldwin St/Milton Rd	Marked/High-VIS Crosswalks on side streets and across Baldwin Ln (as necessary pending location of shared-use path)		\$18,000
P-9	SR 26/ Silver Rapids Rd	Marked/High-VIS Crosswalk on side streets and RRFB across SR 26		\$77,000
<b>P-10</b>	<b>SR 26/ Vista Del Lago Dr</b>	<b>Marked/High-VIS Crosswalk on west and south leg</b>	<b>High</b>	<b>\$12,000</b>
<b>P-11</b>	<b>Vista Del Lago Dr/Hartvickson Ln</b>	<b>Marked/High-VIS Crosswalks on side streets and across Vista Del Lago Ln</b>	<b>High</b>	<b>\$18,000</b>
P-12	Vista Del Lago Dr/Greenbriar Rd (east and west)	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-13	Vista Del Lago Dr/Grouse Dr	Marked/High-VIS Crosswalks on side streets and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000

**Table E-2A – Intersection Project List**

Project #	Project Location	Recommendation	Priority	Cost
P-14	Vista Del Lago Dr/La Contenta Dr	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-15	Vista Del Lago Dr/Huckleberry Ln	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-16	Vista Del Lago Dr/Silver Rd (east and west)	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-17	Vista Del Lago Dr/Shadow Ln	Marked/High-VIS Crosswalks on side streets and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-18	Vista Del Lago Dr/Robin Rd	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-19	Vista Del Lago Dr/Paradise Peak Rd	Marked/High-VIS Crosswalks on side street and across Vista Del Lago Ln (as necessary pending location of shared-use path)		\$18,000
P-20	SR 26/ Quail Oaks Rd	Marked/High-VIS Crosswalk on side streets and across SR 26		\$18,000
P-21	SR 26/ Saint Andrews Rd	Marked/High-VIS Crosswalk on south leg		\$6,000
P-22	SR 26/ Gold Creek Estates Access	Marked/High-VIS Crosswalk on south leg		\$6,000
P-23	Hogan Dam Rd South of Harper Ln	Marked/High-VIS Crosswalk Midblock		\$6,000
<b>P-24</b>	<b>SR 26/ Mangili Rd/ Hogan Dam Rd (south)</b>	<b>RRFB across SR 26; Marked/High-VIS Crosswalk on side streets</b>	<b>High</b>	<b>\$77,000</b>
<b>P-25</b>	<b>SR 26/ Hogan Dam Rd (north)</b>	<b>Marked/High-VIS Crosswalk on south leg</b>	<b>High</b>	<b>\$6,000</b>
P-26	SR 26/ Nove Wy <sup>11</sup>	Marked/High-VIS Crosswalk on south leg (Nove Wy)		\$6,000
P-27	SR 26/ Jean St <sup>12</sup>	Marked/High-VIS Crosswalk on south leg (Jean St)		\$6,000

<sup>11</sup> Valley Springs Town Center Connectivity Plan (CCOG, GHD; April 2020) identifies improvements in this area. Recommendations differ slightly in some locations due to pedestrian desire lines.

<sup>12</sup> Valley Springs Town Center Connectivity Plan (CCOG, GHD; April 2020) identifies a RRFB at Nove Way. Given location of existing businesses, pedestrian desire lines, and current crossing behavior, a crossing farther north providing access between Senders/Mar-Val is recommended as this is currently where crossings occur. However, further evaluation is needed given proximity to SR 12/SR 26 intersection; traffic impacts of a PHB have not been analyzed.

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
<b>P-28</b>	<b>SR 26 between SR 12 and Jean St<sup>12</sup></b>	<b>Pedestrian Hybrid Beacon (PHB)</b>	<b>High</b>	<b>\$236,000</b>
P-29	SR 12/ Pine St <sup>11</sup>	Curb Extension/Bulb-Out with Marked/High-VIS Crosswalk on north leg and across SR 12		\$94,000
P-30	SR 12/ Cedar St <sup>11</sup>	Marked/High-VIS Crosswalk on north leg and across SR 12		\$12,000
P-31	SR 12/ Laurel St <sup>11</sup>	Upgrade to High-VIS Crosswalk on all legs		\$24,000
P-32	Chestnut St/ California St <sup>11</sup>	Marked/High-VIS Crosswalk on East Leg		\$6,000
P-33	W Daphne St/ Cedar St <sup>11</sup>	Marked/High-VIS Crosswalk on East and West Leg		\$12,000
P-34	Daphne St/ Laurel St <sup>11</sup>	Marked/High-VIS Crosswalk on East and West Leg		\$12,000
P-35	Daphne St/ Chestnut St <sup>11</sup>	Marked/High-VIS Crosswalk on East, West, and South Leg		\$18,000
P-36	Daphne St/ Myrtle St <sup>11</sup>	Marked/High-VIS Crosswalk on all legs		\$24,000
P-37	Daphne St/ Rose St <sup>11</sup>	Marked/High-VIS Crosswalk on North, South, and East Leg		\$18,000
P-38	Sequoia Ave/ Cedar St <sup>11</sup>	Marked/High-VIS Crosswalk on all legs		\$18,000
P-39	Sequoia Ave/ Laurel St <sup>11</sup>	Marked/High-VIS Crosswalk on all legs		\$24,000
P-40	Sequoia Ave/ Chestnut St <sup>11</sup>	Marked/High-VIS Crosswalk on all legs		\$24,000
P-41	Sequoia Ave/ Myrtle St <sup>11</sup>	Marked/High-VIS Crosswalk on all legs		\$24,000
<b>P-42</b>	<b>SR 12/ Taco Bell/Burger King Dwy</b>	<b>Curb Extension/Bulb-Out with Marked/High-Vis Crosswalks on side street and across SR 12 – Install with installation of traffic signal</b>	<b>High</b>	<b>\$100,000</b>
P-43	SR 12/ Trailer Park	Marked/High-VIS Crosswalk on north leg		\$6,000
P-44	SR 12/ Lime Creek Rd	Marked/High-VIS Crosswalk on south leg and across SR 12		\$12,000
P-45	SR 12/Southworth Rd	Marked/High-VIS Crosswalks on south leg		\$6,000
P-46	Southworth Rd/Ospital Road (east and west)	Marked/High-VIS Crosswalk on side streets and across road		\$18,000
P-47	Southworth Road/Pettinger Road	Marked/High-VIS Crosswalk on north and west leg		\$12,000
P-48	SR 12/Pettinger Road	Marked/High-VIS Crosswalk on south leg		\$6,000
<b>North Central Subregion Projects – Mokelumne Hill/San Andreas Area</b>				
P-49	SR 49/Pickle Patch Drive Aisle	Marked/High-VIS Crosswalk across SR 49		\$6,000

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-50	SR 49/ Gold Oak Rd	Marked/High-VIS Crosswalk on north leg and across SR 49		\$12,000
P-51	SR 49/ Russell Rd <sup>13</sup>	Marked/High-VIS Crosswalk on south leg and bulb-out for existing crossing on SR 49		\$88,000
<b>P-52</b>	<b>SR 49/ High School St<sup>13</sup></b>	<b>Marked/High-VIS Crosswalk on north leg and across SR 49 with bulb-out for SR 49 crossing</b>	<b>High</b>	<b>\$4,000</b>
<b>P-53</b>	<b>SR 49/ Court Street/ Adams Ave<sup>13</sup></b>	<b>Marked/High-VIS Crosswalk on side streets and across SR 49 with bulb-out for SR 49 crossing</b>	<b>High</b>	<b>\$100,000</b>
P-54	SR 49/ Main St <sup>13</sup>	Marked/High-VIS Crosswalk on side streets with bulb-out and pedestrian refuge island for existing SR 49 crossing		\$119,000
<b>P-55</b>	<b>SR 49/ Treat Ave<sup>13</sup></b>	<b>Marked/High-VIS Crosswalk on SR 49; upgrade existing side street crosswalk to High-Vis</b>	<b>High</b>	<b>\$12,000</b>
<b>P-56</b>	<b>SR 49/ Midblock Crossing</b>	<b>Marked/High-VIS Crosswalk on SR 49 west of Fahily Circle</b>	<b>High</b>	<b>\$6,000</b>
<b>P-57</b>	<b>SR 49/ Mountain Ranch Rd</b>	<b>Marked/High-VIS Crosswalk across SR 49 with bulb-outs and on side street with pedestrian refuge island</b>	<b>High</b>	<b>\$119,000</b>
P-58	Main St/ Pope St	Marked/High-VIS Crosswalk on east leg		\$6,000
P-59	Main St/ Lewis Ave	Marked/High-VIS Crosswalk on east leg		\$6,000
P-60	N California St/ Pope St (north) <sup>14</sup>	Marked/High-VIS Crosswalk on east leg and across California St		\$12,000
P-61	N California St/ Pope St (south)	Marked/High-VIS Crosswalk on west leg		\$6,000
P-62	Foothill Ct/ Lewis Ave	Marked/High-VIS Crosswalk on north leg		\$6,000
P-63	L C Peterson Dr/ Roberts Ave/ Lewis Ave <sup>14</sup>	Marked/High-VIS Crosswalk on side streets and across Lewis Ave		\$18,000
P-64	Roberts Ave/ Treat Ave/ Pope St <sup>14</sup>	Marked/High-VIS Crosswalk on side streets and across Pope Street		\$18,000
P-65	Treat Ave between Avenue A and Pope St (Turner Park Entrance) <sup>14</sup>	Midblock Marked/High-VIS Crosswalk		\$6,000

<sup>13</sup> Consistent with San Andreas SR 49 Commercial Gateway & Corridor Study (CCOG, GHD/Omni-Means; October 2017).

<sup>14</sup> Consistent with San Andreas Pope Street and Safe Routes to School Gap Fill Plan (CCOG, Green DOT; August 2020).

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-66	Pope St/ Lewis Ave <sup>14</sup>	Marked/High-VIS Crosswalk on north leg and across Pope St		\$12,000
P-67	Mountain Ranch Rd/ Government Center Rd	Marked/High-VIS Crosswalk on north and south legs	High	\$12,000
P-68	Mountain Ranch Rd/ Government Center Dr	Marked/High-VIS Crosswalk on north leg and across Mountain Ranch Rd	High	\$12,000
P-69	Mountain Ranch Rd/ Gold Hunter Road	Marked/High-VIS Crosswalk across Mountain Ranch Rd		\$6,000
P-70	Gold Hunter Rd/ Wimbledom Dr	Marked/High-VIS Crosswalk on north leg		\$6,000
P-71	Gold Hunter Rd/ Forest Hill Rd	Marked/High-VIS Crosswalk on north leg and west leg		\$12,000
P-72	SR 26/ SR 49	Marked/High-VIS Crosswalk on north and east Leg		\$12,000
P-73	SR 49/ Main St	Marked/High-VIS Crosswalk on east leg		\$6,000
P-74	SR 49/ Campo Seco Rd	Marked/High-VIS Crosswalk on side streets and across SR 49		\$18,000
P-75	SR 49 North of Gold Rush Drive	Midblock Marked/High-VIS Crosswalk		\$6,000
P-76	Main St/ Church St	Marked/High-VIS Crosswalk on east leg		\$6,000
P-77	SR 26/ Lafayette St	Marked/High-VIS Crosswalk on north leg		\$6,000
<b>Northeast Subregion Projects – West Point/Railroad Flat Area</b>				
P-78	Railroad Flat Rd/Blizzard Mine Rd	Marked/High-VIS Crosswalk on south leg		\$6,000
<b>Southwest Subregion Projects – Angels Camp/Copperopolis Area</b>				
P-79	Egan St/ Reeds Turnpike	Marked/High-VIS Crosswalk on south leg		\$6,000
P-80	Little John Rd/ Copper Cove Dr	Marked/High-VIS Crosswalk on east leg		\$6,000
P-81	O'byrnes Ferry Rd/ Copper Cove Ct/ Copper Cove Dr	Marked/High-VIS Crosswalk on west leg and across O'Byrnes Ferry		\$12,000
P-82	O'byrnes Ferry Rd/ Copper Meadow Dr/ Spangler Ln	Marked/High-VIS Crosswalk on side streets with RRFB across O'Byrnes Ferry	High	\$77,000
P-83	O'byrnes Ferry Rd/ Pheasant Run Dr/ Cosmic Ct	Marked/High-VIS Crosswalk on side streets and across O'Byrnes Ferry		\$18,000
P-84	O'byrnes Ferry Rd/Reeds Turnpike	Marked/High-VIS Crosswalk on west leg and across O'Byrnes Ferry		\$12,000

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-85	SR 49/ Copello Dr <sup>15</sup>	Marked/High-VIS Crosswalk on south leg and across SR 49		\$12,000
P-86	SR 49 / Future Foundry Lane Extension	Marked/High-VIS Crosswalk on all legs		\$24,000
P-87	SR 49/ Tractor Supply Drive Aisles <sup>15</sup>	Marked/High-VIS Crosswalk on south legs		\$12,000
P-88	SR 49/ Middleton's <sup>15</sup>	Pedestrian Hybrid Beacon across SR 49 providing access between Tractor Supply and Middleton's	High	\$236,000
P-89	SR 49/ N Baker St <sup>15</sup>	Marked/High-VIS Crosswalk on south leg		\$6,000
P-90	SR 49/ Francis St <sup>15</sup>	Marked/High-VIS Crosswalk on south leg and across SR 49		\$12,000
P-91	SR 49/ Clifton Ln <sup>15</sup>	Marked/High-VIS Crosswalk on north leg		\$6,000
P-92	SR 49/ CVS Shopping Center Driveway <sup>15</sup>	Marked/High-VIS Crosswalk on south leg		\$6,000
P-93	SR 49/ Dogtown Rd <sup>15</sup>	Marked/High-VIS Crosswalk on side streets and across SR 49 (SR 49 crossing to be provided west of intersection)		\$18,000
P-94	SR 49/ SR 49	Marked/High-VIS Crosswalk on west leg (provide crossings on all legs if roundabout is constructed)		\$6,000
<b>P-95</b>	<b>SR 49/ Monte Verda St</b>	<b>Marked/High-VIS Crosswalk on south leg; Pedestrian Hybrid Beacon (PHB) across SR 49</b>	<b>High</b>	<b>\$242,000</b>
<b>P-96</b>	<b>SR 49/ Stockton Rd</b>	<b>Marked/High-VIS Crosswalk on south leg</b>	<b>High</b>	<b>\$6,000</b>
P-97	Stockton Rd/ Angel Oaks/Greenhorn Creek Dr	Marked/High-VIS Crosswalk on all legs		\$24,000
P-98	Angel Oaks/Greenhorn Creek Rd/ Selkirk Ranch Rd	Marked/High-VIS Crosswalk on south leg		\$6,000
P-99	Angel Oaks/Greenhorn Creek Rd/ McCauley Ranch Rd	Marked/High-VIS Crosswalk on south leg		\$6,000
P-100	SR 49/ Lee St	Marked/High-VIS Crosswalk on north leg and RRFB across SR 49		\$71,000
<b>P-101</b>	<b>SR 49/ Mark Twain Rd</b>	<b>Marked/High-VIS Crosswalk across SR 49</b>	<b>High</b>	<b>\$6,000</b>

<sup>15</sup> Consistent with Angels Camp North Main Street Plan (CCOG. Caltrans, City of Angels, May 2020) or Angels Camp Main Street Plan Final Draft (CCOG, Caltrans, City of Angels; May 2017).

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-102	SR 49 at O'Reilly Auto Parts	Upgrade Existing Crosswalk to High-VIS Crosswalk		\$6,000
P-103	SR 49/ Bragg St	Marked/High-VIS Crosswalk on north leg		\$6,000
P-104	SR 49/ North Bret Harte Rd	Marked/High-VIS Crosswalk on north leg		\$6,000
P-105	SR 49/ South Bret Harte Rd	Marked/High-VIS Crosswalk on north leg		\$6,000
<b>P-106</b>	<b>SR 49/ Raspberry Ln<sup>15</sup></b>	<b>Marked/High-VIS Crosswalk on North Leg; Curb-Extension/Bulb-Outs for highway crossing</b>	<b>High</b>	<b>\$88,000</b>
<b>P-107</b>	<b>SR 49 between Raspberry Ln and Birds Way</b>	<b>Upgrade Existing Crosswalk to High-VIS Crosswalk (between Crusco's alley 1240 S. Main to 1239 S. Main)</b>	<b>High</b>	<b>\$6,000</b>
<b>P-108</b>	<b>SR 491/ Finnegan Ln/ Vallecito Road<sup>16</sup></b>	<b>Marked/High-VIS Crosswalk on North Leg; Curb-Extension/Bulb-Outs for Highway Crossing</b>	<b>High</b>	<b>\$88,000</b>
P-109	Vallecito Road/ Tryon Rd	Marked/High-VIS Crosswalk across SR 4		\$6,000
P-110	Vallecito Road/ Depot Rd	Marked/High-VIS Crosswalk across SR 4		\$6,000
P-111	Vallecito Road / Kurt Dr	Marked/High-VIS Crosswalk across SR 4		\$6,000
P-112	SR 49 between Centennial Rd and Big Bonanza Ln	Midblock Marked/High-VIS Crosswalk with construction of trail		\$6,000
<b>Central Subregion Projects – Murphys Area</b>				
P-113	Main St/ West Church St	Marked/High-VIS Crosswalk on north leg and across Main St		\$12,000
P-114	Main St/ Sheep Ranch Rd	Marked/High-VIS Crosswalk on north leg		\$6,000
P-115	Main St/ Algiers St	Upgrade Existing Crosswalks to High-VIS on all legs		\$24,000
P-116	Main St/ East Church St	Marked/High-VIS Crosswalk on north leg and across Main St		\$12,000
P-117	Main St/ Jones St	Marked/High-VIS Crosswalk on south leg		\$6,000
P-118	Jones St/ Scott St <sup>17</sup>	Marked/High-VIS Crosswalk on north leg		\$6,000

<sup>16</sup> Consistent with Angels Camp Main Street Plan Final Draft (CCOG, Caltrans, City of Angels; May 2017) and Angels Creek Master Plan and Trail (City of Angels; January 2012).

<sup>17</sup> Consistent with Murphys SR 4 Complete Streets Plan (CCOG, Placeworks; September 2019).

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-119	Main St/ Scott St/ Big Trees Rd <sup>17</sup>	<b>Marked/High-VIS Crosswalk on all legs (upgrade existing crosswalk on north leg)</b>	High	\$24,000
P-120	Big Trees Rd/Creekview <sup>17</sup>	Marked/High-VIS Crosswalk on north leg		\$6,000
P-121	<b>SR 4/ Jones St/ Lawrence St<sup>17</sup></b>	<b>Marked/High-VIS Crosswalk on side streets and across SR 4 with Pedestrian Refuge Island on west leg</b>	High	<b>\$43,000</b>
P-122	SR 4/ Ernest St	Marked/High-VIS Crosswalk on east leg		\$6,000
P-123	SR 4/ School St	Marked/High-VIS Crosswalk on west leg		\$6,000
P-124	SR 4/ Arden Ave	Marked/High-VIS Crosswalk on east leg		\$6,000
P-125	<b>SR 4/ Murphys Market Drive Aisles/ Pennsylvania Gulch Rd<sup>18</sup></b>	<b>Marked/High-VIS Crosswalk on east and west legs and upgrade existing RRFB on SR 4 to PHB</b>	High	<b>\$248,000</b>
P-126	<b>Pennsylvania Gulch Rd – Midblock Crossing</b>	<b>Upgrade existing crosswalk to RRFB</b>	High	<b>\$65,000</b>
<b>Eastern Subregion Projects – Arnold/Avery Area</b>				
P-127	<b>SR-4/ Cedar Ln/ Fir Dr</b>	<b>Marked/High-VIS Crosswalk on side streets and RRFB across SR 4</b>	High	<b>\$77,000</b>
P-128	<b>SR-4/ Meadowmont Way</b>	<b>Marked/High-VIS Crosswalk on west leg</b>	High	<b>\$6,000</b>
P-129	SR-4/ Country Club Dr	Marked/High-VIS Crosswalk on east leg and across SR 4		\$12,000
P-130	SR-4/ Applewood Ctr	Marked/High-VIS Crosswalk on across SR 4		\$6,000
P-131	SR-4/ Meadowview Rd	Marked/High-VIS Crosswalk on east leg and across SR 4		\$12,000
P-132	SR-4/ Pine Dr	Marked/High-VIS Crosswalk on west leg		\$6,000
P-133	SR-4/ South Oak Cir	Marked/High-VIS Crosswalk on west leg		\$6,000
P-134	SR-4/ North Oak Cir	Marked/High-VIS Crosswalk on west leg		\$6,000
P-135	SR-4/ Willow St	Marked/High-VIS Crosswalk on west leg and across SR 4		\$12,000
P-136	SR-4/ Manuel Rd	Marked/High-VIS Crosswalk on side streets and across SR 4		\$18,000
P-137	<b>SR-4/ Dunbar Rd/ Blagen Rd</b>	<b>Marked/High-VIS Crosswalk on west leg and pedestrian refuge island between Dunbar/Blagen and RRFB across SR 4</b>	High	<b>\$96,000</b>
P-138	SR-4/ Moran Rd	Marked/High-VIS Crosswalk on east leg		\$6,000

**Table E-2A – Intersection Project List**

<b>Project #</b>	<b>Project Location</b>	<b>Recommendation</b>	<b>Priority</b>	<b>Cost</b>
P-139	SR-4/ Boards Crossing Rd	Marked/High-VIS Crosswalk across SR 4		\$6,000
P-140	SR-4/ Old Highway-4	Marked/High-VIS Crosswalk across SR 4		\$6,000
P-141	White Pines Lake Crossing	Bridge crossing necessary to provide full loop bicycle/pedestrian trail around White Pines Lake		N/A
Notes: High priority crossing improvements are priority improvements that can be implemented in advance of broader roadway segment improvements. In some instances, pedestrian crossings are located on roadway segments deemed high priority but the crossing itself is not deemed high priority as the crossing treatment should occur if/when planned roadway facility treatments are constructed. Source: Fehr & Peers, 2025				

**Table E-3 – Potential Recreational Trail Improvement Projects List**

<b>Trail #</b>	<b>Description</b>	<b>Location</b>	<b>Type</b>
T-1	EBMUD Trail West Extension	Coast to Crest extension from existing trail to Camanche Parkway near Wallace	Unpaved Trail with new Local Trailhead (Equestrian)
T-2	EBMUD Trail East Extension	Coast to Crest extension from existing trail to SR 49 near Mokelumne Hill	Unpaved Trail (existing access road) with new Local Trailhead (Equestrian)
T-3	EBMUD Bike Pilot Project	Coast to Crest trail between Campo Seco Trailhead and Lake Camanche	Expand to allow bicycles
T-4	Hogan Trail Local Access Extension 1	Cameron Trail extension from existing trail to Hogan Dam Road 400' south of Harper Lane	Unpaved Trail
T-5	Hogan Trail Local Access Extension 2	Cameron Trail extension from existing trail to New Hogan Parkway/Hogan Dam Road intersection	Unpaved Trail
T-6	Hogan Marathon Loop Trail Extension	Extension of Hogan Lake trail network from Whiskey Creek Recreational Area to existing fire access road on east side of lake to around the north side of the lake connecting back to existing bike trail network near Oak Knoll Recreation Area	Unpaved Trail (Equestrian)
T-7	San Domingo Canyon Murphys to Arnold Connection	New connection between existing unsanctioned active use trails referred to as Sweetwater Hike and Forest Service Road 04N41	Unpaved Trail (Equestrian)
T-8	Forest Meadows ARTA Connection	New connection from SR 4 north of the SR 4/ Forest Meadows Drive intersection to existing ARTA trail	Unpaved Trail with new Local Trailhead
T-9	Fullen Road ARTA Connection	Fullen Road from south side of ARTA San Domingo Loop to ARTA San Domingo Side Trail to Cowboy Loop Trail	Unpaved Trail
T-10	Forest Route 7N08 ARTA Connection	Forest Route 7N08 from Blagen Road to Summit Level Road	Unpaved Trail
T-11	Cheyenne Way Connection to Big Trees	New connection from Cheyenne Way to Big Trees Fire Access Road for local access to Big Trees State Park	Unpaved Trail
T-12	Mira Vista Connection and El Rancho Dr Connection to Forest Service Roads	New connection from Mira Vista Drive and El Rancho Drive to Forest Service Roads 05N04X and 51527D, providing a recreational loop on the east side of the Blue Lake Springs/Lakeside Terrace subdivisions	Unpaved Trail
T-13	Summit Level Recreational Bike Route	Summit Level Road from Red Rock Road to Forest Route 7N08	Unpaved Trail
<b>Existing Unsanctioned Trails</b>			

T-14	Sweetwater Hike	Unsanctioned trail currently being used on BLM land based on community feedback. Feedback received to formalize trail and formalize access through public access easement given existing access is revocable.	Unpaved Trail
T-15	Murphys to Arnold Connector	Unsanctioned trail currently being used based on community feedback. Feedback received to formalize trail and expand it to provide full connection between existing ART trail and Sweetwater Hike trail in Murphys	Unpaved Trail
T-16	Unauthorized Trails in the Arnold Rim Trail Network	Various unsanctioned trails in the Arnold Rim Trail Network are currently being utilized but are not formally designated as trails. Refer to ART Map in Attachment 2 to review sanctioned versus unsanctioned/unauthorized trails. Formally integrating these trails into the sanctioned trail network would expand access to the ART and ensure continual access/use for recreational opportunities.	Unpaved Trail
Source: Fehr & Peers, 2025			

# Attachment E-2: Feasibility Analysis

Calaveras Council of Governments – Walk-Bike Calaveras

# ATRTP Feasibility Study DRAFT

**Prepared for:**

Calaveras Council of  
Governments

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## **1. Purpose of this Study**

This feasibility study was prepared to accompany the planning efforts performed by Fehr & Peers and governmental agency partners for the Active Transportation and Recreational Trails Plan (ATRTP) in Calaveras County. The ATRTP proposes an extensive network of pedestrian and bicycle paths and crosswalks throughout the County. This report provides a review of the feasibility and constructability of the projects that the planning team has determined to be “priority projects”. Typical cross sections and cost estimates (per mile) are provided herein, as well as a brief discussion of each priority project, along with major constraints or challenges that may impact them.

## **2. Potential Challenges**

WGA has extensive experience in planning and designing civil improvement projects, both municipal and private. While each project is unique and offers its own challenges and constraints, a general discussion is warranted to bring to light the various types of issues that may arise during the planning and design phase.

### **2.1 Right-of-Way Acquisition**

Most of the priority projects are situated within or adjacent to a pre-existing right-of-way or roadway easement. In many cases, the right-of-way will need to be widened in order to accommodate the proposed path. This can be a costly and time-consuming exercise and will need to be investigated for each individual project. This report does not detail specific right-of-way constraints.

### **2.2 Grading and Drainage**

The general topography of Calaveras’ foothills presents a challenge for many of the proposed projects. Many of our roadways are not currently wide enough to provide sufficient flat space for bike or pedestrian paths. Sharp grade transitions (cut and fill slopes) are often close to the edge of the paved travel way, requiring significant or major earthwork to create enough flat space for a path. Retaining walls can offer a viable solution in some cases, though these come with increased engineering and construction costs, along with potential safety concerns when placed close to a roadway edge.

Most of the drainage (stormwater runoff) facilities in the County are simple roadside swales (ditches) that are immediately adjacent and parallel to the roadway. Many of the proposed pathways will be competing for space with these swales. In some instances, there will be an opportunity to re-grade the swale or install the path outside of an existing swale. In other cases, the constraints of the project require that the swales be replaced with underground infrastructure (catch basins and pipe networks), which significantly increases project cost. Piping, along with the increased impervious area (asphalt and concrete), also tends to increase the stormwater runoff rate, which can have a negative impact on downstream areas, including erosion and sedimentation.

## **2.3 Creek Crossings**

All of the major creek crossings are identified in the individual discussions later in this report. The smaller seasonal drainages or ephemeral streams can typically be crossed by extending an existing culvert. Larger creek crossings present a much bigger challenge. Widening an existing bridge or box culvert, or installing a pedestrian bridge requires structural engineering and significantly increased construction costs. These types of projects typically involve California Department of Fish and Wildlife, and if the waterway is considered a “water of the US”, the Army Corps of Engineering will require a separate permit where work is required within the creek.

## **2.4 Utility Conflicts**

Many utilities are placed near the edge of a roadway, such as power poles, fire hydrants, etc. Objects and structures such as road signs, trees, landscaping, and retaining walls are also commonly within several feet of the roadway. While utilities can be moved and pathways can meander, these conflicts can create significant time delays and additional costs if not properly coordinated.

## **2.5 Other Considerations**

Additional challenges may include:

- Coordination with and encroachment permit acquisition from Caltrans
- The need to restripe traffic lines and markers
- Complex traffic control situations
- Conflicts with existing on-street parking areas
- Supplemental studies (CEQA, SWPPPs, traffic studies, biological surveys)

## **3. Green Construction Practices**

In addition to the stated goal of improving access throughout the County, planners of these projects have an opportunity to incorporate various ways to enhance the natural beauty of our traveled ways, and to minimize the environmental impacts of increased impervious surfaces.

Part of what makes Calaveras County uniquely beautiful are the mature oak and redwood trees. Not only do they offer shade to future path users but also act to reduce the rainwater runoff through evapotranspiration. Efforts should be made during the planning and design phase to preserve these trees by carefully defining the path alignments. Where there are currently no trees, or if a tree must be removed, new trees can be planted as part of the project. The preservation and addition of trees should be considered in the planning process prior to right-of-way acquisition in order to ensure that enough space is allocated to the proposed path. In many cases, a property owner will be more than willing to grant additional space in order to preserve a roadside tree.

Efforts should be made to preserve or reconstruct roadside drainage swales. Not only does this reduce infrastructure costs, but it also encourages vegetation growth and reduces the impact of stormwater runoff.

There may be areas encountered that are suitable for wetland habitat. These will be distinguished by certain types of plant and animal life. Avoiding these areas will not only serve to protect the habitat but will also streamline the permitting process.

To the extent that new landscaping is installed with these projects, it is generally advisable to select native plants that are naturally suited to the local climate. This will reduce the amount of water and maintenance needed to sustain the plants long term.

Concerning building materials, it is assumed that all the proposed paths will be paved with either asphalt or portland cement concrete. There are alternative materials such as permeable asphalt and concrete or pavers that will provide a marginal benefit in regard to stormwater runoff impacts. However, these are typically more costly to install and require a higher level of maintenance. In the areas of higher elevation, freeze/thaw cycles can cause premature deterioration. It is important to fully investigate the pros and cons of alternate materials during the design phase of the projects.

If the project proponents desire to utilize recycled materials, there is opportunity to select recycled asphalt pavement as an alternative to aggregate base. While this base layer material is not as strong as standard Class 2 aggregate, it is great for pedestrian/bike paths and areas of light vehicular traffic. Recycled fly ash may be substituted for a portion of the portland cement content in the concrete mix where sidewalks or concrete pathways are proposed. Both of these material substitutions are generally less costly than standard materials.

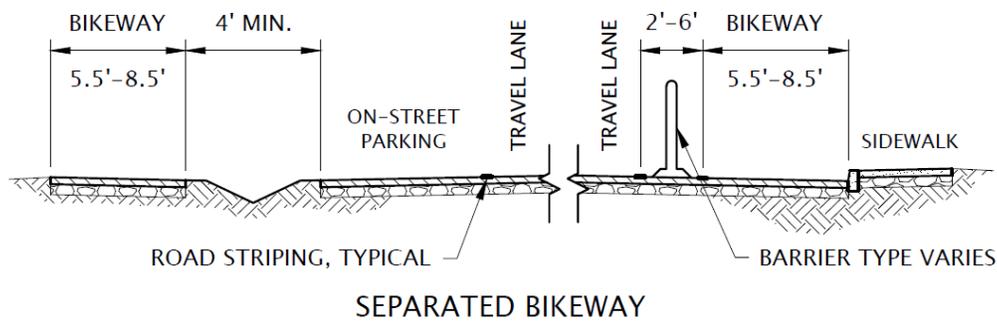
## 4. Facility Type Recommendations

This section presents the various types of paths that are identified in the Caltrans Highway Design Manual (HDM) and other publications by the Federal Highway Administration (FHWA), AASHTO, and other associations. These are presented in the same order as the Facility Type Recommendations document prepared by Fehr & Peers. That document contains more in-depth discussions about the situations in which each facility type should be considered.

The cross sections presented herein reflect only the general intent of each facility type. There is a wide range of flexibility available for each type to fit individual circumstances and constraints.

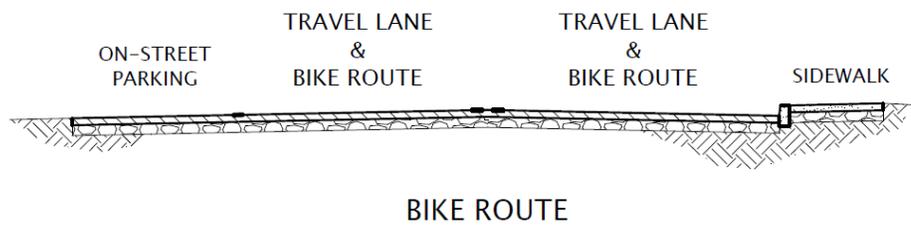
### 4.1 Separated Bikeway (HDM Class IV)

Designed for the exclusive use of bicycles and similar modes of transportation, this class provides a separation from the vehicular traveled way and from a pedestrian path such as a sidewalk. Separation can consist of an elevation change (e.g. curb), posts, barriers, or on-street parking. These facilities are most appropriate for areas of high traffic speed and/or volume and where sufficient right-of-way width is available. Unless noted otherwise, this type of path will be installed on both sides of the road.



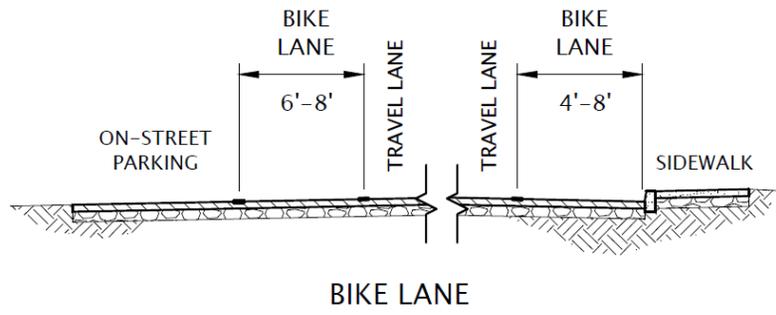
### 4.2 Bike Route (HDM Class III)

A bike route is a roadway typically shared with motor vehicles. This option is only suitable for relatively low traffic, low speed limit areas. Where constraints allow, it may be preferable to widen the roadway by a few feet to provide sufficient space for safe passing of vehicles.



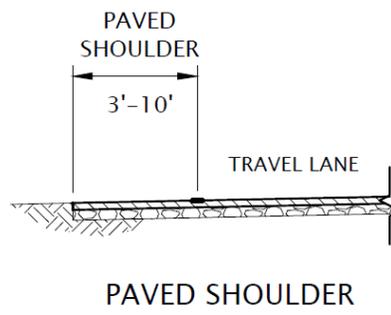
### 4.3 Bike Lane (HDM Class II)

Similar to a separated bikeway, a bike lane is meant exclusively for bicycles. However, a bike lane is delineated only by striping rather than physical separation. The intent is to provide for more predictable movements of both bicycles and motor vehicles. This type of facility is often most appropriate on busier town center streets where space may be constrained, speed limits are on the lower end, there are many intersections and driveways, where bicycle traffic is high, and where a high level of service (e.g., street sweeping) can be provided. Unless noted otherwise, this type of path will be installed on both sides of the road.



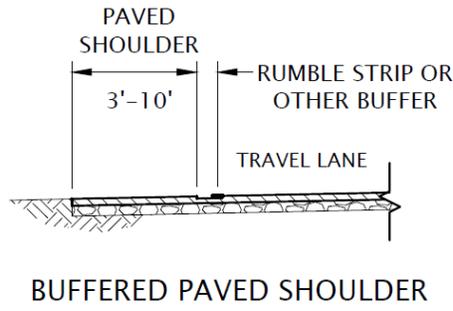
### 4.4 Paved Shoulder

Paved shoulders are a simple widening of a paved roadway with a painted stripe delineating the edge of the vehicular traffic lane. This facility provides a paved path outside the traffic lane that may or may not be shared by both bicycles and pedestrians. This simple and cost-effective solution is suitable for roadways without curbs and where right-of-way or physical constraints exist that preclude a separated pathway. Unless noted otherwise, this type of path will be installed on both sides of the road.



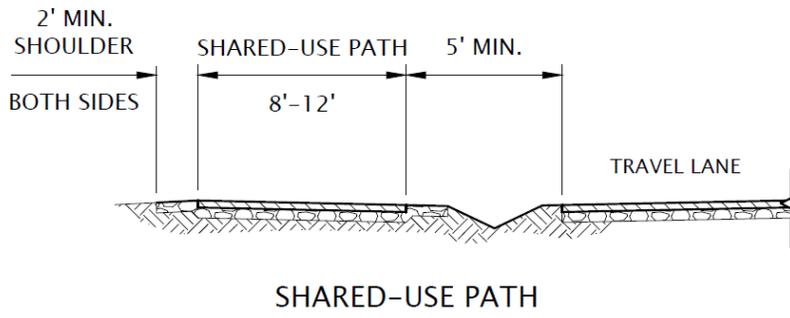
#### 4.5 Buffered Paved Shoulder

Similar to a paved shoulder, but with rumble strips and/or additional striping further delineating the edge of the vehicle traffic lane. Buffers should be considered wherever a paved shoulder is proposed, but is particularly important on high-speed, high-volume roads. Unless noted otherwise, this type of path will be installed on both sides of the road.



#### 4.6 Shared-Use Path/Sidepath (HDM Class I)

A shared-use path or sidepath is an off-street path designated for bicycle and pedestrian use. Typically 8-12 feet wide, these paths provide for two-way non-vehicular traffic. They are best suited for recreational uses and alongside rural high-speed roadways where there are fewer intersections and crossings.



#### 4.7 Concrete Sidewalk

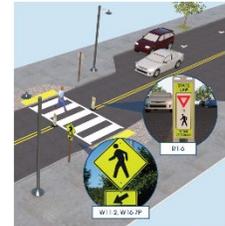
Sidewalks offer protection for pedestrians with a separation barrier, typically a 6" vertical curb. Where there are no bicycle lanes provided within a roadway, cyclists will often utilize sidewalks because they are perceived as safer than riding on the road. However, this practice is strongly discouraged and can be dangerous for both pedestrians and cyclists.

## 5. Crossing Treatments

Fehr & Peers have identified a number of crossing improvements that are needed in conjunction with the pathway projects. A brief description of each type is included here, and an FHA brochure for each is included in Appendix A. In many cases, these crossings can and should be updated independently of the pathway projects because they are already in use by pedestrians and bicyclists. On the other hand, many of the proposed crossings are at uncontrolled locations where no pedestrian/bike facilities exist. Case studies have shown mixed results concerning pedestrian safety in these situations. For this reason, project proponents may consider postponing the installation of some crosswalks until the facilities are in place.

### 5.1 High-visibility Crosswalks

Reflective thermoplastic striping is installed in specific patterns to make the crosswalk more obvious to pedestrian, bicycle, and vehicle traffic. These are often accompanied by signage and improved lighting. This type of crosswalk is particularly suited for uncontrolled intersections and midblock crossings.



### 5.2 Pedestrian Hybrid Beacons (PHB)

Often mounted on a mast arm, these traffic control devices provide positive stop control. They typically include a yellow and red light to alert traffic that the crossing is in use, and are dark when not in use. These devices are most suited for midblock crossings in higher speed roadways.



### 5.3 Rectangular Rapid Flashing Beacons (RRFB)

When a PHB isn't called for but a heightened level of conspicuity is needed, these LED flashers effectively bring attention to the fact that the crosswalk is in use or about to be used.



### 5.4 Pedestrian Refuge Islands

Refuge Islands are protected spaces between two opposing lanes of traffic. They allow pedestrians to cross one direction of traffic at a time. These are best suited for multi-lane intersections, midblock crossings, and at angled intersections that tend to create a larger gap from one side of the crossing to the other.



### 5.5 Bulb-out Curb Extensions

The purpose of curb extensions is to narrow the roadway at a pedestrian crossing, thereby making a safer and shorter path. They can be implemented at midblock crossings and at intersections. They are best suited for downtown areas or neighborhoods where foot traffic is high and speed limits are low. They can have a traffic calming effect similar to speed bumps and encourage motorists to slow down.



## 6. Typical Cost Estimates

WGA has prepared the following estimates to be used as a general planning tool; they do not reflect actual costs. None of the potential challenges listed in Section 2 are included in these estimates. It is important to note that the relative costs may be misleading. For instance, a Class I path is likely to cost more than a paved shoulder where space is constrained. Furthermore, path/lane widths, barrier types, and pavement thickness are assumed as stated in the description and assumptions columns of Table 1. Actual values for each project are unknown at this time. Individual cost breakdowns for each facility type are included in Appendix B.

**Table 1 – Cost Estimates for Standard Pathway and Crossing Facilities**

FACILITY TYPE	ESTIMATE	UNITS	DESCRIPTION	ASSUMPTIONS
CONCRETE SIDEWALK	\$1,000,000	PER SIDE PER MILE	VERTICAL CURB, GUTTER, & 6' WIDE SIDEWALK ALONG AN EXISTING STREET	INCLUDES MOBILIZATION, EXCAVATION, 4" PCC OVER 6" AB SECTION, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
SEPARATED BIKEWAY (CLASS IV)	\$1,844,000	PER MILE (BOTH SIDES)	WIDEN ROADWAY FOR 3' SEPARATION AND 7' BIKE LANES, SEPARATE WITH FLEXIBLE DELINEATORS	INCLUDES MOBILIZATION, EXCAVATION, 4" AC OVER 8" AB PAVING SECTION, FLEXIBLE DELINEATOR POSTS, STRIPING, SIGNAGE, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
SEPARATED BIKEWAY (CLASS IV) NO WIDENING	\$240,000	PER MILE (BOTH SIDES)	3' SEPARATION AND 7' BIKE LANES, SEPARATE WITH FLEXIBLE DELINEATORS	INCLUDES MOBILIZATION, FLEXIBLE DELINEATOR POSTS, STRIPING, SIGNAGE, TRAFFIC CONTROL, AND 30% CONTINGENCY.
BIKE ROUTE (CLASS III W/ ROADWAY WIDENING)	\$552,000	PER MILE (BOTH SIDES)	WIDEN ROADWAY FOR 3' PAVED SHOULDERS, SHARROW MARKINGS IN TRAFFIC LANES	INCLUDES MOBILIZATION, EXCAVATION, 4" AC OVER 8" AB PAVING SECTION, STRIPING, SIGNAGE, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
BIKE ROUTE (CLASS III W/ SIGNAGE & MARKERS ONLY)	\$42,000	PER MILE (BOTH SIDES)	NO ROADWAY WIDENING, ONLY SHARROW MARKINGS AND SIGNAGE	INCLUDES MOBILIZATION, STRIPING, SIGNAGE, TRAFFIC CONTROL, AND 30% CONTINGENCY.
BIKE LANE (CLASS II)	\$1,198,000	PER MILE (BOTH SIDES)	WIDEN ROADWAY FOR 7' BIKE LANES, PAINTED STRIPE FOR BUFFER	INCLUDES MOBILIZATION, EXCAVATION, 4" AC OVER 8" AB PAVING SECTION, STRIPING, SIGNAGE, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
PAVED SHOULDER (SHARED USE)	\$1,676,000	PER MILE (BOTH SIDES)	WIDEN ROADWAY FOR 3' SEPARATION AND 7' PAVED SHOULDERS, STRIPING BUFFER	INCLUDES MOBILIZATION, EXCAVATION, 4" AC OVER 8" AB PAVING SECTION, STRIPING, SIGNAGE, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
BUFFERED PAVED SHOULDER (SHARED USE)	\$1,698,000	PER MILE (BOTH SIDES)	WIDEN ROADWAY FOR 3' SEPARATION AND 7' PAVED SHOULDERS, STRIPING AND RUMBLE STRIP BUFFER	INCLUDES MOBILIZATION, EXCAVATION, 4" AC OVER 8" AB PAVING SECTION, STRIPING, SIGNAGE, RUMBLE STRIP, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
SHARED USE PATH / SIDE PATH (CLASS I)	\$779,000	PER MILE	12' WIDE PAVED PATH, 5' MIN. SEPARATION, PEDESTRIAN RATED PAVING SECTION	INCLUDES MOBILIZATION, EXCAVATION, 2" AC OVER 4" AB PAVING SECTION, STRIPING, SIGNAGE, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY.
HIGH VISIBILITY CROSSWALK	\$6,000	PER CROSSING	CROSSWALK STRIPING AND SIGNAGE	INCLUDES MOBILIZATION, TRAFFIC CONTROL, AND 30% CONTINGENCY
PEDESTRIAN HYBRID BEACON (PHB)	\$236,000	PER CROSSING	TWO POLES w/ MAST ARM, SIGNAGE, PUSH BUTTON ACTIVATED SIGNAL LIGHTS, ELECTRICAL WIRING, CROSSWALK STRIPING AND SIGNAGE	INCLUDES MOBILIZATION, TRAFFIC CONTROL, AND 30% CONTINGENCY
RECTANGULAR RAPID FLASHING BEACON (RRFB)	\$65,000	PER CROSSING	CROSSWALK STRIPING, SIGNAGE w/ PUSH BUTTON ACTIVATED LIGHTS, SOLAR PANEL & ELECTRICAL WIRING	INCLUDES MOBILIZATION, TRAFFIC CONTROL, AND 30% CONTINGENCY
PEDESTRIAN REFUGE ISLAND	\$25,000	PER CROSSING	PAVEMENT SAW CUT, REMOVAL & PATCH, VERTICAL CURB, WALKWAY, TRUNCATED DOME TILES, CROSSWALK STRIPING AND SIGNAGE	INCLUDES MOBILIZATION, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY
BULB-OUT/CURB EXTENSION w/ ACCESSIBLE RAMPS	\$41,000	PER CORNER	PAVEMENT SAW CUT, REMOVAL & PATCH, VERTICAL CURB & GUTTER, SIDEWALK, ACCESSIBLE RAMPS, CROSSWALK STRIPING AND SIGNAGE	INCLUDES MOBILIZATION, TRAFFIC CONTROL, EROSION CONTROL, AND 30% CONTINGENCY

NOTE: ESTIMATES ARE FOR CONSTRUCTION COSTS ONLY AND DO NOT INCLUDE COSTS OF ENGINEERING, ENVIRONMENTAL STUDIES, PERMITTING, RELOCATION OR ADJUSTMENTS TO EXISTING UTILITIES, REMOVAL OR REPLACEMENT OF EXISTING CURB, GUTTER & SIDEWALK (CG&S), CURB RAMPS, EXCESSIVE GRADING OPERATIONS, STORM DRAINAGE INFRASTRUCTURE, LANDSCAPING & IRRIGATION, OR LAND ACQUISITION UNLESS STATED IN THE DESCRIPTION. THESE ESTIMATES ARE FOR PLANNING PURPOSES ONLY AND DO NOT APPLY TO SPECIFIC PROJECTS. WGA HAS NO CONTROL OVER VARIANCES IN THE COST OF LABOR, MATERIALS, EQUIPMENT, SERVICES PROVIDED BY OTHERS, CONTRACTORS' METHODS OF DETERMINING PRICES, COMPETITIVE BIDDING OR MARKET CONDITIONS, PRACTICES OR BIDDING STRATEGIES. WGA CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT PROPOSALS, BIDS, OR ACTUAL CONSTRUCTION COSTS WILL NOT VARY FROM THE COSTS PRESENTED HEREIN.



## 7. Priority Projects

Through collaboration efforts with Calaveras County, City of Angels Camp, CCOG, and the public, Fehr & Peers has identified 48 priority pathway projects and 28 priority crossing projects. Those projects are briefly discussed in this section with a focus on some specific challenges that will need to be evaluated during the design phase should the project move forward.

### R-2 SR 12 Valley Springs Complete Streets

Location: SR 12 from Pine St to Lime Creek Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Separated Bikeway (Class IV) (no widening) + Sidewalks on both sides of the road	\$2,240,000	0.62	\$1,388,800
F&P Alternate Recommendation	Shared-Use Path (Class I) on both sides of the road	\$1,558,000	0.62	\$965,960

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- SR 12 Lime Creek bridge crossing
  - Not enough width on existing roadway for the proposed facilities



## R-7 SR 26 Valley Springs Main Street Complete Streets Phase 1

Location: SR 26 from SR 12 to Hogan Dam Rd (north intersection)

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Separated Bikeway (Class IV) (no widening) + Sidewalks on both sides of the road	\$2,240,000	0.41	\$918,400
F&P Alternate Recommendation	Shared-Use Path (Class I) on both sides of the road	\$1,558,000	0.41	\$638,780

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- A portion of SR 26 is already improved on the west side with curb, gutter, & sidewalk. If Shared-Use Path alternate is selected, may consider a transition to Bike Lane or Separated Bikeway from Dollar General to SR 12



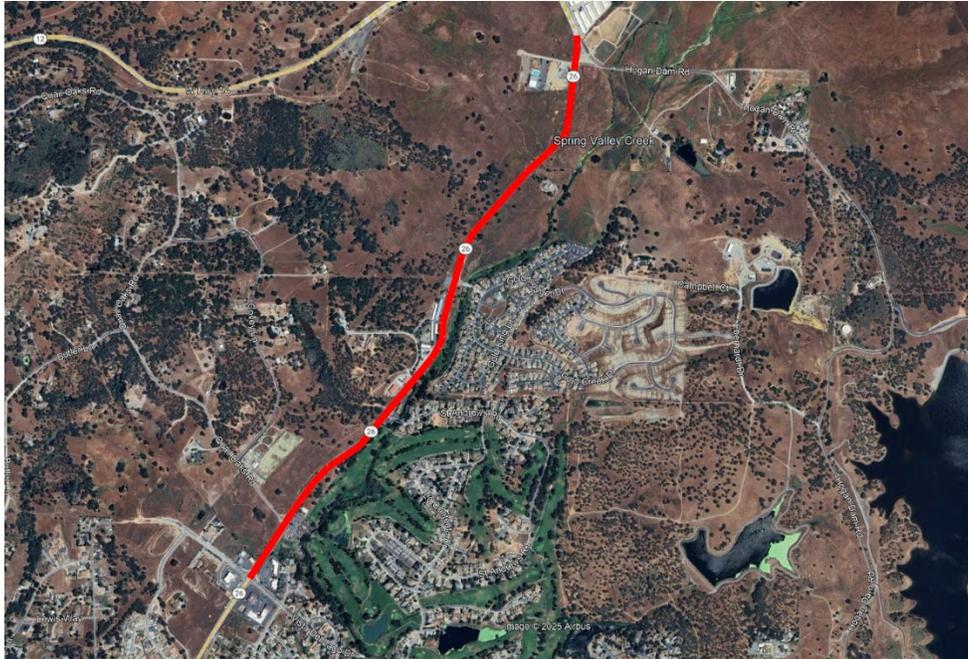
## R-8 SR 26 Valley Springs Main Street Complete Streets Phase 2

Location: SR 26 from Hogan Dam Rd (north intersection) to Vista Del Lago Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on the E side of the road	\$779,000	1.49	\$1,160,710

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- 3 minor creek crossings
- Conflict with existing parking lot at Thomas Center (commercial complex)
- Grading challenges at La Contenta golf course near 10<sup>th</sup> Green Inn



## R-17 SR 4 Angels Camp

Location: SR 4 from Foundry Ln to Rollerri Bypass to Kurt Dr / Depot Rd (connecting to Angels Creek Trail)

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on the SE side of the road	\$779,000	2.38	\$1,854,020

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Significant grading required if path is required to be outside existing roadway
- Space is constrained from Murphys Grade Rd overpass to Rollerri Bypass. Consider transitioning to Buffered Paved Shoulder for these areas.



## R-19 SR 4 Murphys Main Street Complete Streets

Location: SR 4 from Feeny Park to Pennsylvania Gulch Rd to Apple Blossom Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Separated Bikeway (Class IV) (no widening) + Sidewalks on both sides of the road	\$240,000 Class IV \$1,000,000 Sidewalk	0.92 mi Class IV 1.17 mi Sidewalk	\$1,390,800
F&P Alternate Recommendation	Shared-Use Path (Class I) on the E side of the road from Feeny Pk to Penn. Gulch Rd, both sides from Penn. Gulch Rd to Big Trees Rd, one side of the road from Big Trees Rd to Apple Bl. Dr	\$779,000	1.30	\$1,012,700

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossing at Angels Creek
- Significant grading may be required depending on path alignment



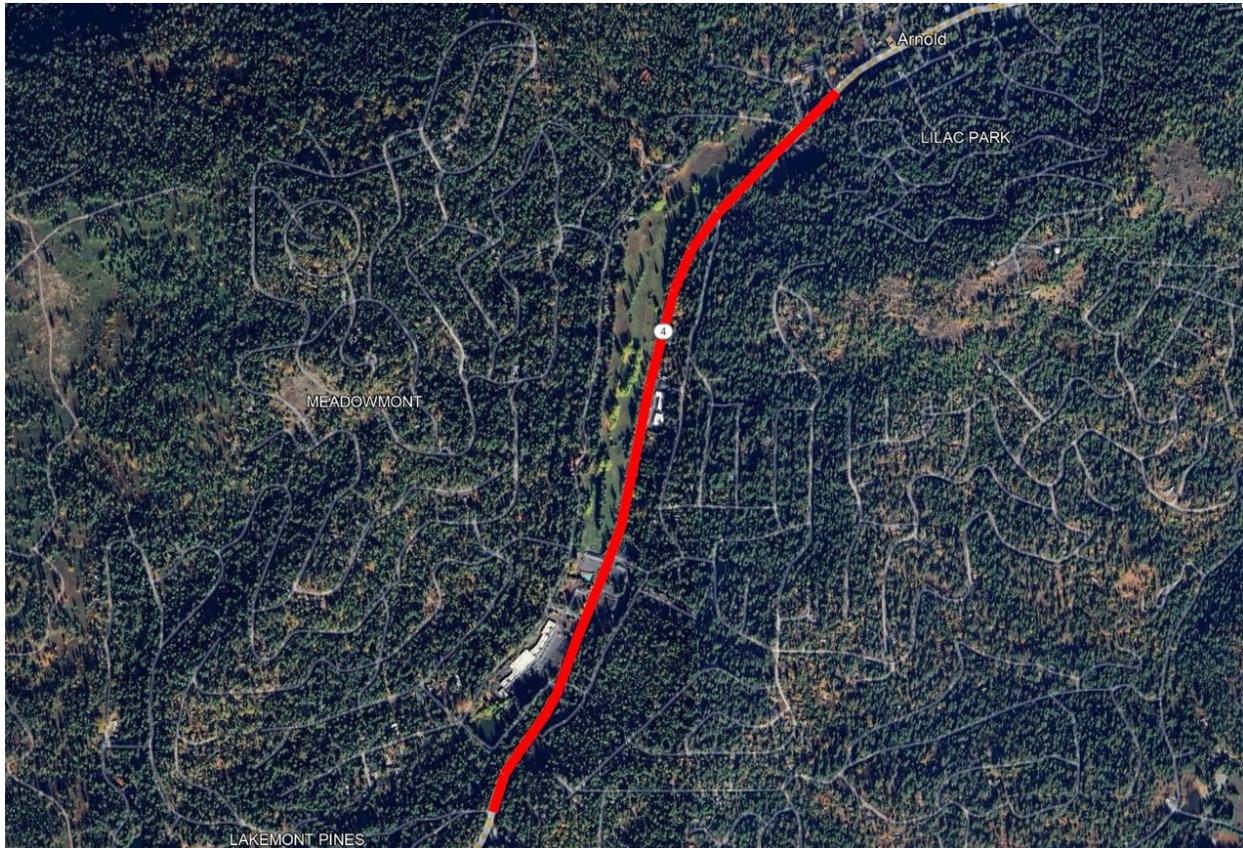
## R-21 SR 4 Arnold Main Street Complete Streets Phase 1

Location: SR 4 from Lakemont Dr to Oak Cir (north)

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road	\$779,000	1.42	\$1,106,180

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Significant grading challenges



- Possible large redwood tree removal

## R-22 SR 4 Arnold Main Street Complete Streets Phase 2

Location: SR 4 from Oak Cir (north) to Henry Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Shared-Use Path (Class I) on both sides of the road</b>	<b>\$1,558,000</b>	<b>0.40</b>	<b>\$623,200</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Conflict with Chevron on NW side
- Conflicts with existing improvements & landscaping
- Grading challenges



## R-23 SR 4 Arnold Main Street Complete Streets Phase 3

Location: SR 4 from Henry Dr to Moran Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Shared-Use Path (Class I) on one side of the road</b>	<b>\$779,000</b>	<b>0.96</b>	<b>\$747,840</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Significant grading challenges



## R-28 SR 49 San Andreas Main Street Complete Streets

Location: SR 49 from Pool Station rd to Toyanza Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Separated Bikeway (Class IV) + Sidewalks on both sides of the road	\$2,240,000	1.40	\$3,136,000
F&P Alternate Recommendation	Shared-Use Path (Class I) on both sides of the road	\$1,558,000	1.40	\$2,181,200

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints may preclude a separated bikeway. May consider bike lane & sidewalks



## R-31 SR 49 Angels Camp Main Street Complete Streets

Location: SR 49 from Copello Dr to Finnegan Ln / Vallecito Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Separated Bikeway (Class IV) + Sidewalks on both sides of the road	\$2,240,000	2.21	\$4,950,400
F&P Alternate Recommendation	Shared-Use Path (Class I) on both sides of the road	\$1,558,000	2.21	\$3,443,180

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints may preclude a separated bikeway. May consider bike lane & sidewalks.
- Downtown area is very narrow with the on-street parking. May consider bike route and existing sidewalks.



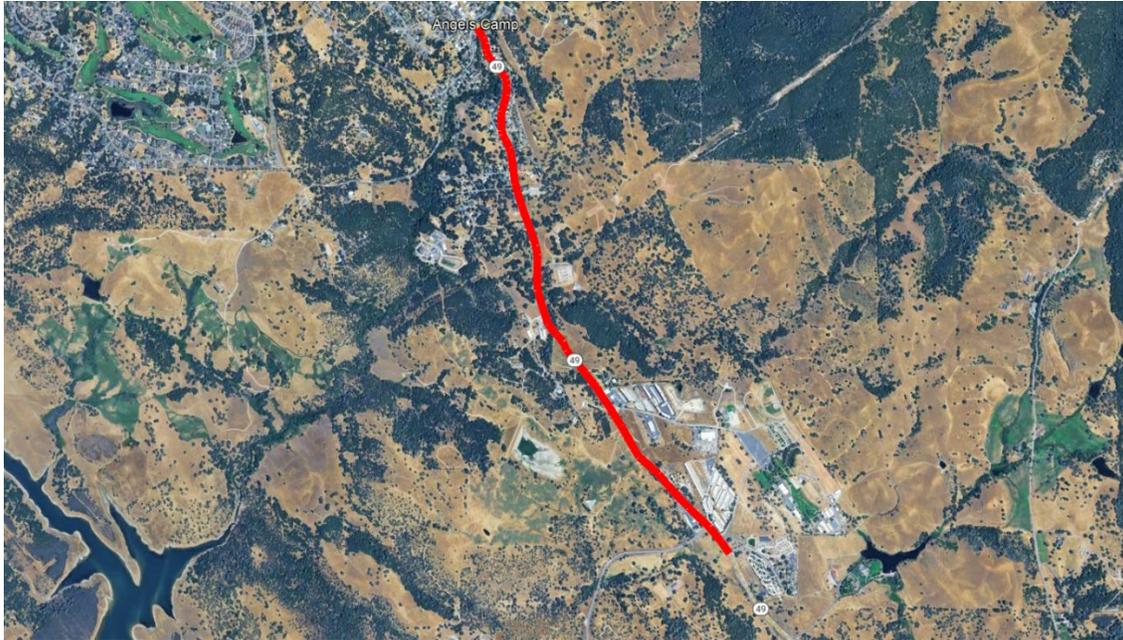
## R-32 SR 49 Fairgrounds Connection

Location: SR 4 from Finnegan Ln / Vallecito Rd to the Angels Camp RV Entrance

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Shared-Use Path (Class I) on the NE side of the road</b>	<b>\$779,000</b>	<b>1.85</b>	<b>\$1,441,150</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraint at 1909 bridge across Angels Creek
- Existing path through Annex neighborhood is too narrow for shared use and there's not much room to widen
  - Elevation difference may create hazardous conditions for bicycles
- Conflicts with power poles and existing retaining walls
- Significant grading/retaining walls or creative alignment determination required at Sonora St



## R-45 Vista Del Lago Drive

Location: Vista Del Lago Dr from Berkesey Ln (planned extension) to SR 26

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Sidewalk gap fill on both sides and bike lane on the NE side of the road	\$1,000,000	0.46	\$460,000
F&P Alternate Recommendation	Shared-Use Path (Class I) between Berkesey Ln and Vista Del Lago Dr if road extension is not constructed	\$779,000	0.13	\$101,270

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No comments

## R-46 Vista Del Lago Drive

Location: Vista Del Lago Dr from SR 26 to Hogan Dam Rd to Esenolda Rd (Cameron Trailhead)

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on both sides of the road from SR 26 to Hartvickson and on one side of the road from Hartvickson to Hogan Dam Rd to Esenolda Rd	\$779,000	1.81	\$1,409,990
F&P Alternate Recommendation	Buffered Paved Shoulder with designated bike/ped recreational route signage	\$1,698,000	1.71	\$2,903,580

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossings at Cosgrove Creek & smaller unnamed creek
- Significant space constraints or grading requirements in certain areas
- May need to replace roadside swales with underground drainage infrastructure



## R-49 Hogan Dam Road

Location: Hogan Dam Rd from New Hogan Pkwy to SR 26

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	1.04	\$810,160
F&P Alternate Recommendation	Paved Shoulder with designated bike/ped recreational route signage	\$1,676,000	1.04	\$1,743,040

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossing at Cosgrove Creek
- Crossing at Spring Valley Creek



## R-51 Valley Springs Commercial Core Connection

Location: Nove Way from SR 26 to Main St, Main St from Nove Way to Jean St, Jean St from SR 26 to SE corner of Oak Tree Shopping Center

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road	\$779,000	0.42	\$327,180
<b>F&amp;P Alternate Recommendation</b>	Bike Lane (Class II) with Sidewalks on both sides	\$3,198,000	0.42	\$1,343,160

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-52 Through R-63 Downtown Valley Springs Complete Streets

R-52 Location: Laurel St from SR 12/26 to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Lane (Class II) with Sidewalks on both sides	\$3,198,000	0.12	\$383,760

R-53 Location: Cedar St from SR 12 to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.12	\$245,040
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.12	\$93,480

R-54 Location: Pine St from SR 12 to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.12	\$245,040
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.12	\$93,480

R-55 Location: Chestnut St from SR 12 to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.14	\$285,880
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.14	\$109,060

R-56 Location: Myrtle St from California St to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.13	\$265,460
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.13	\$101,270

R-57 Location: Rose St from Daphne St to Sequoia Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.06	\$122,520
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.06	\$46,740

R-58 Location: California St from Daphne St to Chestnut St

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III) with Sidewalks on west side	\$1,042,000	0.20	\$208,400
F&P Alternate Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.20	\$155,800

R-59 Location: Daphne St from Pine St to Rose/California St

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Sidewalks on both sides of the road	\$2,000,000	0.36	\$720,000

R-60 Location: Daphne St from Pine St to existing Class I path

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.11	\$85,690

R-63 Location: Valley Oaks Shopping Center access drive aisle between Burger King/Taco Bell and SR 12

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Sidewalks on both sides of the road	\$2,000,000	0.03	\$60,000

### Project Map



### Constraints and Challenges

- No Comments

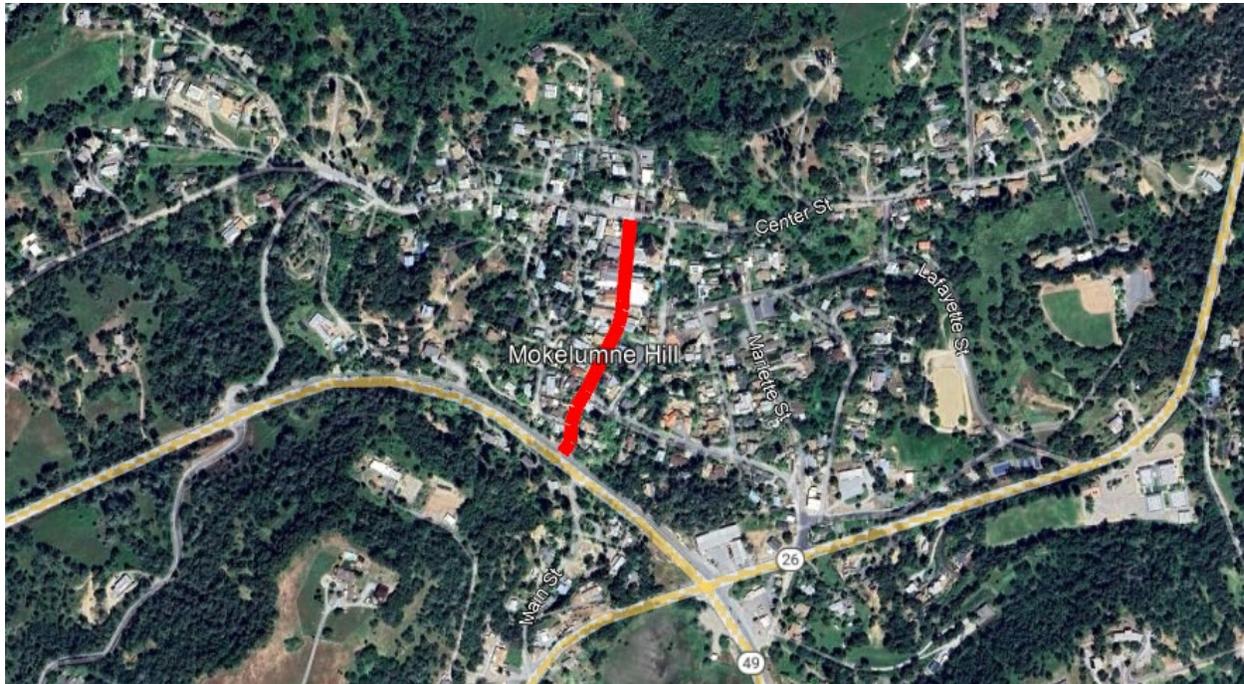
## R-65 Mokelumne Hill Recreational Trail Loop

Location: Main St from SR 49 to Center St

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Bike Route (Class III) with Sidewalk on E side of road</b>	<b>\$1,042,000</b>	<b>0.21</b>	<b>\$218,820</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints, elevation changes, and slopes will present significant challenges for sidewalk



## R-66 Mokelumne Hill Recreational Trail Loop

Location: E Center St from Main St to Zumwalt St, Zumwalt St from E Center St to Lafayette St, Lafayette St from Zumwalt St to SR 26, Mareta St from Lafayette St to Church St, Church St from SR 26 to Main St

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	0.93	\$724,470
F&P Alternate Recommendation	Paved Shoulder with designated bike/ped recreational route signage	\$1,676,000	0.93	\$1,558,680

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Creek crossing
- Space constraints
- Significant grading challenges



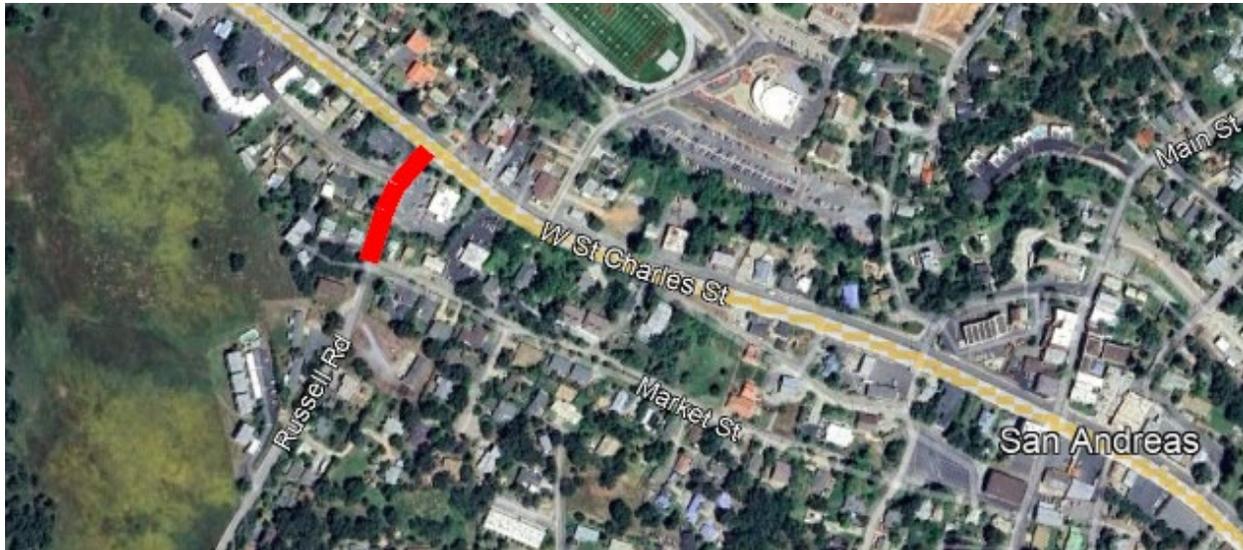
## R-68 Russell Road

Location: Russell Rd from Market St to SR 49

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Sidewalk on E side of the road	\$1,000,000	0.07	\$70,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

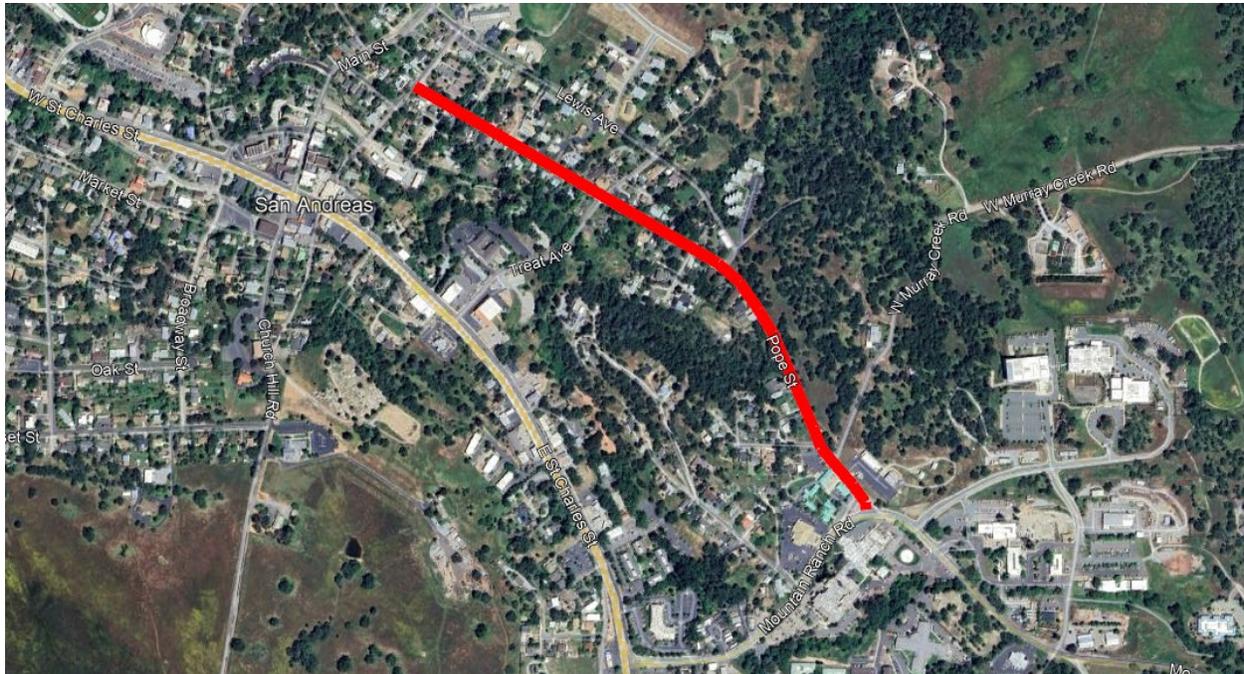
## R-71 Pope Street

Location: Pope St from California St to Mountain Ranch Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road	\$779,000	0.67	\$521,930

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints, conflicts with trees & power poles



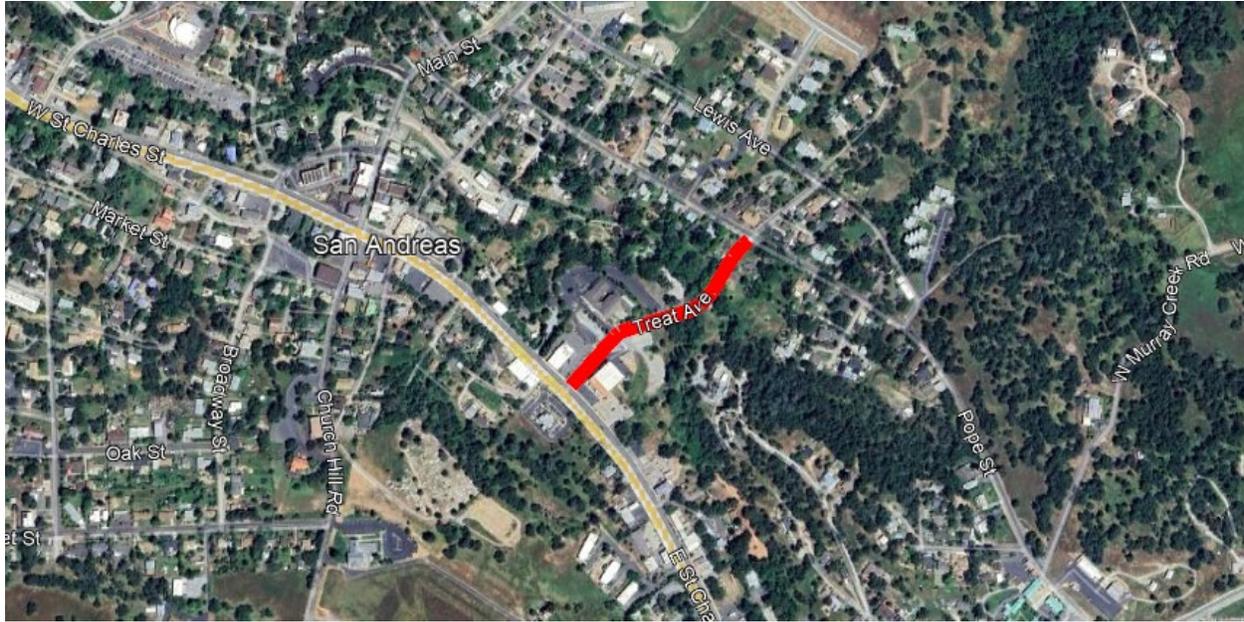
## R-73 Treat Avenue

Location: Treat Ave from Pope St to SR 49

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road	\$779,000	0.21	\$163,590

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossing at San Andreas Creek



## R-74 Court Street

Location: Court St from SR 49 to existing sidewalk

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Sidewalk gap fill on south/east side of the road	\$1,000,000	0.05	\$50,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Retaining wall may be required along hotel parking lot



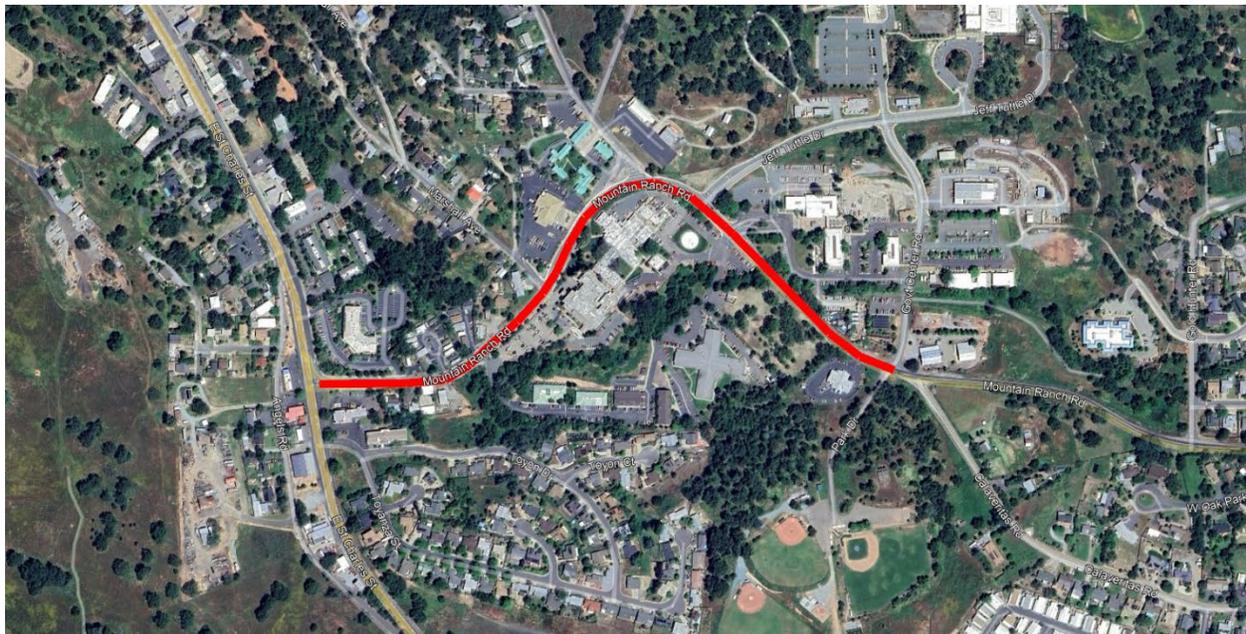
## R-75 Mountain Ranch Road

Location: Mountain Ranch Rd from SR 49 to Government Center Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Lane (striping only)	\$42,000	0.57	\$23,940
	Sidewalk gap fill	\$1,000,000	0.61	\$610,000
			total	\$633,940

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Conflict with existing decorative retaining walls
- Two crossings at San Andreas Creek
- Adding bike lanes will require restriping the traffic lanes



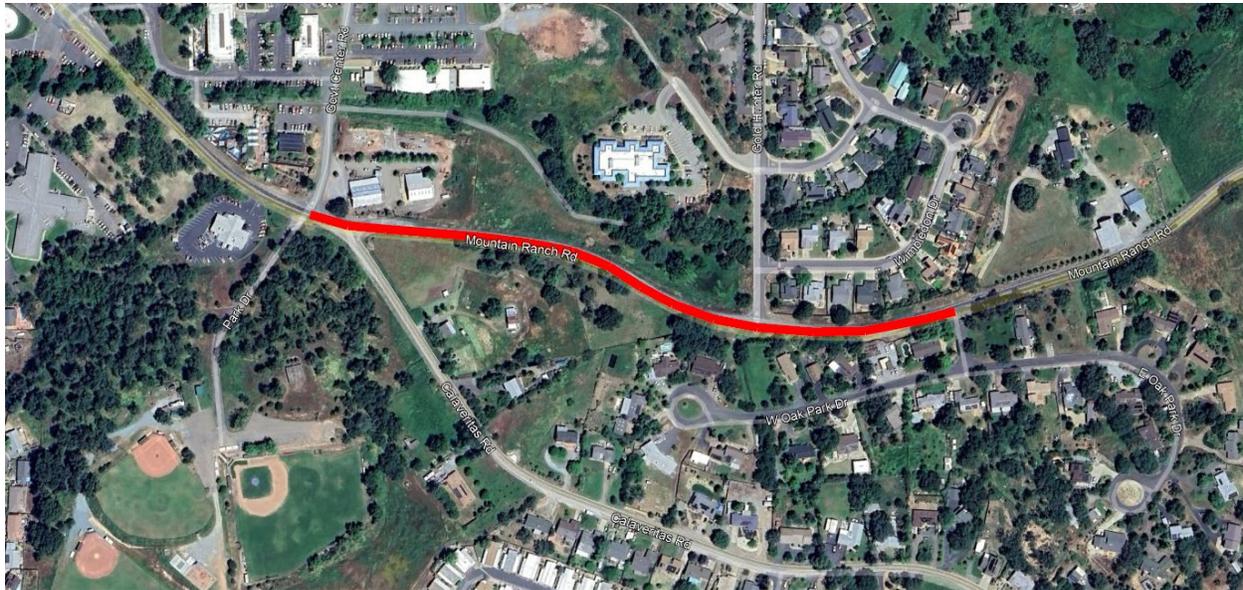
## R-76 Mountain Ranch Road

Location: Mountain Ranch Rd from Government Center Dr to Oak Park Dr

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road	\$779,000	0.35	\$272,650

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Significant grading challenges



## R-79 Government Center Drive

Location: Government Center Dr from Mountain Ranch Rd to existing sidewalk

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Sidewalk gap fill on both sides of the road	\$1,000,000	0.24	\$240,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossing at San Andreas Creek



## R-85 Copperopolis Recreational Trail

Location: Main St from SR 4 to Reeds Tpke Rd, Reeds Tpke Rd from Main St to Town Square Rd, Little John Rd from Town Square Rd to Copper Cove Dr, Copper Cove Dr from O'Byrnes Ferry Rd to Little John Rd, O'byrnes Ferry Rd from Pheasant Run Dr to Reeds Tpke Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	10.89	\$8,483,310
F&P Alternate Recommendation	Paved Shoulder with designated bike/ped recreational route signage	\$1,676,000	10.89	\$18,251,640

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Crossing at Penny Creek
  - Culvert extension or pedestrian bridge required
- Crossing at Sawmill Creek
  - Roadbed is narrow and much higher than creek elevation.



- Major grading required in several areas



- 2<sup>nd</sup> Sawmill Creek Crossing
  - Requires box culvert extension or pedestrian bridge



- 2 crossings at Black Creek
  - Bridges are too narrow. Will require a pedestrian bridge or major bridge reconstruction



- Several smaller creek crossings will require culvert extensions and significant grading



## R-91 Foundry Lane Extension

Location: Foundry Ln from Stockton Rd to SR 49 via planned extension

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Bike Lane (Class II) with Sidewalks on both sides</b>	<b>\$3,198,000</b>	<b>0.80</b>	<b>\$2,558,400</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-92 Stockton Road

Location: Stockton Rd from Angel Oaks Dr to SR 49

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Lane (Class II) with Sidewalks on both sides	\$3,198,000	0.54	\$1,726,920

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Significant grading required
- Roadway narrows at cemetery retaining wall



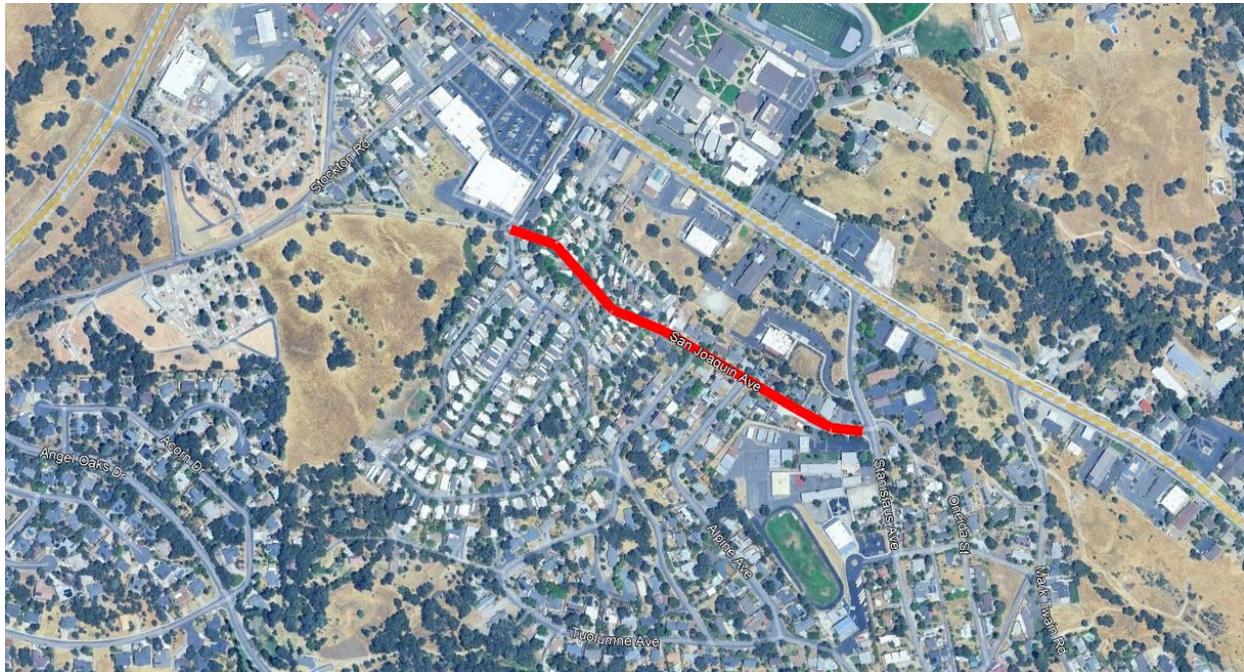
## R-94 San Joaquin Avenue

Location: San Joaquin Ave from Demarest St to Stanislaus Ave

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Bike Lane (Class II) with Sidewalks on both sides</b>	<b>\$3,198,000</b>	<b>0.34</b>	<b>\$1,087,320</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Mobile Home Park streets are very narrow
- Conflicts with existing driveways, parking, and retaining walls
- Gate at emergency access between MHP & San Joaquin Ave



## R-97 South Angels Camp Recreational Trail

Location: Gold Cliff Rd from Stanislaus Ave to Tuolumne Ave, Tuolumne Ave from Gold Cliff Rd to Greenhorn Creek Rd via future extension of Sierra Ave, Greenhorn Creek Rd from Sierra Ave to Finnegan Ln

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on one side of the road - desire to be golf cart accessible	\$779,000	1.55	\$1,207,450

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints due to retaining walls, driveways, and mature oaks make it difficult to keep the path on one side of the road. May need to alternate sides
- Crossing at Greenhorn Creek
- Significant grading required in some areas



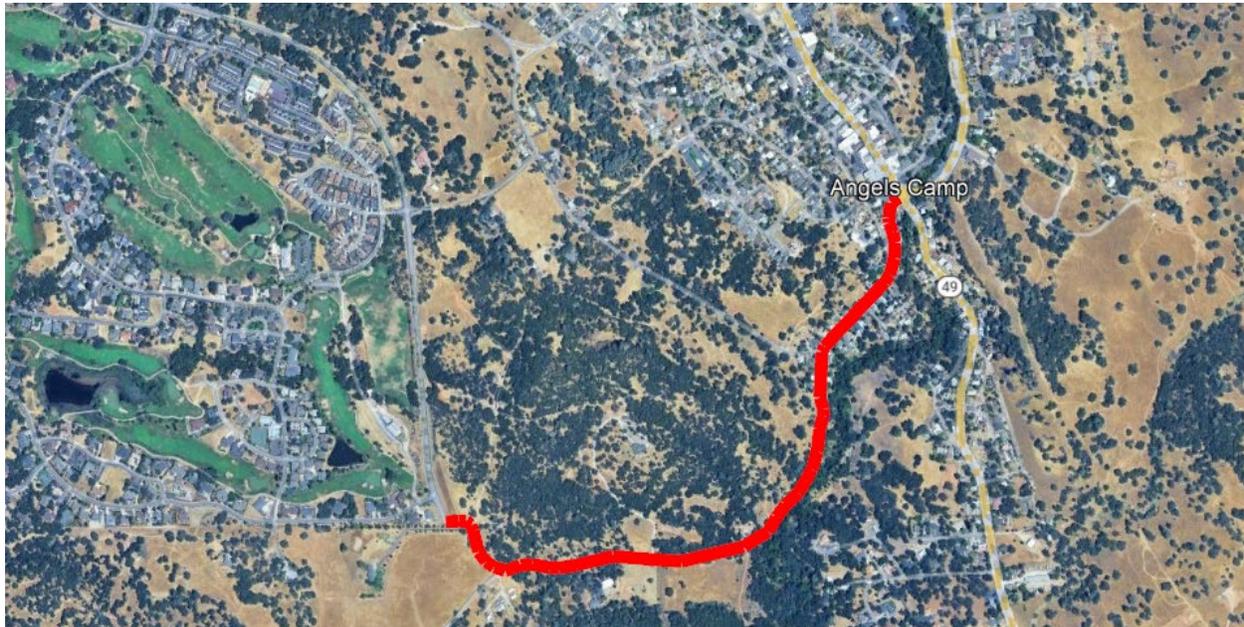
## R-98 Angels Creek Trail Phase I

Location: Finnegan Ln from SR 49 to Finnegan Ct to Greenhorn Creek Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III)	\$42,000	0.67	\$28,140
	Shared-Use Path (Class I)	\$779,000	0.31	\$241,490
			total	\$269,630

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

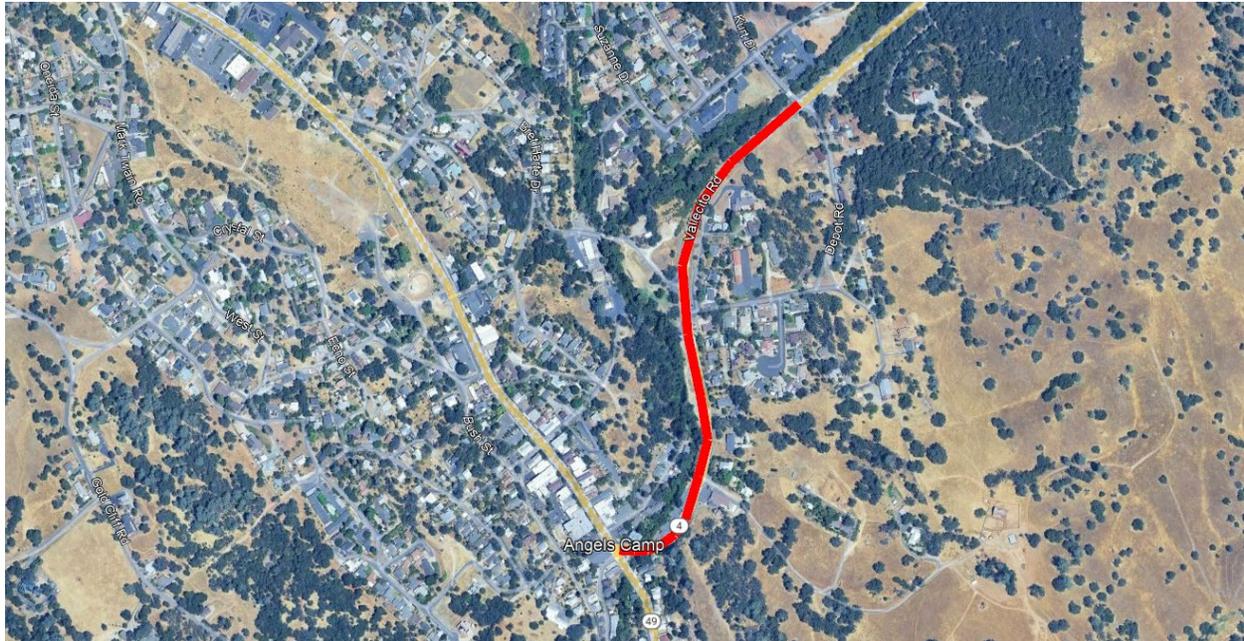
## R-99 Angels Creek Trail Phase II

Location: Vallecito Rd from Kurt Dr/Depot Rd to SR 49

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) with pedestrian bridge (bridge cost not included)	\$779,000	0.53	\$412,870

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-100 Angels Creek Trail Phase III

Location: Trail connection from Vallecito Rd to Finnegan Ln to City Wastewater Treatment Facility

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	<b>Shared-Use Path (Class I) with pedestrian bridges (bridge costs not included)</b>	<b>\$779,000</b>	<b>1.44</b>	<b>\$1,121,760</b>

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-102 Utica Park Bike Connection

Location: Utica Ln from Utica Park to Bush St, Bush St from Utica Ln to Finnegan Ln

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Route (Class III)	\$42,000	0.48	\$20,160

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

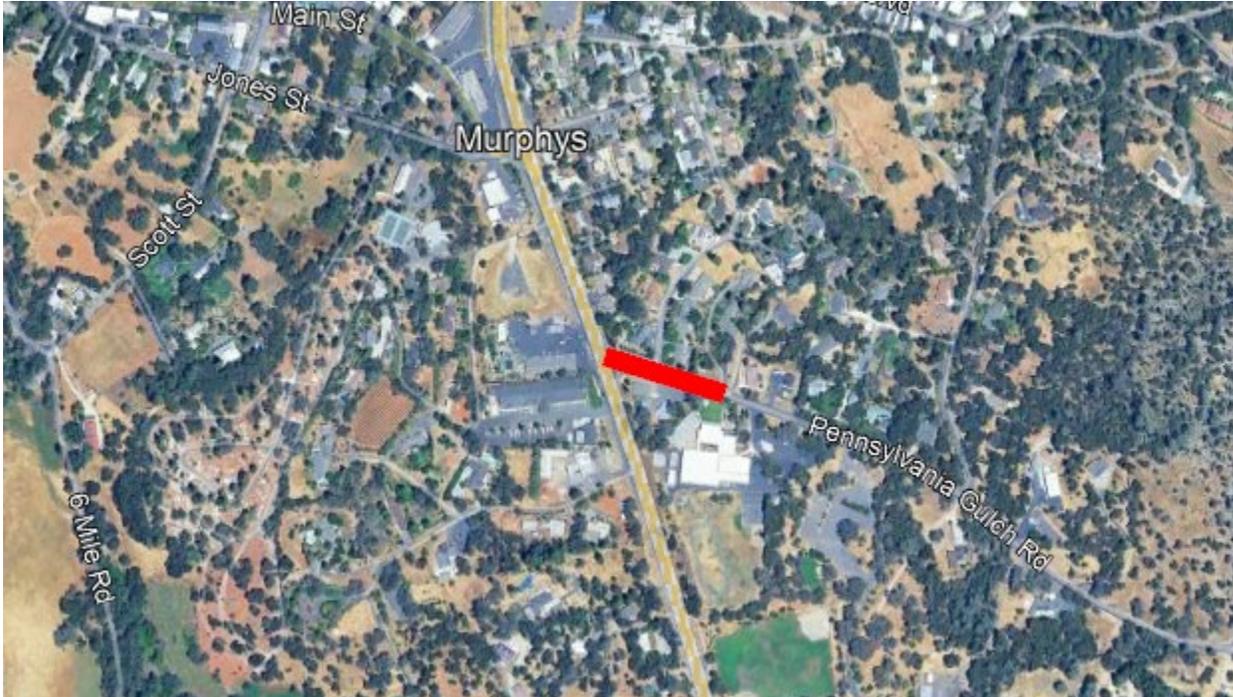
## R-107 Pennsylvania Gulch Road

Location: Pennsylvania Gulch Rd from SR 4 to Michelson Elementary School

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
<b>F&amp;P Recommendation</b>	Shared-Use Path (Class I) on the south side of the road	\$779,000	0.09	\$70,110

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-109 Main Street

Location: Main St from SR 4 to Murphys Grade Rd

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Lane (Class II) with Sidewalks on both sides	\$3,198,000	0.71	\$2,270,580
F&P Alternate Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.71	\$1,449,820

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Space constraints
  - The addition of bike lanes and sidewalk would effectively remove all on-street parking
  
- Crossing at Angels Creek



## R-110 Ironstone Recreational Trail

Location: S Algiers St from Main St to 6 Mile Rd, Scott St from Main St to 6 Mile Rd, 6 Mile Rd from S Algiers St/Scott St to Ironstone

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Shared-Use Path (Class I) on one side of the road	\$779,000	1.43	\$1,113,970
F&P Alternate Recommendation	Paved Shoulder with designated bike/ped recreational route signage	\$1,676,000	1.43	\$2,396,680

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- Major grading required along portions of 6 Mile Rd
- Scott Street is narrow. May require removal of mature oak trees



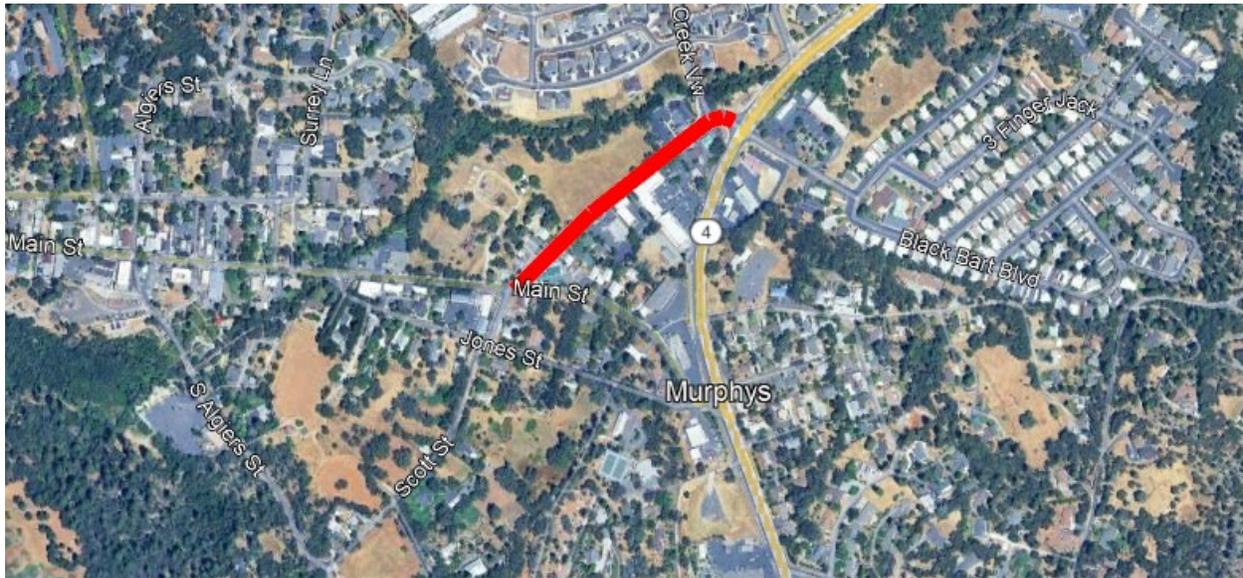
## R-112 Big Trees Road

Location: Big Trees Rd from SR 4 to Main St

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Bike Lane (Class II) with Sidewalks on both sides	\$3,198,000	0.24	\$767,520
F&P Alternate Recommendation	Bike Route (Class III) with Sidewalks on both sides	\$2,042,000	0.24	\$490,080

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

- No Comments

## R-119 Blagen Road ARTA Connection

Location: Blagen Rd from SR 4 to Forest Route 7N08

	Proposed Facilities	Cost Per Mile*	Length (mi)	Total Cost*
F&P Recommendation	Paved Shoulders with designated bike/ped recreational route signage	\$1,676,000	0.95	\$1,592,200

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

### Project Map



### Constraints and Challenges

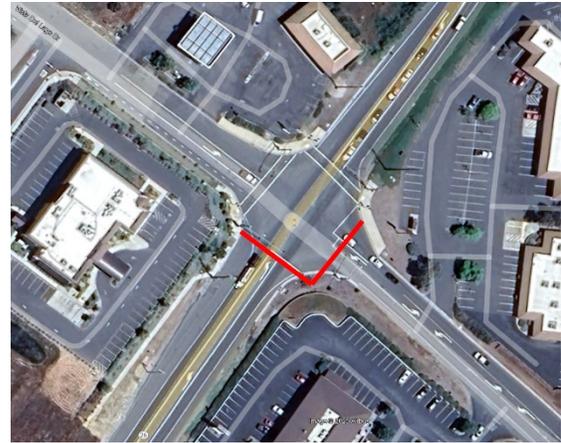
- Creek crossing
- Significant grading required in some locations
- Large tree removal may be required depending on alignment



### P-10 SR 26 & Vista Del Lago Drive

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk on SW and SE legs	\$12,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- May require new curb ramps

### P-11 Vista Del Lago Drive & Hartvickson Lane

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk on side streets & across Vista Del Lago Dr	\$18,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- Double path ends here – may only need two crosswalks

### P-24 SR 26 & Mangili Rd/Hogan Dam Rd

	Proposed Facilities	Cost*
F&P Recommendation	RRFB at SR 26, high-vis crosswalk on side streets	\$77,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- No comments

### P-25 SR 26 & Hogan Dam Rd (north)

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on S leg	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- No comments



### P-28 SR 26 between SR 12 and Jean Street

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	Pedestrian Hybrid Beacon (PHB)	\$236,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- No comments



### P-42 SR 12 & Taco Bell/Burger King DW

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	Bulb-out and high-vis crosswalk	\$176,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- Bulb-out into the highway may impact right turn lane



**P-52 SR 49 & High School Street**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on N leg & across SR 49	\$12,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-53 SR 49 & Court Street/Adams Street**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on side streets & across SR 49	\$18,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-55 SR 49 & Treat Avenue**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on Treat Avenue & across SR 49	\$12,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



### P-56 SR 49 W of Fahily Circle

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk midblock W of Fahily Circle	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- No comments



### P-57 SR 49 & Mountain Ranch Road

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk across SR 49 & w/ refuge on Mountain Ranch Rd	\$37,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- No comments



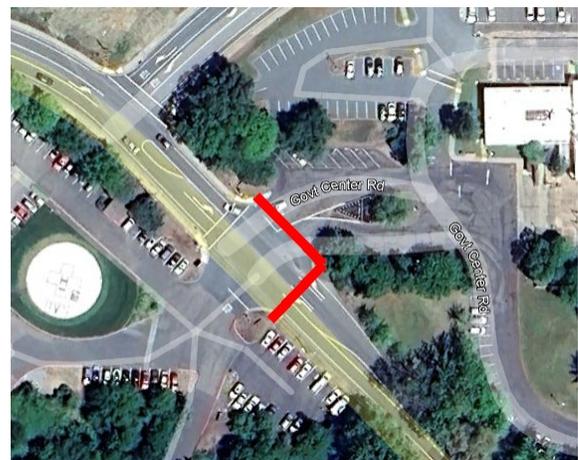
### P-67 Mountain Ranch Rd & Govt Center Rd

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk across N & S legs	\$12,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

#### Constraints and Challenges

- No comments



**P-68 Mountain Ranch Rd & Govt Center Dr**

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk across N leg & across Mountain Ranch Rd	\$12,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

**P-82 O'Byrnes Ferry Rd & Copper Meadow Dr / Spangler Ln**

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk on side streets w/ RRFB across O'Byrnes Ferry Rd	\$77,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

**P-88 SR 49 & Middleton's Shopping Center**

	Proposed Facilities	Cost*
F&P Recommendation	Pedestrian Hybrid Beacon (PHB) midblock btwn Middleton's & TCS	\$236,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

**P-95 SR 49 & Monte Verda Street**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	Pedestrian Hybrid Beacon (PHB) across SR 49, high-vis crosswalk across Monte Verda St	\$242,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

**P-96 SR 49 & Stockton Road**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on S leg	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

**P-101 SR 49 & Mark Twain Road**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk across SR 49	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



**Constraints and Challenges**

- No comments

### P-106 SR 49 & Raspberry Lane

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk on N leg, bulb-outs for SR 49 crossing	\$170,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- No comments

### P-107 SR 49 btwn Raspberry Ln & Birds Way

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk midblock btwn Raspberry Ln & Birds Way	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- No comments

### P-108 SR 49 & Finnegan Lane/Vallecito Road

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk on N leg, bulb-outs across SR 49	\$88,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



#### Constraints and Challenges

- This is a complex intersection, and careful consideration is needed to facilitate heavy traffic and pedestrian safety. A bulb-out across SR 49 may impact larger vehicles' ability to turn right onto Vallecito Rd

**P-119 Main Street & Scott St/Big Trees Rd**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on all legs	\$24,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-121 SR 4 & Jones Street/Lawrence Street**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on W,N,E legs, Refuge on W leg	\$43,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-125 SR 4 & Penn. Gulch Rd/Murphys Market**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on E & W legs	\$18,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-126 Penn. Gulch Rd at Michelson Elem.**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	upgrade existing crosswalk to RRFB	\$65,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



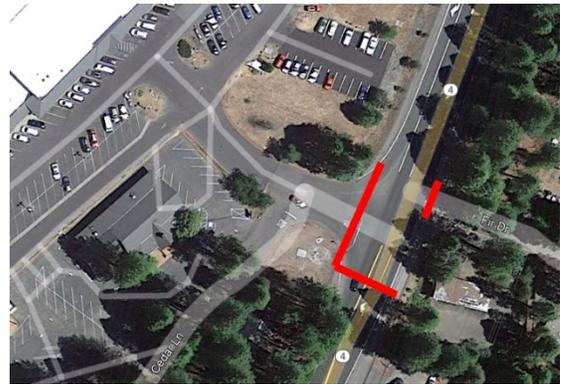
**P-127 SR 4 & Cedar Lane/Fir Drive**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on side streets & RRFB on SR 4	\$77,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

- No comments



**P-128 SR 4 & Meadowmont Way**

	Proposed Facilities	Cost*
<b>F&amp;P Recommendation</b>	high-vis crosswalk on W leg	\$6,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.

**Constraints and Challenges**

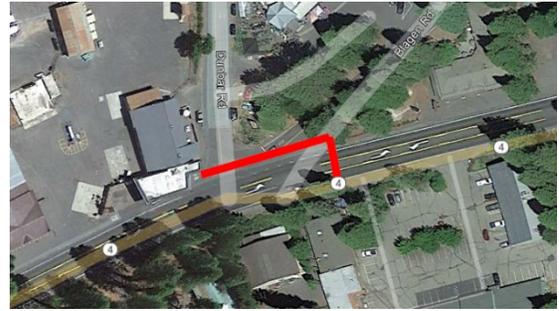
- No comments



## P-137 SR 4 & Dunbar Road/Blagen Road

	Proposed Facilities	Cost*
F&P Recommendation	high-vis crosswalk w/ refuge btwn Dunbar Rd & Blagen Rd, RRFB on SR 4	\$77,000

\*Costs are theoretical values derived solely from the unit costs presented in Table 1. All disclaimers apply.



### Constraints and Challenges

- This is a complex intersection, and careful consideration is needed to facilitate heavy traffic, gas station usage, and pedestrian safety.

# APPENDIX A



### Safety Benefits:

**High-visibility crosswalks can reduce pedestrian injury crashes up to: 40%<sup>1</sup>**

**Intersection lighting can reduce pedestrian crashes up to: 42%<sup>2</sup>**

**Advance yield or stop markings and signs can reduce pedestrian crashes up to: 25%<sup>3</sup>**

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://highways.dot.gov/safety/proven-safety-countermeasures> and <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/techSheetVizEnhancemt2018.pdf>.

## Crosswalk Visibility Enhancements

Poor lighting conditions, obstructions such as parked cars, and horizontal or vertical roadway curvature can reduce visibility at crosswalks, contributing to safety issues. For multilane roadway crossings where vehicle volumes are in excess of 10,000 Average Annual Daily Traffic (AADT), a marked crosswalk alone is typically not sufficient. Under such conditions, more substantial crossing improvements could prevent an increase in pedestrian crash potential.

Three main crosswalk visibility enhancements help make crosswalks and the pedestrians, bicyclists, wheelchair and other mobility device users, and transit users using them more visible to drivers. These include high-visibility crosswalks, lighting, and signing and pavement markings. These enhancements can also assist users in deciding where to cross. Agencies can implement these features as standalone or combination enhancements to indicate the preferred location for users to cross.

### High-visibility crosswalks

High-visibility crosswalks use patterns (i.e., bar pairs, continental, ladder) that are visible to both the driver and pedestrian from farther away compared to traditional transverse line crosswalks. They should be considered at all midblock pedestrian crossings and uncontrolled intersections. Agencies should use materials such as inlay or thermoplastic tape, instead of paint or brick, for highly reflective crosswalk markings.

### Improved Lighting

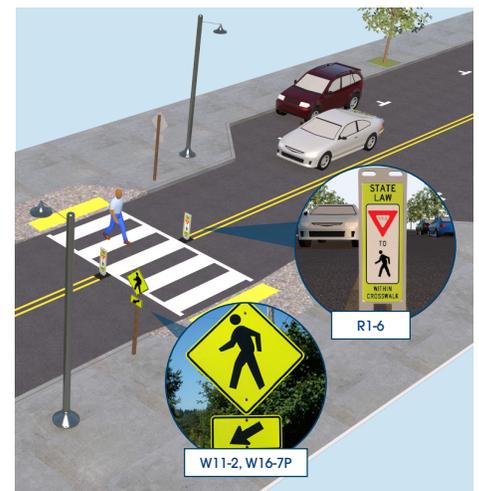
The goal of crosswalk lighting should be to illuminate with positive contrast to make it easier for a driver to visually identify the pedestrian. This involves carefully placing the luminaires in forward locations to avoid a silhouette effect of the pedestrian.

### Enhanced Signing and Pavement Markings

On multilane roadways, agencies can use "YIELD Here to Pedestrians" or "STOP Here for Pedestrians" signs 20 to 50 feet in advance of

a marked crosswalk to indicate where a driver should stop or yield to pedestrians, depending on State law. To supplement the signing, agencies can also install a STOP or YIELD bar (commonly referred to as "shark's teeth") pavement markings.

In-street signing, such as "STOP Here for Pedestrians" or "YIELD Here to Pedestrians" may be appropriate on roads with two- or three-lane roads where speed limits are 30 miles per hour or less.



Source: FHWA

1 (CMF ID: 4123) Chen, L., C. Chen, and R. Ewing. The Relative Effectiveness of Pedestrian Safety Countermeasures at Urban Intersections - Lessons from a New York City Experience. (2012).  
2 (CMF ID: 436) Elvik, R. and Vaa, T. Handbook of Road Safety Measures. Oxford, United Kingdom, Elsevier, (2004).  
3 (CMF ID: 9017) Zeeger et al. Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, FHWA, (2017).

Transportation agencies should refer to the Manual on Uniform Traffic Control Devices (MUTCD) for information on crosswalk markings (Chapter 3C) and in-street signing (Sections 2B.19 and 2B.20).



## Safety Benefits:

Median with  
Marked Crosswalk

# 46%

reduction in  
pedestrian crashes.<sup>2</sup>

Pedestrian Refuge  
Island

# 56%

reduction in  
pedestrian crashes.<sup>2</sup>

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://highways.dot.gov/safety/proven-safety-countermeasures> and <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-08/techSheetPedRefugeIsland2018.pdf>.

## Medians and Pedestrian Refuge Islands in Urban and Suburban Areas

A **median** is the area between opposing lanes of traffic, excluding turn lanes. Medians in urban and suburban areas can be defined by pavement markings, raised medians, or islands to separate motorized and non-motorized road users.

A **pedestrian refuge island** (or crossing area) is a median with a refuge area that is intended to help protect pedestrians who are crossing a road.

Pedestrian crashes account for approximately 17 percent of all traffic fatalities annually, and 74 percent of these occur at non-intersection locations.<sup>1</sup> For pedestrians to safely cross a roadway, they must estimate vehicle speeds, determine acceptable gaps in traffic based on their walking speed, and predict vehicle paths. Installing a median or pedestrian refuge island can help improve safety by allowing pedestrians to cross one direction of traffic at a time.

Transportation agencies should consider medians or pedestrian refuge islands in curbed sections of urban and suburban multilane

roadways, particularly in areas with a significant mix of pedestrian and vehicle traffic, traffic volumes over 9,000 vehicles per day, and travel speeds 35 mph or greater. Medians/refuge islands should be at least 4-ft wide, but preferably 8 ft for pedestrian comfort. Some example locations that may benefit from medians or pedestrian refuge islands include:

- Mid-block crossings.
- Approaches to multilane intersections.
- Areas near transit stops or other pedestrian-focused sites.



Example of a road with a median and pedestrian refuge islands. Source: City of Charlotte, NC



Median and pedestrian refuge island near a roundabout. Source: [www.pedbikeimages.org](http://www.pedbikeimages.org) / Dan Burden

<sup>1</sup> National Center for Statistics and Analysis. (2020, March). Pedestrians: 2018 data (Traffic Safety Facts. Report No. DOT HS 812 850). National Highway Traffic Safety Administration  
<sup>2</sup> (CMF ID: 175) Desktop Reference for Crash Reduction Factors, FHWA-SA-08-011, September 2008, Table 11.



### Safety Benefits:

# 55%

reduction in pedestrian crashes.<sup>3</sup>

# 29%

reduction in total crashes.<sup>4</sup>

# 15%

reduction in fatal and serious injury crashes.<sup>4</sup>

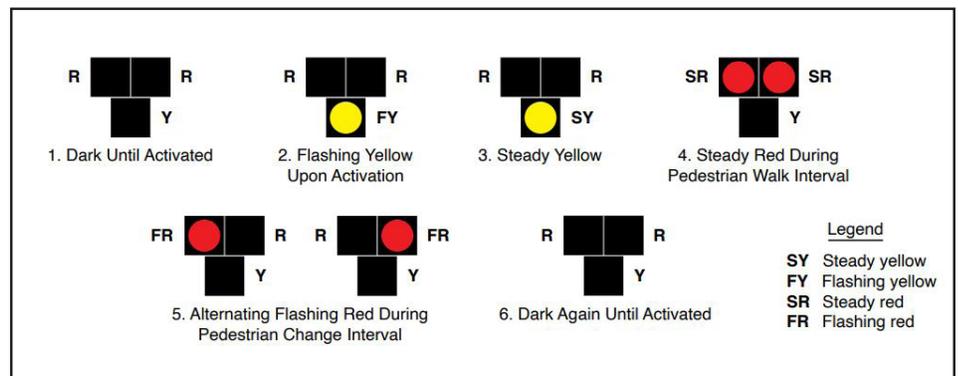


Example of PHBs mounted on a mast arm. Source: FHWA

For more information on this and other FHWA Proven Safety Countermeasures, please visit <https://highways.dot.gov/safety/proven-safety-countermeasures> and <https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwas18064.pdf>.

## Pedestrian Hybrid Beacons

The pedestrian hybrid beacon (PHB) is a traffic control device designed to help pedestrians safely cross higher-speed roadways at midblock crossings and uncontrolled intersections. The beacon head consists of two red lenses above a single yellow lens. The lenses remain “dark” until a pedestrian desiring to cross the street pushes the call button to activate the beacon, which then initiates a yellow to red lighting sequence consisting of flashing and steady lights that directs motorists to slow and come to a stop, and provides the right-of-way to the pedestrian to safely cross the roadway before going dark again.



Sequence for a PHB. Source: MUTCD 2023 Edition, Chapter 4J, FHWA

Nearly 74 percent of pedestrian fatalities occur at non-intersection locations, and vehicle speeds are often a major contributing factor.<sup>1</sup> As a safety strategy to address this pedestrian crash risk, the PHB is an intermediate option between a flashing beacon and a full pedestrian signal because it assigns right of way and provides positive stop control. It also allows motorists to proceed once the pedestrian has cleared their side of the travel lane(s), reducing vehicle delay.

Transportation agencies should refer to the *Manual on Uniform Traffic Control Devices* (MUTCD) for information on the application of PHBs.<sup>2</sup> Transportation agencies should locate pedestrian signals to be accessible for all users.

In general, PHBs are used where it is difficult for pedestrians to cross a roadway, such as when gaps in traffic are not sufficient or speed limits exceed 35 miles per hour. They are very effective at locations where three or more lanes will be crossed or traffic volumes are above 9,000 annual average daily traffic. Installation of a PHB must also include a marked crosswalk and pedestrian countdown signal. If PHBs are not already familiar to a community, agencies should conduct appropriate education and outreach as part of implementation.

<sup>1</sup> National Center for Statistics and Analysis. (2020, March). Pedestrians: 2018 data (Traffic Safety Facts. Report No. DOT HS 812 850). National Highway Traffic Safety Administration

<sup>2</sup> Manual on Uniform Traffic Control Devices, Chapter 4J, FHWA, (2023).

<sup>3</sup> (CMF ID: 9020) Zegeer et al. NCHRP Report 841: Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments. TRB, (2017).

<sup>4</sup> (CMF ID: 2911, 2917) Fitzpatrick, K. and Park. E.S. Safety Effectiveness of the HAWK Pedestrian Crossing Treatment, FHWA-HRT-10-042, (2010).



### Safety Benefits:

RRFBs can reduce crashes up to:

# 47%

for pedestrian crashes.<sup>4</sup>

RRFBs can increase motorist yielding rates up to:

# 98%

(varies by speed limit, number of lanes, crossing distance, and time of day).<sup>3</sup>



RRFBs used at a trail crossing.  
Source: LJB

## Rectangular Rapid Flashing Beacons (RRFB)

A marked crosswalk or pedestrian warning sign can improve safety for pedestrians crossing the road, but at times may not be sufficient for drivers to visibly locate crossing locations and yield to pedestrians. To enhance pedestrian conspicuity and increase driver awareness at uncontrolled, marked crosswalks, transportation agencies can install a pedestrian actuated Rectangular Rapid Flashing Beacon (RRFB) to accompany a pedestrian warning sign. RRFBs consist of two, rectangular-shaped yellow indications, each with a light-emitting diode (LED)-array-based light source.<sup>1</sup> RRFBs flash with an alternating high frequency when activated to enhance conspicuity of pedestrians at the crossing to drivers.

Transportation agencies should refer to the *Manual on Uniform Traffic Control Devices (MUTCD)* for information on the application of RRFBs.<sup>1</sup>

### Applications

The RRFB is applicable to many types of pedestrian crossings but is particularly effective at multilane crossings with speed limits less than 40 miles per hour.<sup>2</sup> Research suggests RRFBs can result in motorist yielding rates as high as 98 percent at marked crosswalks, but varies depending on the location, posted speed limit, pedestrian crossing distance, one- versus two-way road, and the number of travel lanes.<sup>3</sup> RRFBs can also accompany school or trail crossing warning signs.

RRFBs are placed on both sides of a crosswalk below the pedestrian crossing sign and above the diagonal downward arrow plaque pointing at the crossing.<sup>1</sup> The flashing pattern can be activated with pushbuttons or passive (e.g., video or infrared) pedestrian detection, and should be unlit when not activated.

### Considerations

#### Agencies should:<sup>2</sup>

- Install RRFBs in the median rather than the far-side of the roadway if there is a pedestrian refuge or other type of median.
- Use solar-power panels to eliminate the need for a power source.
- Reserve the use of RRFBs for locations with significant pedestrian safety issues, as over-use of RRFB treatments may diminish their effectiveness.

#### Agencies shall not:<sup>2</sup>

- Use RRFBs without the presence of a pedestrian, school or trail crossing warning sign.
- Use RRFBs for crosswalks across approaches controlled by YIELD signs, STOP signs, traffic control signals, or pedestrian hybrid beacons, except for the approach or egress from a roundabout.

For more information on this and other FHWA Proven Safety Countermeasures, please visit

<https://highways.dot.gov/safety/proven-safety-countermeasures> and [https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/techSheet\\_RRFB\\_2018.pdf](https://highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/techSheet_RRFB_2018.pdf).

<sup>1</sup> Manual on Uniform Traffic Control Devices (MUTCD), Chapter 4L. FHWA, (2023).

<sup>2</sup> "Rectangular Rapid Flash Beacon" in PEDSAFE: Pedestrian Safety Guide and Countermeasure Selection System. FHWA, (2013).

<sup>3</sup> Fitzpatrick et al. "Will You Stop for Me? Roadway Design and Traffic Control Device Influences on Drivers Yielding to Pedestrians in a Crosswalk with a Rectangular Rapid-Flashing Beacon." Report No. TTI-CTS-0010. Texas A&M Transportation Institute, (2016).

<sup>4</sup> (CMF ID: 9024) NCHRP Research Report 841 Development of Crash Modification Factors for Uncontrolled Pedestrian Crossing Treatments, (2017).

# APPENDIX B

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
CONCRETE CURB, GUTTER, & SIDEWALK - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$40,000	\$40,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$5,000	\$5,000
3	EARTHWORK / GRADING	CY	150	\$150	\$22,500
4	CONCRETE FLATWORK (4"/6")	SF	31,680	\$15	\$475,200
5	VERTICAL CURB & GUTTER	LF	5,280	\$40.00	\$211,200
6	SIGNAGE & MARKERS	LS	0	\$0	\$0
7	EROSION CONTROL	LS	1	\$5,000	\$5,000
8	TRAFFIC CONTROL	LS	1	\$10,000	\$10,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$768,900</b>
<b>CONTINGENCY (30%)</b>					<b>\$230,670</b>
<b>TOTAL</b>					<b>\$999,570</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
SEPARATED BIKEWAY (CLASS IV) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$30,000	\$30,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$5,000	\$5,000
3	EARTHWORK / GRADING	CY	200	\$150	\$30,000
4	ASPHALT PAVING (4"/8")	SF	52,800	\$10	\$528,000
5	STRIPING	LF	10,560	\$0.75	\$7,920
6	DELINEATORS	LF	5,280	\$12	\$63,360
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	1	\$5,000	\$5,000
9	TRAFFIC CONTROL	LS	1	\$30,000	\$30,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$709,280</b>
<b>CONTINGENCY (30%)</b>					<b>\$212,784</b>
<b>TOTAL</b>					<b>\$922,064</b>

**SEPARATED BIKEWAY (CLASS IV) - PER SIDE, NO WIDENING**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$6,000	\$6,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	0	\$1,000	\$0
3	EARTHWORK / GRADING	CY	0	\$150	\$0
4	ASPHALT PAVING (4"/8")	SF	0	\$10	\$0
5	STRIPING	LF	10,560	\$0.75	\$7,920
6	DELINEATORS	LF	5,280	\$12	\$63,360
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	0	\$5,000	\$0
9	TRAFFIC CONTROL	LS	1	\$5,000	\$5,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$92,280</b>
<b>CONTINGENCY (30%)</b>					<b>\$27,684</b>
<b>TOTAL</b>					<b>\$119,964</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
BIKE ROUTE (WITH 3' ROAD WIDENING) (CLASS III) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$10,000	\$10,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$4,000	\$4,000
3	EARTHWORK / GRADING	CY	100	\$150	\$15,000
4	ASPHALT PAVING (4"/8")	SF	15,840	\$10	\$158,400
5	STRIPING	LF	0	\$0.75	\$0
6	DELINEATORS	LF	0	\$12	\$0
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	1	\$5,000	\$5,000
9	TRAFFIC CONTROL	LS	1	\$10,000	\$10,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$212,400</b>
<b>CONTINGENCY (30%)</b>					<b>\$63,720</b>
<b>TOTAL</b>					<b>\$276,120</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
BIKE ROUTE (SIGNAGE AND MARKERS ONLY) (CLASS III) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$1,000	\$1,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	0	\$4,000	\$0
3	EARTHWORK / GRADING	CY	0	\$150	\$0
4	ASPHALT PAVING (4"/8")	SF	0	\$10	\$0
5	STRIPING	LF	0	\$0.75	\$0
6	DELINEATORS	LF	0	\$12	\$0
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	0	\$3,000	\$0
9	TRAFFIC CONTROL	LS	1	\$5,000	\$5,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$16,000</b>
<b>CONTINGENCY (30%)</b>					<b>\$4,800</b>
<b>TOTAL</b>					<b>\$20,800</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
BIKE LANE (CLASS II) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$22,000	\$22,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$4,000	\$4,000
3	EARTHWORK / GRADING	CY	150	\$150	\$22,500
4	ASPHALT PAVING (4"/8")	SF	36,960	\$10	\$369,600
5	STRIPING	LF	10,560	\$0.75	\$7,920
6	DELINEATORS	LF	0	\$12	\$0
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	1	\$5,000	\$5,000
9	TRAFFIC CONTROL	LS	1	\$20,000	\$20,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$461,020</b>
<b>CONTINGENCY (30%)</b>					<b>\$138,306</b>
<b>TOTAL</b>					<b>\$599,326</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
PAVED SHOULDER (SHARED USE) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$30,000	\$30,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$4,000	\$4,000
3	EARTHWORK / GRADING	CY	200	\$150	\$30,000
4	ASPHALT PAVING (4"/8")	SF	52,800	\$10	\$528,000
5	STRIPING	LF	10,560	\$0.75	\$7,920
6	DELINEATORS	LF	0	\$12	\$0
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	1	\$5,000	\$5,000
9	TRAFFIC CONTROL	LS	1	\$30,000	\$30,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$644,920</b>
<b>CONTINGENCY (30%)</b>					<b>\$193,476</b>
<b>TOTAL</b>					<b>\$838,396</b>

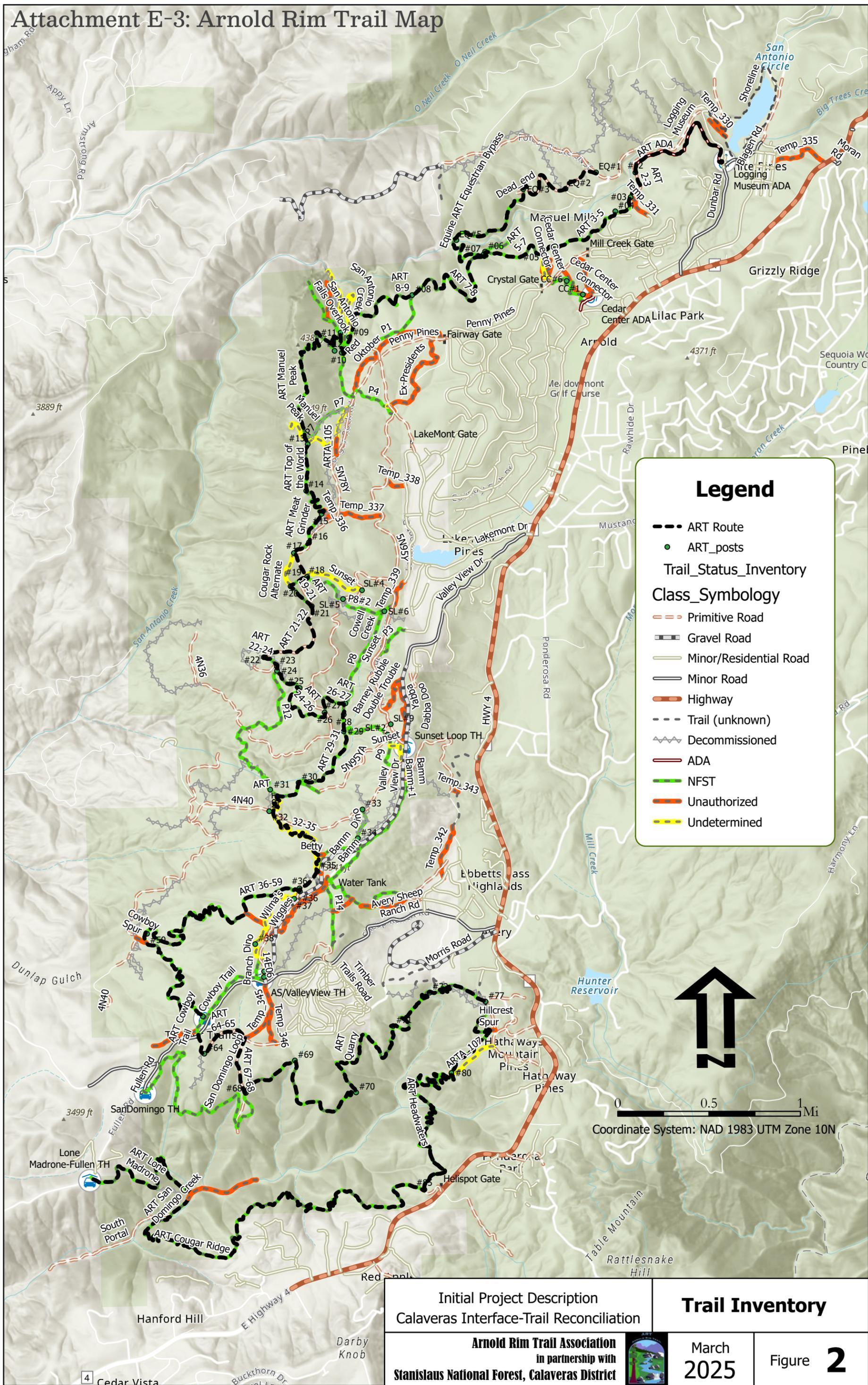
**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
BUFFERED PAVED SHOULDER (SHARED USE) - PER SIDE**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$30,000	\$30,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$4,000	\$4,000
3	EARTHWORK / GRADING	CY	200	\$150	\$30,000
4	ASPHALT PAVING (4"/8")	SF	52,800	\$10	\$528,000
5	STRIPING	LF	10,560	\$0.75	\$7,920
6	RUMBLE STRIPS	LF	5,280	\$1.50	\$7,920
7	SIGNAGE & MARKERS	LS	1	\$10,000	\$10,000
8	EROSION CONTROL	LS	1	\$5,000	\$5,000
9	TRAFFIC CONTROL	LS	1	\$30,000	\$30,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$652,840</b>
<b>CONTINGENCY (30%)</b>					<b>\$195,852</b>
<b>TOTAL</b>					<b>\$848,692</b>

**AT RTP  
CONSTRUCTION COST ESTIMATE  
FOR  
SHARED USE PATH / SIDE PATH (CLASS I)**

<b>ITEM NO.</b>	<b>ITEM</b>	<b>UNIT OF MEASURE</b>	<b>EST. QTY.</b>	<b>UNIT PRICE</b>	<b>ITEM TOTAL</b>
1	MOBILIZATION (5%)	LS	1	\$30,000	\$30,000
2	LOCATE & PROTECT EXISTING UTILITES	LS	1	\$10,000	\$10,000
3	EARTHWORK / GRADING	CY	1,000	\$150	\$150,000
4	ASPHALT PAVING (2"/4")	SF	63,360	\$6	\$380,160
5	STRIPING	LF	5,280	\$0.75	\$3,960
6	DELINEATORS	LF	0	\$12	\$0
7	SIGNAGE & MARKERS	LS	1	\$5,000	\$5,000
8	EROSION CONTROL	LS	1	\$10,000	\$10,000
9	TRAFFIC CONTROL	LS	1	\$10,000	\$10,000
<b>CONSTRUCTION SUBTOTAL</b>					<b>\$599,120</b>
<b>CONTINGENCY (30%)</b>					<b>\$179,736</b>
<b>TOTAL</b>					<b>\$778,856</b>

# Attachment E-3: Arnold Rim Trail Map



# Appendix F - Funding Sources

## Funding Sources

Local, state, and federal funding opportunities exist to assist with planning, design, and construction of active transportation and recreational trail facilities.

Local funding opportunities include:

- **County Service Areas** – County service areas are special taxing areas designed to provide revenue for unincorporated portions of the county. There are five service areas within the county. Funds can be used for road maintenance within the service areas.
- **Traffic Mitigation Fees** – Traffic mitigation fees are one-time charges on new development to pay for required public facilities and to mitigate impacts created by or reasonably related to development. Fees must be clearly related to the costs incurred as a result of the development and cannot be used to correct existing problems or pay for improvements needed for existing development.
- **Regional Impact Mitigation Fee Program (RIM)** – Established in 2004, this regional program funds transportation improvement projects listed in the Road Impact Mitigation Fee Nexus Study (CCOG, Economic & Planning Systems, Inc, 2004). These funds are not generally available to fund on-going transportation maintenance and operations costs. CCOG and the County will be updating this program/planned improvements in the near future.
- **Benefit Basin Revenues** – Benefit Basin programs charge developers fees based on the impact of the development on local roads. The fees pay for improvements needed to mitigate additional traffic generated by the project such as roadway widening, turn lanes, and signals. Benefit Basin programs exist in Copperopolis and Valley Springs.

Tables F-1 and F-2 identify potential state and federal funding opportunities. A brief description is provided for each. Note that funding sources may be limited to certain project types as noted. For further details on each funding program, visit the link provided.

**Table F-1: State Funding Sources**

Source/Program	Agency	Description	Project Types	Website
Active Transportation Program	California Department of Transportation (Caltrans)	Primary statewide funding program for active transportation projects, non-infrastructure programs, and planning. Annual cycle.	Infrastructure, Non-Infrastructure, Planning	<a href="https://catc.ca.gov/programs/active-transportation-program">https://catc.ca.gov/programs/active-transportation-program</a>
Affordable Housing and Sustainable Communities (AHSC) Program	Strategic Growth Council	Program funds can be used for projects which demonstrate reduction in vehicle miles traveled through fewer or shorter vehicle trips or mode shift to transit use, bicycling or walking within areas lacking high quality transit, with an emphasis on providing disadvantaged community benefits.	Infrastructure, Non-Infrastructure	<a href="https://sgc.ca.gov/programs/ahsc/">https://sgc.ca.gov/programs/ahsc/</a>
Clean Mobility Options Program	California Air Resources Board	This pilot program makes \$20 million available for low-emission mobility projects (such as bike sharing and on-demand shuttles) in disadvantaged and low-income communities.	Infrastructure	<a href="http://www.cleanmobilityoptions.org/">http://www.cleanmobilityoptions.org/</a>
Land and Water Conservation Fund	California Department of Parks and Recreation	These grants provide funding for the acquisition or development of land to create new outdoor recreation opportunities for the health and wellness of Californians.	Infrastructure	<a href="https://www.parks.ca.gov/?page_id=21360">https://www.parks.ca.gov/?page_id=21360</a>
Local Streets and Roads (LSR) Program	California Transportation Commission	The purpose of the program is to provide approximately \$1.5 billion per year to cities and counties for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system.	Infrastructure	<a href="https://catc.ca.gov/programs/sb1/local-streets-roads-program">https://catc.ca.gov/programs/sb1/local-streets-roads-program</a>
Local Partnership Program (LPP)	California Transportation Commission	The primary objective of this program is to provide funding to counties, cities, districts, and regional transportation agencies in which voters have approved fees or taxes dedicated solely to transportation improvements or that have imposed fees, including uniform developer fees, dedicated solely to transportation improvements. Funding includes \$200 million per year to improve aging infrastructure, active transportation, and safety.	Infrastructure	<a href="https://catc.ca.gov/programs/sb1/local-partnership-program">https://catc.ca.gov/programs/sb1/local-partnership-program</a>

Source/Program	Agency	Description	Project Types	Website
Local Transportation Fund (LTF)	California Department of Transportation (Caltrans) [Administered by MCLTC]	Limited amounts (2%) from the Local Transportation Fund (LTF), which is part of the Transportation Development Act (TDA) and derived from a ¼ cent of the general sales tax collected statewide, can be used for bicycle and pedestrian facilities. Article 3 funds for planning and construction of pedestrian and bicycle facilities are administered locally through MCLTC and are allocated to member agencies based on population and taxable sales.	Infrastructure	<a href="https://dot.ca.gov/programs/rail-and-mass-transportation/transportation-development-act">https://dot.ca.gov/programs/rail-and-mass-transportation/transportation-development-act</a>
Office of Traffic Safety Grant Program	Office of Traffic Safety	The Program provides funds annually to prevent serious injury and death resulting from motor vehicle crashes. Projects need to be supported by local crash data that demonstrates a need for funding. Safety education and encouragement campaigns for pedestrian and bicycles safety. Applications are due every January.	Non-Infrastructure	<a href="https://www.ots.ca.gov/Grants/">https://www.ots.ca.gov/Grants/</a>
Reconnecting Communities: Highways to Boulevards	Caltrans	In response to the adoption of Streets & Highways Code 104.3, this Pilot Program was launched. Funding is for planning and constructing the conversion of key underutilized highways in the state into multimodal corridors to reconnect communities divided by transportation infrastructure. The historical harm will be addressed through community-based transportation planning, design, demolition, and/or reconstruction of local streets, parks, or other infrastructure.	Infrastructure, Planning	<a href="https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/rc-h2b">https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/rc-h2b</a>
Recreational Trails Program	California Department of Parks and Recreation	The Recreational Trails Program (RTP) provides funds annually to develop non-motorized recreational trails and trails-related facilities.	Infrastructure	<a href="https://www.parks.ca.gov/?page_id=24324">https://www.parks.ca.gov/?page_id=24324</a>
Road Maintenance and Rehabilitation Account & Highway Users Tax Account (RMRA & HUTA)	California State Controlled	A percentage of RMRA funding is apportioned by formula to eligible cities and counties pursuant to Streets and Highways Code section 2032(h) for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system. Revenues from the gas tax deposited into the Highway Users Tax Account (HUTA), apportioned by the SCO to cities and counties.	Infrastructure	<a href="https://www.sco.ca.gov/aud_road_maintenance_sb1.html">https://www.sco.ca.gov/aud_road_maintenance_sb1.html</a>
Solutions for Congested Corridors Program (SCCP)	California Transportation Commission	The program provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. This statewide, competitive program makes \$250 million available annually for projects that implement specific transportation performance improvements and are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement.	Infrastructure	<a href="https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program">https://catc.ca.gov/programs/sb1/solutions-for-congested-corridors-program</a>
State Transportation Improvement Program (STIP)	California Transportation Commission	The STIP is the biennial five-year plan adopted by the CTC for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. As the Metropolitan Planning Organization, local agencies should work through MCLTC to nominate projects for inclusion in the STIP.	Infrastructure	<a href="https://catc.ca.gov/programs/state-transportation-improvement-program">https://catc.ca.gov/programs/state-transportation-improvement-program</a>

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Source/Program	Agency	Description	Project Types	Website
Sustainable Transportation Planning Grants	Caltrans Division of Transportation Planning	The program encourages local and regional planning that furthers state goals, including the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission.	Planning	<a href="https://dot.ca.gov/programs/transportation-planning/regional-planning/sustainable-transportation-planning-grants">https://dot.ca.gov/programs/transportation-planning/regional-planning/sustainable-transportation-planning-grants</a>
Sustainable Transportation Equity Project (STEP)	California Air Resources Board	The project funds clean transportation and supporting projects that increase transportation equity by addressing community-identified transportation needs and increasing access to key destinations and services without increasing GHG emission and vehicle miles traveled. STEP funds active transportation infrastructure, zero-emission buses, and public transit subsidies.	Infrastructure, Non-Infrastructure, Planning	<a href="https://ww2.arb.ca.gov/resources/factsheets/sustainable-transportation-equity-project">https://ww2.arb.ca.gov/resources/factsheets/sustainable-transportation-equity-project</a>
Transformative Climate Communities (TCC) Program	Strategic Growth Council and Department of Conservation	The program funds community-led development and infrastructure projects that achieve major environmental, health, and economic benefits in California's most disadvantaged communities. TCC is one of many California Climate Investments programs.	Infrastructure	<a href="http://www.sgc.ca.gov/programs/tcc/">http://www.sgc.ca.gov/programs/tcc/</a>
Urban Greening Program	California Natural Resources Agency	The program supports the development of green infrastructure projects that reduce GHG emissions and provide multiple benefits. Proposed projects can include tree planting, and construction of bicycle paths, bicycle lanes, or pedestrian facilities to connect important destinations.	Infrastructure	<a href="https://resources.ca.gov/grants/urban-greening">https://resources.ca.gov/grants/urban-greening</a>

Source: Fehr & Peers, 2025; Caltrans, 2023

**Table F-2: Federal Funding Sources**

Source/Program	Agency	Description	Project Types	Website
Carbon Reduction Program	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA)  [Administered by MCLTC]	The program seeks to reduce transportation emissions through the development of state carbon reduction strategies and by funding projects designed to reduce transportation emissions as established by the Infrastructure Investment and Jobs Act (IIJA), also known as the Bipartisan Infrastructure Law (BIL).	Infrastructure, Non-Infrastructure	<a href="https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crpfm">https://www.fhwa.dot.gov/bipartisan-infrastructure-law/crpfm</a>
Congestion Mitigation and Air Quality Improvement Program (CMAQ)	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA)  [Administered by MCLTC]	The program provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. The program supports surface transportation projects and other related efforts that contribute to air quality improvement and provide congestion relief, including bicycle and pedestrian facilities, shared micromobility projects, diesel engine retrofits, transit improvements, and more.  Federal funds from STBGP and CMAQ programs are allocated to MCLTC. Distribution is allocated either competitively or proportionally according to jurisdiction population.	Infrastructure, Non-Infrastructure	<a href="https://www.fhwa.dot.gov/environment/air_quality/cmaq/">https://www.fhwa.dot.gov/environment/air_quality/cmaq/</a>
Highway Safety Improvement Program (HSIP) Grants	U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA)	The program focuses on roadway safety; projects with documented collision history are typically ranked higher. While this funding source is often used for major roadway improvement projects, installation of traffic signals, and most other cost-intensive projects, funding has routinely been awarded to bicycle and pedestrian projects. Successful projects have included: median refuges and curb extensions, curb, gutter, and sidewalk, paved shoulders, upgraded traffic signals with pedestrian countdown signals, pedestrian-scale lighting, bicycle lane striping, crosswalk striping, and rectangular rapid flashing beacons (RRFB). The Caltrans Division of Local Assistance (DLA) manages California's local agency share of HSIP funds. Solicitation varies from annually to semi-annually.	Infrastructure	<a href="https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program">https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program</a>
Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT)	U.S. Department of Transportation (DOT)	This grant program provides funding to support surface transportation resilience to natural hazards including climate change, sea level rise, flooding, extreme weather events, and other natural disasters through support of planning activities, resilience improvements, and community resilience and evacuation routes. The discretionary program offers two types of awards: planning grants and Competitive Resilience Improvement Grants.	Infrastructure, Planning	<a href="https://www.transportation.gov/rural/grant-toolkit/promoting-resilient-operations-transformative-efficient-and-cost-saving">https://www.transportation.gov/rural/grant-toolkit/promoting-resilient-operations-transformative-efficient-and-cost-saving</a>

Source/Program	Agency	Description	Project Types	Website
Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	U.S. Department of Transportation (DOT)	The discretionary grants help municipalities, Tribal governments, counties, and others complete critical freight and passenger transportation infrastructure projects. Half of the funding will go to projects in rural areas, and at least \$15 million in funding is guaranteed to go towards projects located in Areas of Persistent Poverty or Historically Disadvantaged Communities.	Infrastructure	<a href="https://www.transportation.gov/RAISEgrants">https://www.transportation.gov/RAISEgrants</a>
Rural Surface Transportation Grant Program	U.S. Department of Transportation (DOT)	The Rural Surface Transportation Grant Program supports projects that improve and expand the surface transportation infrastructure in rural areas to increase connectivity, improve the safety and reliability of the movement of people and freight, and generate regional economic growth and improve quality of life.	Infrastructure	<a href="https://www.transportation.gov/grants/rural-surface-transportation-grant">https://www.transportation.gov/grants/rural-surface-transportation-grant</a>
Safe Streets and Roads for All (SS4A)	U.S. Department of Transportation (DOT)	The program funds regional, local, and Tribal initiatives through grants to prevent roadway deaths and serious injuries. The SS4A program supports the U.S. Department of Transportation's National Roadway Safety Strategy and our goal of zero roadway deaths using a Safe System Approach. Funding is available until 2026. Over \$3 billion is still available for future funding rounds.	Infrastructure, Planning	<a href="https://www.transportation.gov/grants/SS4A">https://www.transportation.gov/grants/SS4A</a>
Surface Transportation Block Grant Program (STBGP)	U.S. Department of Transportation (DOT) [Administered by MCLTC]	Federal funding is authorized through the Surface Transportation Block Grant Program (STBGP). The STBGP provides flexible funding that may be used by localities for projects on any federal-aid highway, bridge and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects. STBG promotes flexibility in local transportation decisions and provides flexible funding to best address regional and local transportation needs.  Federal funds from STBGP and CMAQ programs are allocated to MCLTC. Distribution is allocated either competitively or proportionally according to jurisdiction population.	Infrastructure	<a href="https://www.fhwa.dot.gov/specialfunding/stp/">https://www.fhwa.dot.gov/specialfunding/stp/</a>

Source: Fehr & Peers, 2025; Caltrans, 2023.

# Attachment F-1: Additional Funding Sources

## Table 1: Federal Funding Sources

Source	Origin	Funding Uses							
		CIP Development	Maintenance & Operations	Implementation	First & Last Mile	Urban Forestry	Access to Nature	Stormwater Treatment	Culture & History
Land & Water Conservation Fund	U.S. National Park Service/ California Dept. of Parks & Recreation	X					X	X	
Urban Community Forestry Program	U.S. National Park Service	X				X			
Surface Transportation Program (STP)	Federal Highway Administration (FHWA) / Caltrans	X		X	X			X	
Highway Safety Improvement Program (HSIP)	FHWA	X		X	X			X	
Transportation Alternative Program (TAP)	FHWA	X		X	X			X	
Recreational Trails Program	FHWA	X		X	X		X	X	
EPA Brownfields Clean Up and Assessments	U.S. Environmental Protection Agency	X		X	X			X	
Sustainable Communities Planning Grant and Incentive Program	U.S. Department of Housing and Urban Development (HUD)				X				
Urban Revitalization and Livable Communities Act	HUD			X	X				
Community Development Block Grants	HUD	X			X		X		X
ACHIEVE, Communities Putting Prevention to Work, Pioneering Communities	Center for Disease Control and Prevention				X		X		
Urban and Community Forest Program	Department of Agriculture, Forest Service	X		X		X	X	X	
Community Forest and Open Space Conservation	Department of Agriculture, Forest Service	X		X		X	X	X	
Choice Neighborhoods Implementation Grants	HUD, Office of Public and Indian Housing	X		X	X		X	X	
Safe Routes to School, Mini-grants	National Center for Safe Routes to School, Caltrans	X		X	X				
Metropolitan and Statewide and Nonmetropolitan Transportation Planning	Federal Transit Administration (FTA)	X		X	X			X	
Urbanized Area Formula Grants	FTA	X	X		X			X	
Bus and Bus Facilities Formula Grants	FTA	X			X				
Enhanced Mobility of Seniors and Individuals with Disabilities	FTA	X	X		X				
Formula Grants for Rural Areas	FTA	X	X		X				
TOD Planning Pilot Grants	FTA	X	X		X			X	

## Table 2: State Funding Sources

Source	Origin	Funding Uses							
		CIP Development	Maintenance & Operations	Implementation	First & Last Mile	Urban Forestry	Access to Nature	Stormwater Treatment	Culture & History
Land & Water Conservation Fund (LCWF)	California Dept. of Parks & Recreation (DPR)	X			X		X	X	
Statewide Park Program Prop 84 Round 2	DPR	X		X	X				
Recreational Trails Program	DPR	X	X	X	X		X	X	
Proposition 117 - Habitat Conservation	DPR	X		X		X	X	X	
Nature Education Facilities	DPR	X	X				X		X
Watershed Program	DPR	X		X			X	X	
Stormwater Flood Management Prop. 1E	DPR	X		X	X	X	X	X	
Aquatic Center Grants	Department of Boating and Waterways	X							
Community Based Transportation Planning, Environmental Justice and Transit Planning	Caltrans	X			X			X	
Active Transportation Planning Grants (ATP)	Caltrans	X		X	X			X	
Regional Improvement Program	Caltrans	X			X			X	
Safe Routes to School Programs (SR2S)	Caltrans	X			X			X	
Traffic Safety Grants	California Office of Traffic Safety	X		X	X				
Local Partnership Program – Competitive and Formulaic	California Transportation Commission (SB 1)		X	X				X	
Coastal Conservancy Grants	California Coastal Conservancy	X			X	X	X	X	X
Non-point Source Pollution, Watershed Plans, Water Conservation (Props. 13, 40, 50, and 84)	State Water Resources Control Board	X	X			X		X	
Sustainable Communities Planning, Regional SB 375	Strategic Growth Council/ Department of Conservation	X			X	X	X	X	X
Environmental Enhancement and Mitigation (EEMP)	California Natural Resources Agency/Department of Water Resources	X	X		X		X	X	
California River Parkway and Urban Streams Restoration Grant	California Natural Resources Agency/Department of Water Resources	X	X		X		X	X	
Strategic Growth Council Urban Greening Program	California Natural Resources Agency	X		X		X	X	X	
California Cap and Trade Program	Cal EPA, Air Resources Board	X		X	X	X	X		
Urban Forestry Program (Leafing Out, Leading Edge and Green Trees Grants)	California Department of Forestry and Fire Protection (CAL FIRE)	X		X		X			

# Appendix G - Project Resolution

**G-60**

CALAVERAS COUNTY



# Appendix H - Existing Conditions Assessment

**H-62**

CALAVERAS COUNTY

Attachment H-1: Existing Conditions Assessment

# Calaveras County Active Transportation and Recreational Trails Plan - Existing Conditions Assessment

Prepared for:  
Calaveras Council of Governments

September 2024

RS24-4337

FEHR  PEERS

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# 1. Introduction

This existing conditions assessment serves as the first step in developing the Calaveras County Active Transportation and Recreational Trails Plan (ATRTP). A discussion of previous planning efforts relevant to the ATRTP, an overview of the various communities within the County, and an evaluation of the existing active transportation and recreational trails (ATRT) network in Calaveras County are included. The study area is displayed on **Figure 1**.

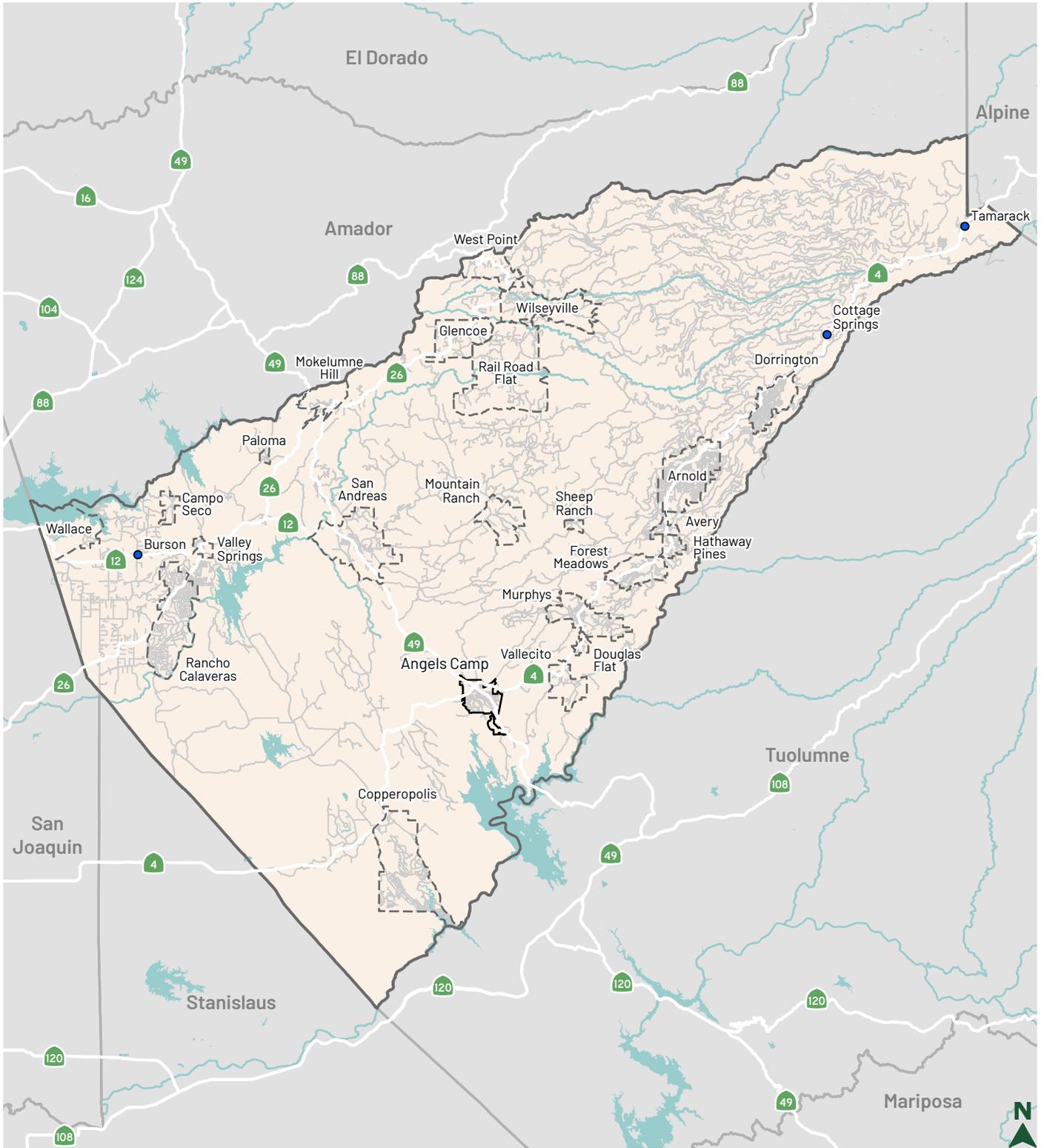
As shown, Calaveras County is comprised of one incorporated city (Angels Camp), and multiple unincorporated community areas. Some community areas are formally designated as a census designated place (CDP) while others are not CDPs but are designated communities in the Calaveras County General Plan. Communities are geographically dispersed throughout the County but there are larger clusters of development which serve the broader adjacent community areas. For example, Valley Springs has grocery, medical, shopping, service, and educational uses which serve residents in the areas of Rancho Calaveras, Burson, Wallace, Campo Seco and western Calaveras County. Likewise, Angels Camp has grocery, medical, shopping, service, and educational uses which serve residents in the areas of Vallecito, Douglas Flat, Murphys, and central Calaveras County.

Although the County is rural in nature, many of these small communities have a variety of land uses that are geographically spaced close together. From a transportation perspective, many trips are short enough that they could be walking or biking trips; however, due to limited bicycle and pedestrian facilities in the County, many people rely solely on vehicles for transportation. The overall intent of the existing conditions assessment is to identify existing opportunities and constraints within the ATRT network, identify key communities and locations in which ATRT facilities would improve access and mobility for people walking and biking, and identify areas in which new trails can be developed and/or existing trails may be expanded to provide more recreational opportunities.

Specifically, the existing conditions assessment is comprised of the following:

- Document Review
- Demographic Review
- Evaluation of Travel Patterns and Key Destinations
- Existing Bicycle, Pedestrian, and Transit Infrastructure
- Safety and Collision Analysis





Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 1



Study Area

## 2. Document Review

In recent years, the Calaveras Council of Governments (CCOG), Calaveras County, and City of Angels Camp have developed or participated in the development of various planning documents relevant to the ATRTP. A brief summary of previous planning efforts and on-going projects is provided below.

### 2015 Calaveras County Regional Bicycle, Pedestrian and Safe Routes to School Master Plan

The Calaveras County Regional Bicycle, Pedestrian, and Safe Routes to School Master Plan (Alta Planning + Design and the Calaveras Council of Governments, 2018) was developed by the CCOG in coordination with member agencies and through public outreach efforts. The plan vision is to create “an improved and enhanced bicycle and pedestrian network within Calaveras County that addresses the mobility needs for people of all ages and abilities, while improving the economic health of the county”. Project goals include:

- **Goal 1:** Provide an efficient network of bikeways and pedestrian facilities throughout Calaveras County.
- **Goal 2:** Improve bicyclist and pedestrian safety.
- **Goal 3:** Ensure the timely funding and construction of the bicycle and pedestrian improvements described in this plan.
- **Goal 4:** Increase the number of commutes, recreation, and utilitarian bicycle and walking trips.
- **Goal 5:** Increase the awareness of bicycling and pedestrian travel through encouragement, education, enforcement and evaluation programs.

The Plan identifies approximately 22 miles of existing bikeways and trails in Calaveras County and Angels Camp. A comprehensive needs assessment, which included community outreach and a community survey, collision analysis, commute patterns analysis, and other important considerations, helped identify bicycle and pedestrian projects that would improve connectivity and access for residents and community members. Approximately 17 miles of recommended bikeway projects in Angels Camp and approximately 237 miles of recommended bikeway projects in the County were identified. Funding opportunities and an implementation plan are also included.

### Regional Transportation Plan

The Calaveras County 2021 Regional Transportation Plan (LSC Transportation Consultants, Inc and Calaveras Council of Governments, 2021) provides a coordinated 20-year vision of the regionally significant transportation improvements and policies needed to efficiently move goods and people within



the region. The following transportation needs and concerns related to non-motorized transportation are documented in the 2021 Plan:

- Widen shoulders on state highways to reduce conflicts between cyclists and motorists. Particular areas of concern brought up as part of public input include:
  - SR 4 from Arnold to Big Trees
  - SR 12 in Valley Springs
  - SR 26 in Valley Springs
  - SR 49 between San Andreas and Angels Camp
- Bicycle lanes or separated bicycle paths have been requested in the following areas:
  - Arnold to Dorrington
  - Hogan Dam Road to SR 26 near Valley Springs
  - Vallecito and Red Hill Road
  - Murphys
- Sidewalks along six-mile road in Murphys
- Gaps in sidewalk and poor bicycle facility connectivity combined with high vehicle speeds in the Angels Camp-SR 49-N. Main Street Corridor
- No shoulders, limited pedestrian facilities, or high vehicle speeds limit the number of potential active transportation users in the Pope Street Corridor in San Andreas despite a relatively short distance between residences and schools
- Safe Routes to School for the Valley Springs Elementary School
- Complete streets improvements throughout the commercial core area in Murphys along SR 4 are needed to address limited bicycle and pedestrian facilities, a high proportion of senior residents and the proximity of an Elementary School
- Limited bicycle and pedestrian facilities combined with heavy truck traffic and projected future growth in all traffic in the SR 49 corridor in San Andreas

While the above concerns were documented, the only funded bicycle/pedestrian related projects identified are in the City of Angels Camp and are documented below<sup>1</sup>.

- SR 49 at Murphys Grade – Roadway overlay, sidewalks, and intersection improvements from City limits to Demarest.
- SR 49 in Angels Camp from Copello Road and 4/49 Intersection – Multimodal improvements as identified in the Angels Camp N Main Street Plan including sidewalks and bike lanes, multi-use paths, crosswalks, HAWK beacon, striping, and median island.
- SR 49 in Angels Camp from SR 4/49 Intersection to Utica Park - Multimodal improvements as identified in the Angels Camp N Main Street Plan including contiguous sidewalks and bike lanes with streetscape features and medians as feasible, bus pullouts, bulb-outs, and enhanced crossings.

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<sup>1</sup> Although not documented as funded in the 2021 Regional Transportation Plan, the San Andreas Pope Street project and portions of the Valey Springs Elementary School Safe Routes to School project have since received funding through either grants or local funding as identified in the County's Capital Improvement Program.



- Angels Camp Trail Phase 1 – Environmental, PE, and ROW bike/ped access from Stelte Park and Greenhorn Creek Subdivision to downtown corridor.
- SR 4/49 and SR 49/Francis Street – Conversion to roundabouts, bridge, median island, sidewalks, bicycle lanes, multiuse path, retaining wall, and crosswalks.

It is also noted that the RTP identifies Caltrans State Highway Operation and Protection Program (SHOPP) projects which are described in greater detail in the 2021 Caltrans District 10 Active Transportation Plan discussion section of this document.

## Calaveras County General Plan

The Calaveras County General Plan (Calaveras County, 2019) serves as the overarching policy document that defines a vision for future change and guides the location and character of development. The Circulation Element specifically provides a framework for decisions concerning the countywide transportation system, which consists of transportation modes, including roads, transit, bike, pedestrian, and aviation from the San Joaquin Valley to the high Sierra Nevada. The following goals and policies identified in the Circulation Element are applicable to the ATRTP.

- **Goal C-1.** A balanced circulation system that provides for the safe and efficient movement of people and goods while maintaining the county's rural and historic character.
- **Policy C 1.1.** Incorporate the concept of complete streets for planning transportation and development, including operations and maintenance, where feasible and suitable to the rural nature of the county and its topography.
- **Policy C 1.3.** Prioritize funding and construction of projects that reduce vehicle miles traveled.
- **Policy C 1.9.** Consider context sensitive designs, i.e., designs appropriate for the unique characteristics of the community in which it is located, for planned circulation improvements, which are intended to preserve the rural character and historic resources of communities in the County. Alternative designs shall be in accordance with standards adopted or accepted by Caltrans or the County intended to provide a safe and efficient transportation system.
- **Policy C 1.13.** Strive to increase roadway connectivity, particularly in Community Areas, to reduce trip lengths, enhance emergency response, encourage opportunities for trips to be made by walking and bicycling.
- **Goal C-5.** A safe, convenient transportation network for pedestrians, cyclists, and users of other non-motorized modes of transportation that is suitable for the rural nature of the county and its topography.
- **Policy C 5.1.** Incorporate safe and convenient bicycle and pedestrian access, where feasible, in all transportation improvement projects.
- **Policy C 5.2.** Bicycle and pedestrian access and circulation shall be designed into new development projects where applicable to enhance internal circulation and interconnectivity with surrounding land uses and to implement any adopted bicycle and/or pedestrian plan.



- **Policy C 5.3.** Safe routes to schools shall be incorporated into new residential projects where appropriate.

In addition to goals and policies in the Circulation Element, the Conservation and Open Space Element includes the following relevant goals and policies:

- **Goal COS-6.** A high-quality system of recreational facilities enhancing the quality of life and health of residents and visitors and contributing to the County's economy.
- **Policy COS 6.3.** Pursue partnerships with public and private entities that make the most of limited funding, share maintenance costs, provide important linkages between recreational facilities and generally expand the quality and quantity of recreational opportunities countywide.
- **Policy COS 6.4.** Facilitate the provision of and access to local and regional trail systems.
- **Policy COS 6.5.** Design recreational facilities to minimize ongoing maintenance costs and reduce potential environmental impacts.

## Promoting Safe Bicycle Travel Opportunities for Bicycle Tourism and Economic Development

The Promoting Safe Bicycle Travel Opportunities for Bicycle Tourism and Economic Development (referred to as the Bike Tourism Plan) was developed in 2019 by CalBike, Fehr & Peers, New Economics & Advisory, and Mark Thomas in collaboration with the following five counties: Tuolumne County, Stanislaus County, San Joaquin County, Calaveras County, and Alpine County. The two primary intentions of the plan are to (1) attract visitors and grow the tourism industry for economic development while (2) simultaneously enhancing the opportunity for local residents to enjoy equitable and safe bicycling for transportation and healthy recreation.

The Bike Tourism Plan indicates that bicycle tourism in Calaveras County (as of 2019) generates approximately \$345,000 annually in rider expenditures captured locally. With additional investment in bicycle infrastructure that would increase tourism by 20-40 percent, rider expenditures could increase to \$414,000-\$552,000.

Several "signature" and "supporting" trail projects are identified in the document. The following are particularly relevant to the ATRTP:

Signature Projects:

- East Bay Municipal Utility District (EBMUD) Pipeline Trail from Stockton to Lake Camanche – While the bulk of this signature project is located in San Joaquin County, the overall intent is to provide a car-free connection from Lodi/Stockton areas to the popular and varied recreational opportunities at Lake Camanche as well as a connection to the existing Mokelumne Coast to Crest Trail.



- Angels Creek Trail from Murphys Grade Road near Angels Camp to New Melones Reservoir - This 5.1-mile trail along Angels Creek would offer active access to wine tasting, cavern excursions, outdoor adventures, and world-famous cultural events like the Jumping Frog Jubilee.

#### Supporting Projects:

- Repaving Dogtown Road to San Domingo Road
- Repaving San Domingo Road from Dogtown Road to Sheep Ranch Road
- Repaving Sheep Ranch Road from San Domingo Road to Main Street in Murphys.
- Establishing a low-stress bicycle route from Murphys Community Park to Ironstone Vineyards along Algiers Street and 6 Mile Road.
- Installing bike amenities at Murphys Main Street, Murphys Community Park, Angels Camp Main Street, Utica Park, and Ironstone Vineyards.

To complement the infrastructural recommendations, this Bike Tourism Plan makes a number of policy and programmatic recommendations. Policy recommendations relate to rumble strips and signage. Programmatic recommendations relate to events and practices.

## 2021 Caltrans District 10 Active Transportation Plan

The 2021 Caltrans District 10 Active Transportation Plan (Caltrans, 2021) was developed to identify locations with bicycle and pedestrian needs and help implement the vision statement and goals in Toward an Active California and the Statewide Bicycle and Pedestrian Plan.

District 10 covers the San Joaquin Valley and Central Sierra counties of Alpine, Amador, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne and has just under nine miles of designated bikeways on its 1,322 highway centerline miles. Most of these facilities are Class II bike lanes and most are in Main Street contexts. No bikeways in the district are considered low stress given the speed and volume of the roadways on which they are present. A companion Story Map<sup>2</sup> to the Plan was created to more easily highlight pedestrian and bicycling issues and opportunities described in the report. The Story Map indicates a bicycle, pedestrian, or bicycle and pedestrian need on essentially every mile of state highway within Calaveras County. Once needs were identified, they were grouped into three Tiers with Tier 1 being the highest priority and Tier 3 being the lowest priority. Despite having locations with a higher density of public and partner identified needs, all intersections and roadway segments in Calaveras County were categorized as Tier 3.

It is noted that although not identified in the Active Transportation Plan, Caltrans currently has the following State Highway Operation and Protection Program (SHOPP) projects ongoing in the County which will result in bicycle and pedestrian improvements along certain corridors:

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<sup>2</sup> Caltrans District 10 Active Transportation Story Map:

<https://storymaps.arcgis.com/stories/4947c77e35c64647b269d513b04ba480>; accessed August 22, 2024



- State Route (SR) 49 Angels Camp Complete Streets Project – Project will install/upgrade curb ramps, sidewalks, driveways, and accessible pedestrian signal to current American with Disabilities Act (ADA) standards along SR 49 within the City of Angels Camp. This project is currently in the Plans, Specifications, & Estimates (PS&E) and Right of Way Phase and has an estimated completion date of Summer 2026.
- SR 49 Mobility Improvement Project – Project will include intersection, roadway, pedestrian, and bicycle improvements along SR 49 and SR 4 in the City of Angels Camp. The project proposed to modify the SR 49 and SR 4 intersection and the SR 49 and Francis Street intersection and includes sidewalks and bike lanes or a shared-use path along SR 49 between Monte Verda Street and Baker Street. The project is currently in the Project Approval & Environmental Document (PA&ED) phase and has an estimated completion date of Summer 2027.
- SR 49 San Andreas Complete Streets Project – Project will install/upgrade curb ramps, sidewalks, and driveways to current ADA standards and install a Class II bike lane on SR 49 in the town of San Andreas. The project is currently in the PA&ED phase and has an estimated completion date of Fall 2025.
- Valley Oaks Intersection Project – Project will construct a traffic signal at the existing side-street stop controlled intersection of SR 12 and the entrance/exit of the Valley Oaks Shopping Center. The project will include high-visibility crosswalks on all legs of the intersection and may include bicycle and pedestrian facilities adjacent to the intersection. The project is currently in the PA&ED phase and has an estimated completion date of Fall 2025.
- Murphys Americans with Disabilities Act (ADA) Upgrades – Project will include sidewalk and ADA upgrades on SR 4 between Jones Street and Pennsylvania Gulch Road in Murphys. Project specific details, current project status, and/or an estimated completion date is not currently publicly posted online on the Caltrans webpage.

## Short-Range Transit Plan 2020-2025

The Short-Range Transit Plan 2020-2025 (Amm Transit Planning and Calaveras Council of Governments, 2021) was prepared with the purpose of guiding the development of public transportation services for Calaveras residents and visitors between 2020 and 2025. The Plan documents existing services and performance and includes a transit needs assessment, a service and fare alternative analysis, a recommended service plan, and an operating and capital financial plan. Origin-destination information as well as demographic information are valuable for the ATRTP. Additionally, bicycle and pedestrian access to existing transit stops will be evaluated.

## Other Recent Planning Efforts

In addition to the above referenced projects, the Calaveras Council of Governments (CCOG) has recently completed the following planning documents relevant to the proposed project:

- San Andreas Pope Street and Safe Routes to School Gap Fill Plan (2020)



- Valley Springs Town Center Connectivity Plan (2020)
- Murphys SR 4 Complete Streets Corridor Plan and Project Prioritization (2019)
- Angels Camp North Main Street/SR 49 Complete Streets Corridor Plan and Copello Road Pedestrian Connector (2020)

Each of the above documents focused on identifying bicycle and pedestrian needs in the respective community. Regionally significant projects included in these plans will be considered in the ATRTP; however, projects may differ slightly given that the ATRTP is a regional document and therefore, is looking at improvements from a countywide perspective. Additionally, the ATRTP is based on more recent data which may result in different recommendations.



## 3. County Demographics

As of 2022, Calaveras County has an estimated population of 45,674<sup>3</sup>. The median age is 52 years old which is higher than the statewide median age of 37. There are approximately 17,000 workers 16 years and over; 56 percent of which live and work in Calaveras County. The median household income is \$77,526 which is lower than the statewide average of \$91,905. Key countywide demographic information such as means of transportation to work, travel time to work, and vehicles available are displayed in **Tables 1 through 3**.

**Table 1: Means of Transportation to Work**

Means of Transportation to Work	Calaveras County (%)	State of California (%)
Drive Alone	73.2	67.1
Carpool	9.7	10.2
Public Transportation (excluding taxicab)	0.4	3.1
Walk	2.1	2.5
Bike	0.2	0.8
Taxicab, motorcycle, or other means	1.0	1.7
Work at home	13.5	14.6

Source: 2022 American Community Survey 5-Year Estimates; Table S0801

**Table 2: Travel Time to Work**

Travel Time to Work	Calaveras County (%)	State of California (%)
Less than 10 minutes	18.0	9.5
10 to 14 minutes	9.6	12.2
15 to 24 minutes	15.2	29.3
25 to 34 minutes	14.9	21.3
35 to 44 minutes	9.7	7.1
45 to 59 minutes	12.9	8.6
60 or more minutes	19.7	11.9
<i>Mean travel time</i>	<i>35.6 minutes</i>	<i>29.2 minutes</i>

Source: 2022 American Community Survey 5-Year Estimates; Table S0802

<sup>3</sup> Unless otherwise specified, all demographic data was derived from the US Census Bureau 2022 American Community Survey 5-year Estimates.



**Table 3: Vehicles Available**

Vehicles Available	Calaveras County (%)	State of California (%)
No vehicle available	2.0	3.3
1 vehicle available	8.4	18.2
2 vehicles available	36.1	37.5
3 or more vehicles available	53.6	41.1

Source: 2022 American Community Survey 5-Year Estimates; Table S0802

Key findings from the above tables indicate that although approximately 73 percent of employed residents drive alone to work, approximately 28 percent have a travel time less than 15 minutes indicating there may be potential to convert these drive-alone trips to walking or biking. Compared to the statewide average, more people in Calaveras County drive alone to work but more people also have a travel time less than 15 minutes. Despite this, the mean travel time in the County is longer than the statewide average, primarily due to a larger percentage of people with a travel time of 60 minutes or more.

## Disadvantaged Community Analysis

Various sources were reviewed to determine if Calaveras County, or specific communities within Calaveras County are considered disadvantaged. This analysis is important for an active transportation plan because 1) it helps to ensure that disadvantaged communities are being included in the planning process and special consideration is being given to addressing the respective community needs and 2) certain programs (including Caltrans Active Transportation Program) allocate funding specifically to serving disadvantaged communities and the County and/or CCOG may be able to secure funding through these programs for future transportation efforts in these community areas.

Communities can be considered disadvantaged for a variety of reasons and various statewide tools and maps have been developed to help jurisdictions more easily determine if one of their communities is considered disadvantaged and would qualify for funding.

The 2025 Active Transportation Program (ATP) Guidelines adopted by the California Transportation Commission (CTC) on March 22, 2024 indicate that under the Justice40 Initiative (created by the Biden-Harris Administration under Executive Order 14008), at least 40 percent of federal funds programmed in the ATP must benefit communities identified as disadvantaged in the federal Climate and Economic Justice Screening Tool (CEJEST) or the United States Department of Transportation (US DOT) Equitable Transportation Community (ETC) Explorer. Both tools were evaluated and a total of five tracts within Calaveras County are considered disadvantaged by at least one of the tools.

Additionally, the ATP Guidelines note that SB 99 specifies that at least 25% of all funds must benefit disadvantaged communities and includes additional criteria and tools that can be evaluated to determine if a community is disadvantaged. Each of these criteria/tools were evaluated for the County and census



tracts that are deemed disadvantaged by at least one of these tools (including the CEJEST and ETC tools) are displayed on **Figure 2** and identified in **Table 4**.

**Table 4: Disadvantaged Community Status**

Census Tract	Median Household Income <sup>1</sup>	CalEnviroScreen 4.0 <sup>2</sup>	Healthy Places Index <sup>3</sup>	CEJEST <sup>4</sup>	ETC <sup>5</sup>
06009000121	X				
06009000122	X				
06009000220					X
06009000301 & 02	X	X	X	X	
06009000400	X		X	X	X
06009000504 <sup>6</sup>					X
06009000506	X				

Notes:

<sup>1</sup> US Census Bureau Table B19013 2022: ACS 5-Year Estimates was reviewed to determine eligibility for this criteria.

<sup>2</sup> [CalEnviroScreen 4.0 Results \(arcgis.com\)](https://arcgis.com) was reviewed to determine eligibility for this criteria.

<sup>3</sup> [California Healthy Places Index](#) was reviewed to determine eligibility for this criteria.

<sup>4</sup> [Explore the map - Climate & Economic Justice Screening Tool \(geoplatform.gov\)](https://geoplatform.gov) was reviewed to determine eligibility for this criteria.

<sup>5</sup> [ETC Explorer - State Results | USDOT Equitable Transportation Community \(ETC\) Explorer \(arcgis.com\)](https://arcgis.com) was reviewed to determine eligibility for this criteria.

<sup>6</sup>06009000504 is excluded from Healthy Places Index and CalEnviroScreen 4.0 due to low population and/or unreliable data.

As displayed, census tracts 06009000301/302 and 06009000400 are considered disadvantaged by multiple of the tools evaluated. The following communities are in these census tracts:

- Glencoe
- Mokelumne Hill
- Mountain Ranch
- Rail Road Flat
- San Andreas
- Sheep Ranch
- West Point
- Wilseyville

Amongst the various tools, these communities are most commonly considered disadvantaged due to income, wildfire risk, health risk/vulnerability, and transportation insecurity including transportation access, transportation cost burden, and traffic safety. There are limited roadways that provide access



in/out of the communities, limited transit, minimal to no walking or biking facilities, and limited access to jobs, services, health facilities, recreational facilities, and educational facilities. As a result, many residents must make longer trips via automobile just to access basic needs (like schools, jobs, grocery stores, etc.). According to the ETC Tool, all three census tracts are low income with a median household income range between approximately \$45,000 and \$54,000 per year, have a high transportation cost burden where between approximately 18 percent and 22 percent of their annual household income is spent on transportation, and a high housing cost burden where between approximately 41 percent and 59 percent of households spend more than 30 percent of their income on housing. For some of these communities, active transportation investments could alleviate some of the transportation cost burden as trips currently being made by automobile could be converted to walking and biking trips. While other communities in these census tracts are too far from key destinations to walk or bike, active transportation or recreational trail investments could be made to improve overall quality of life by giving residents the opportunity to safely walk or bike in their community, rather than having to drive to a safer location.

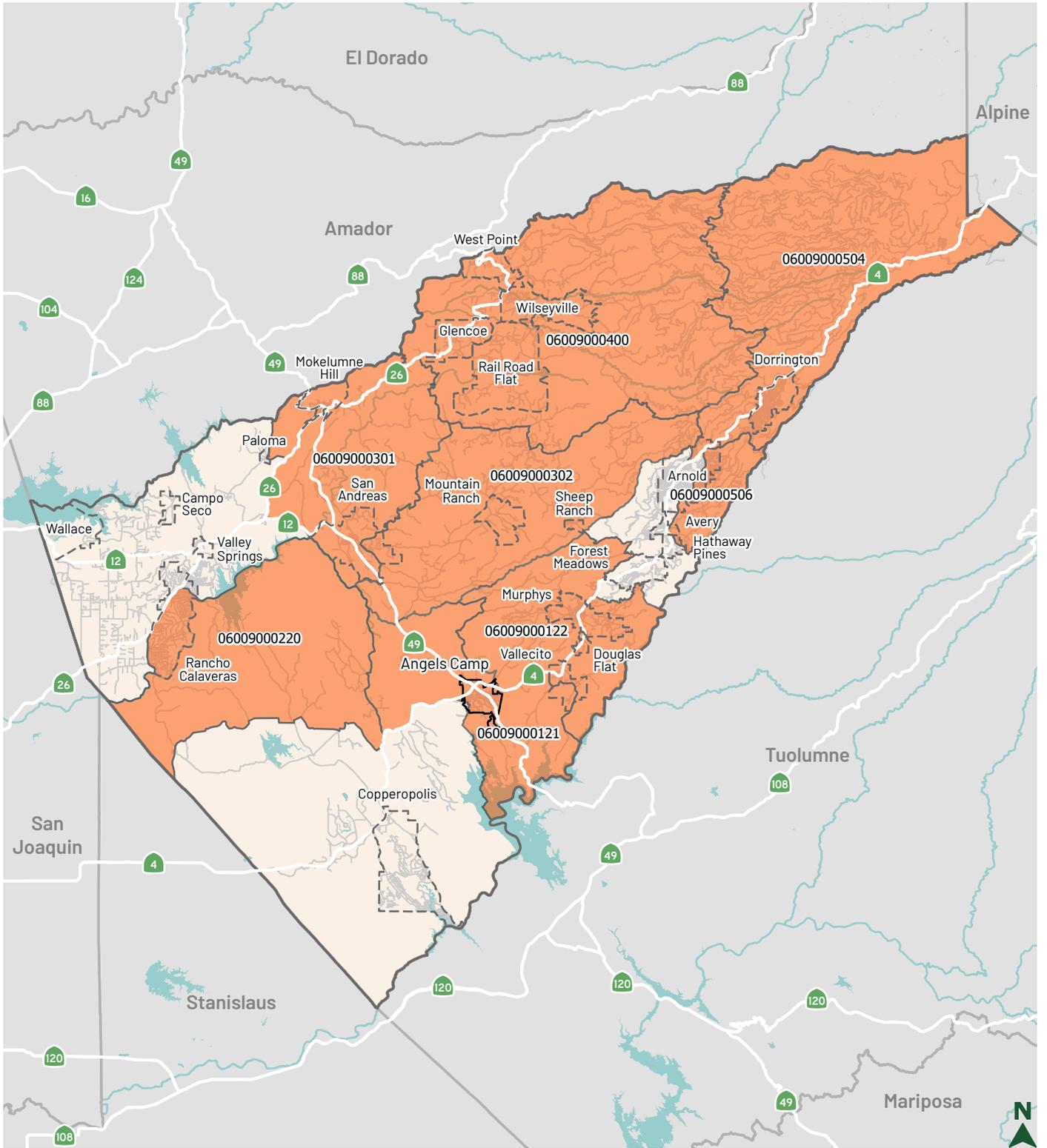
It is also noted that if 75% of public school students in a project area are eligible to receive free or reduced-price meals under the National School Lunch Program for the 2022-2023 school year, they may be eligible to receive disadvantaged community funding so long as the project is within two miles of the school(s) represented by this criteria. Review of the 2022-2023 California Department of Education Free or Reduced-Price Meal (Student Poverty) Data identifies the following schools with over 75% of students eligible to receive free or reduced-price meals<sup>4</sup>:

- Calaveras River Academy located at 150 Old Oak Grove Road, San Andreas.
- Oakendell Community School located at 3585 Hawver Road, San Andreas.
- Learner, Empowered Academic Progress (LEAP) located at 981 Tuolumne Avenue, Angels Camp.

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<sup>4</sup> One additional “school” is identified in the state’s dataset; however, the school name is “nonpublic, nonsectarian schools” and it has one student enrolled so is not likely to be considered eligible and therefore, is not documented.





Disadvantaged Community Census Tract
  City of Angels Camp
  Body of Water

Note: Census Tract is considered disadvantaged based on one or more criteria listed in the 2025 ATP Guidelines.
  Census Designated Place
  Calaveras County Boundary

Figure 2



## Disadvantaged Communities

## 4. Travel Patterns and Key Destinations

Travel patterns and key destinations were identified using a combination of local knowledge, stakeholder and community input, Streetlight Origin-Destination (O-D) data, and for the recreational trail component of the ATRTP, recreational data sources like Strava and All Trails were reviewed. While Streetlight offers a variety of data sources and time periods, anonymized location-based cell phone data between March 1 and April 30, 2022 was used for this analysis. This time period was chosen in part because post-April 2022, Streetlight began utilizing connected vehicle data in lieu of strictly cell phone data. Fehr & Peers compared and discussed the two time periods and data sources with CCOG staff and due to the overall sample size and way data from each time period is processed and reported, the above referenced data and time period was selected. Information presented in the “Local Community Trips” section is based on average Tuesday-Thursday trip data to represent typical weekday travel. Information presented in the “Recreational Trips” section is based on average Monday-Sunday trip data given an influx in recreational trips occur on weekends.

### Local Community Trips

Given that Calaveras County has multiple communities fairly spread out geographically, a primary goal of this analysis was to evaluate origin-destination (O-D) pairings for trips not only internal to the County, but internal to individual communities within the County. This is helpful for an active transportation plan because it can help determine what percentage of trips currently being taken by vehicle have the potential to be converted to walking or biking trips. The County was split into 60 zones and the number and percentage of trips between each zone was then evaluated to determine overall travel patterns. Given that Streetlight represents a sample, the percentage of trips between origins and destinations is reported rather than total number of trips. It is also noted that trips that originate within the County but have a destination outside of the County and trips that originate outside of the County but have a destination within the County are excluded from this analysis. This is because the purpose of this data is to assist in prioritizing active transportation and recreational trail improvements in Calaveras County and identifying which trips may be converted from local vehicular trips to walking/biking trips is a primary goal of this project. For the purposes of this existing conditions analysis, O-D patterns are presented at the community level or broader county area level (for areas with less destinations) and include the following information:

Graphically displayed in **Figures 3 through 14:**

- Percentage of trips that are internal to individual community or broader county area (i.e. they start and stop within the respective community/county area) and percentage of trips that are internal to the County, displayed from the origin of the trip.

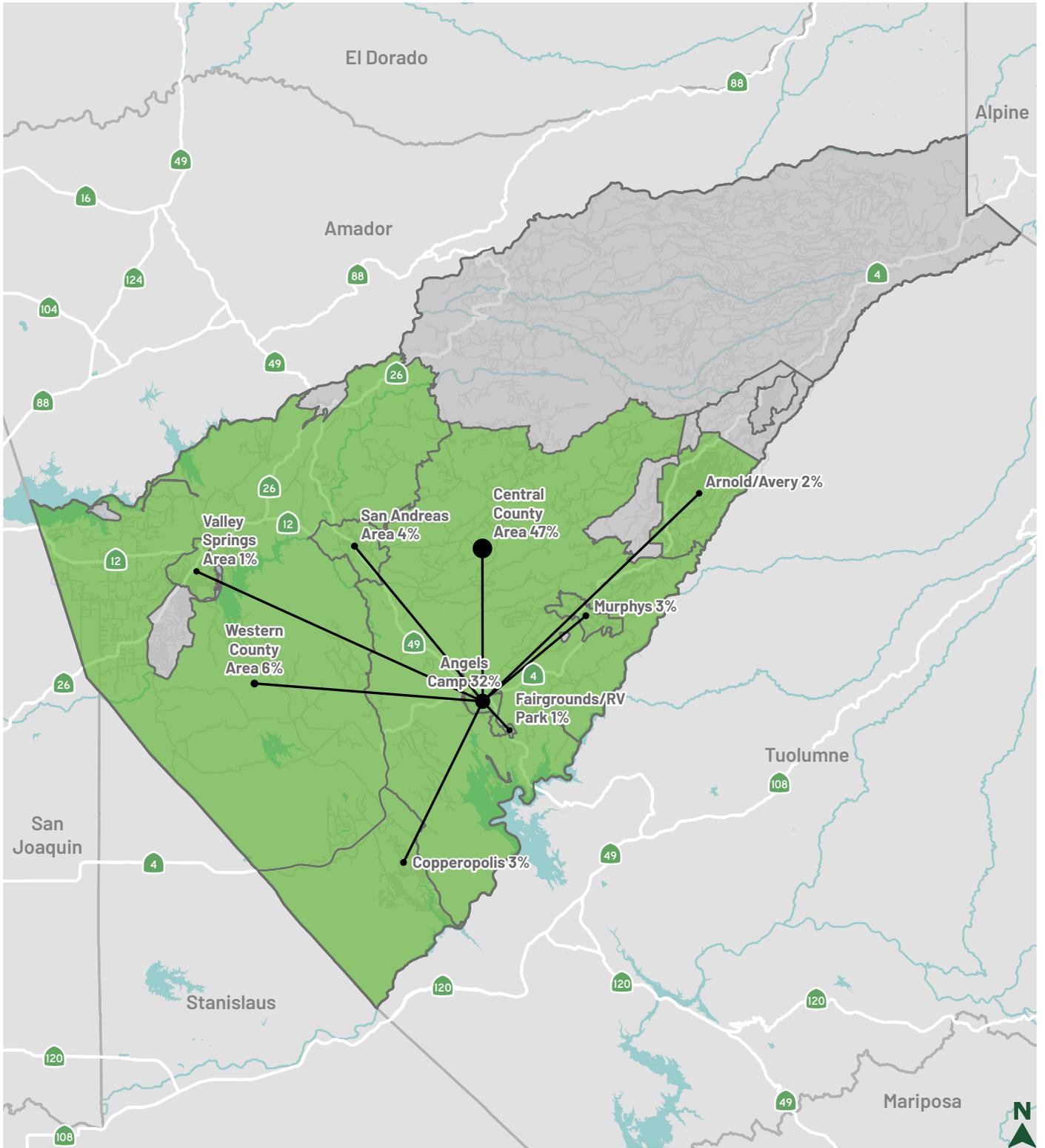


Tabulated in **Tables 5 and 6:**

- Percentage of **internal** trips within a respective community/county area (e.g. start and stop within the same community/area) with a trip length of 0-1 miles and 1-3 miles which have the potential to be converted to walking or biking trips.
- Percentage of trips that end in the respective community (community is the **destination**) with a trip length of 0-1 miles and 1-3 miles which have the potential to be converted to walking or biking trips.

The tabulated data is presented in two ways to display both trip lengths for trips internal to a specific community and trip lengths for all trips traveling to a community. For example, the zones representing Valley Springs and Rancho Calaveras are directly adjacent to each other. Table 5 presents the percentage of trips and the respective trip length data for trips that start and stop within the Valley Springs Area zone. Table 6 presents the percentage of trips and the respective trip length data for trips that end in Valley Springs but do not exclusively originate in Valley Springs. For example, a trip may originate in Rancho Calaveras but have a destination in Valley Springs and due to proximity of these two zones/communities, the trip may be less than three miles and therefore, has potential for conversion. This trip would have been excluded from Table 5 though because it did not originate in Valley Springs.





Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

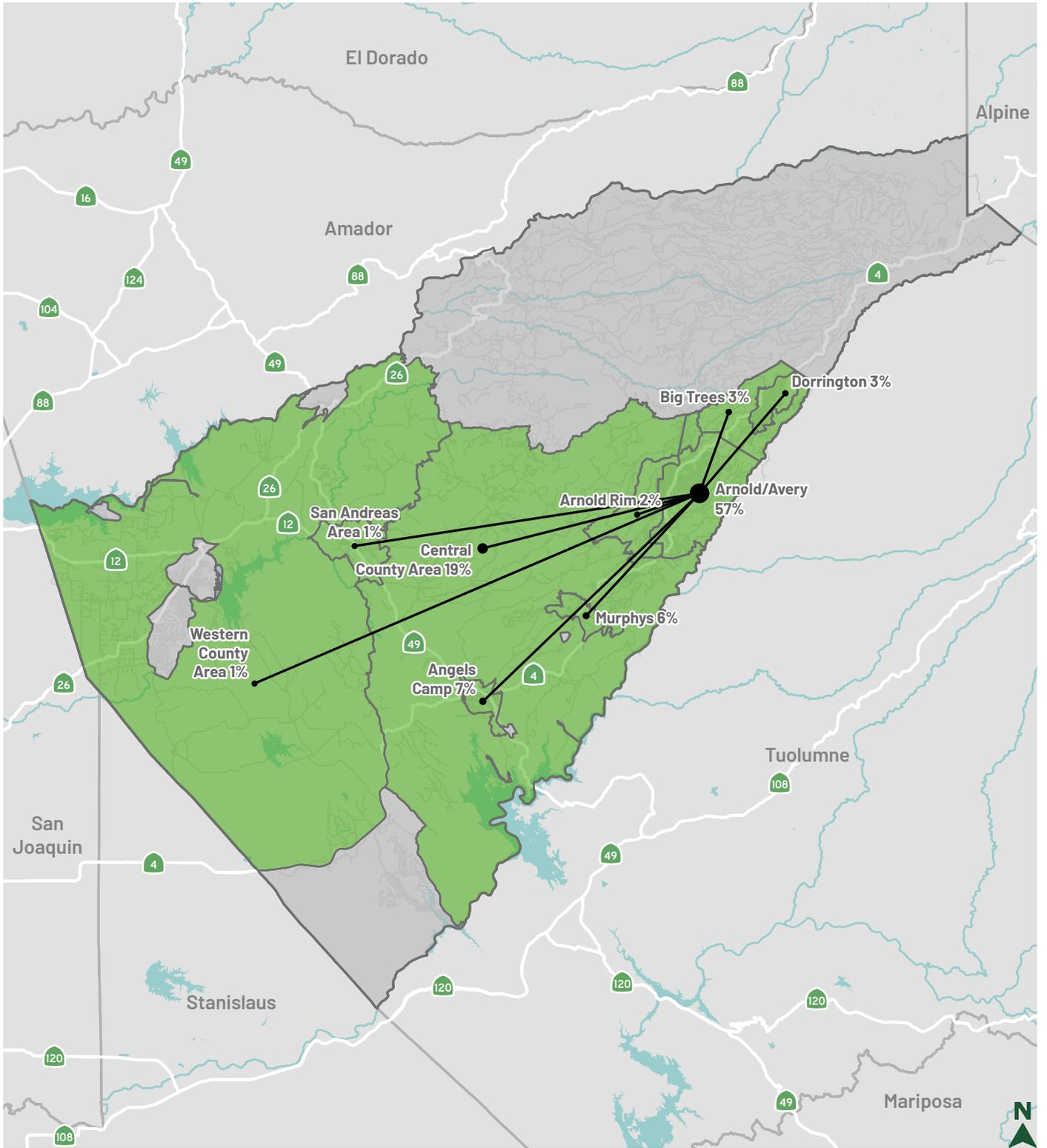
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 3



Angels Camp: Community O-D Analysis



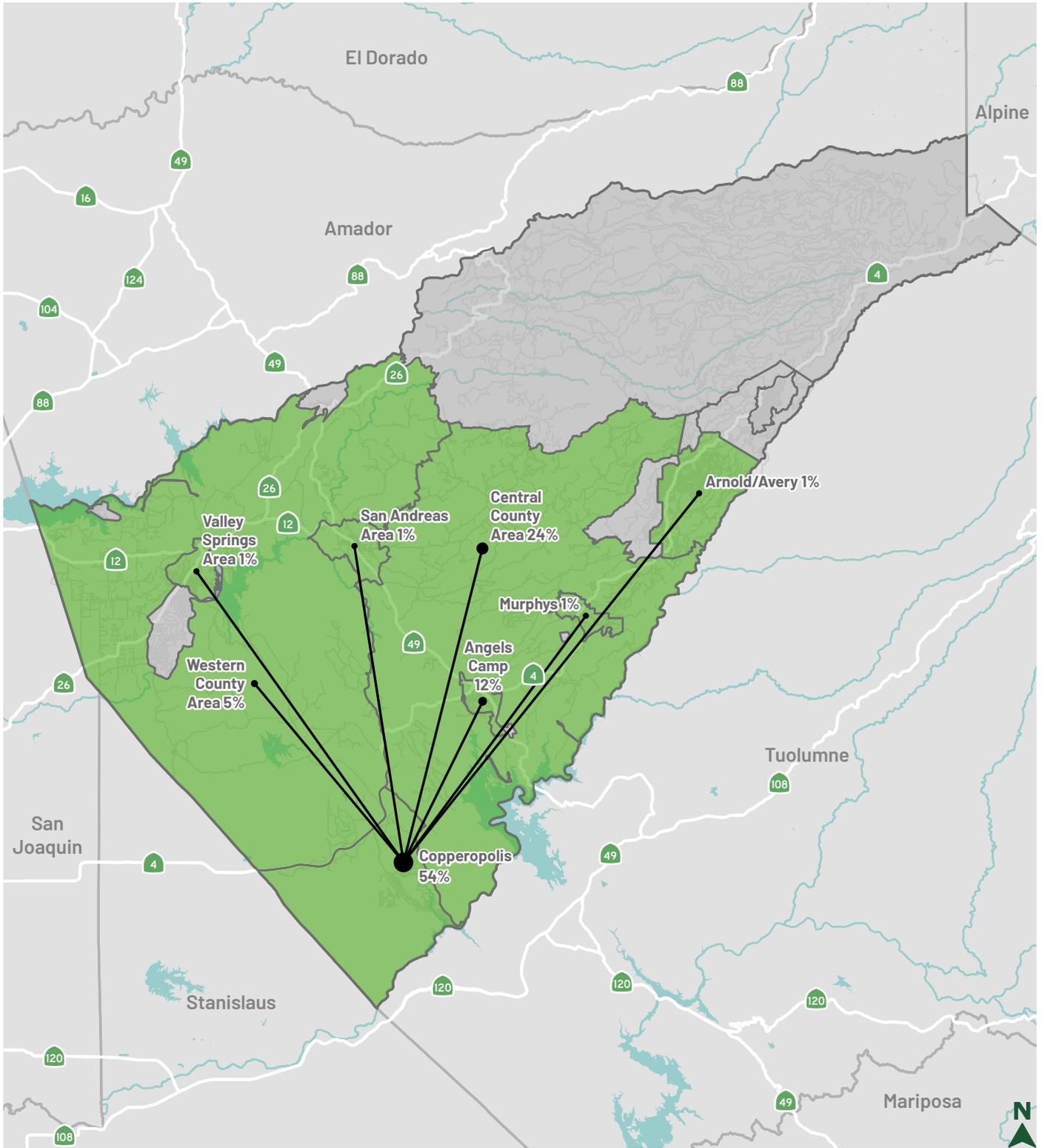
Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water  
 ■ ≥1% Travel to  
 ■ <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 4



Arnold/Avery: Community O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

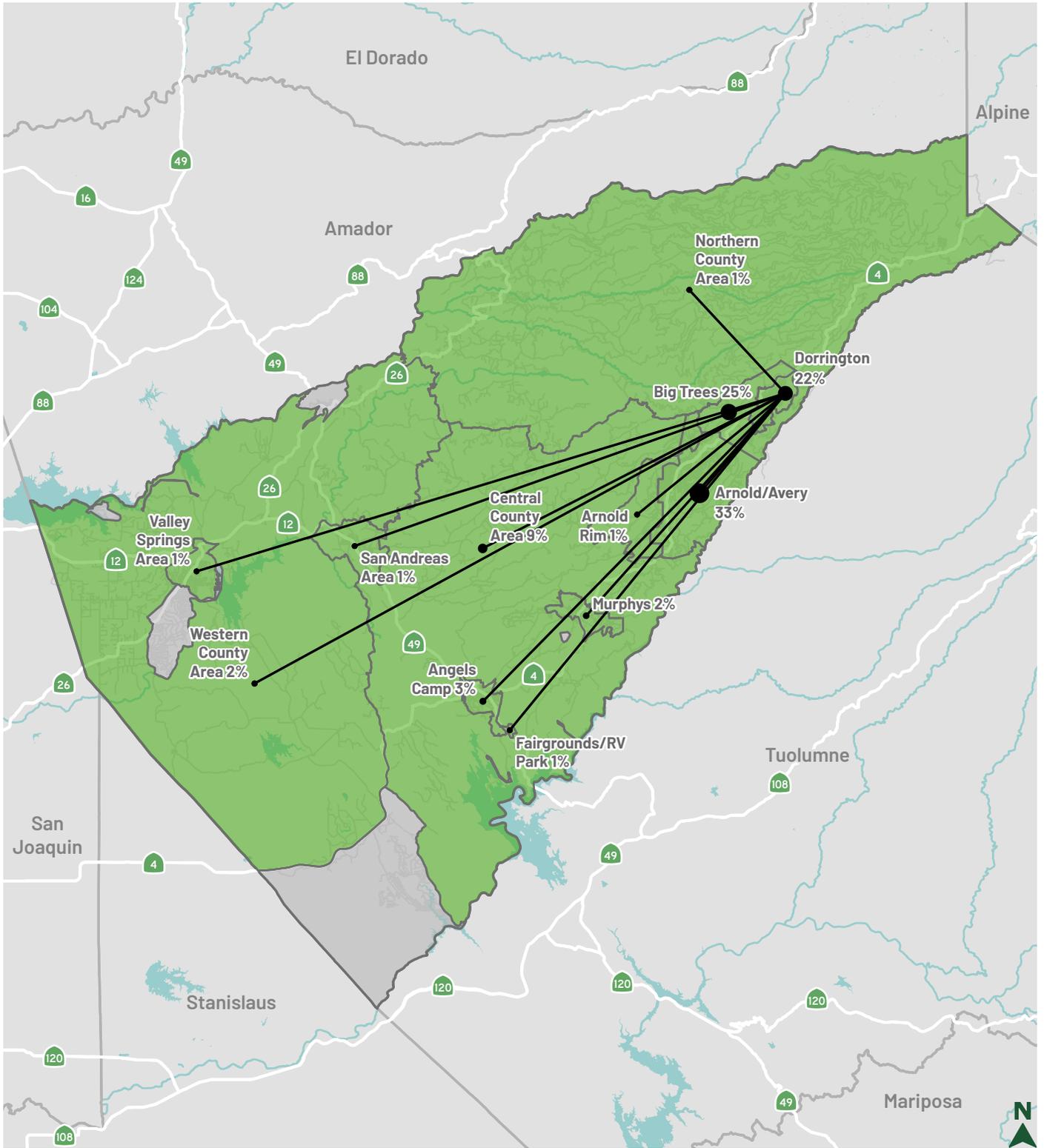
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 5



Copperopolis: Community O-D Analysis



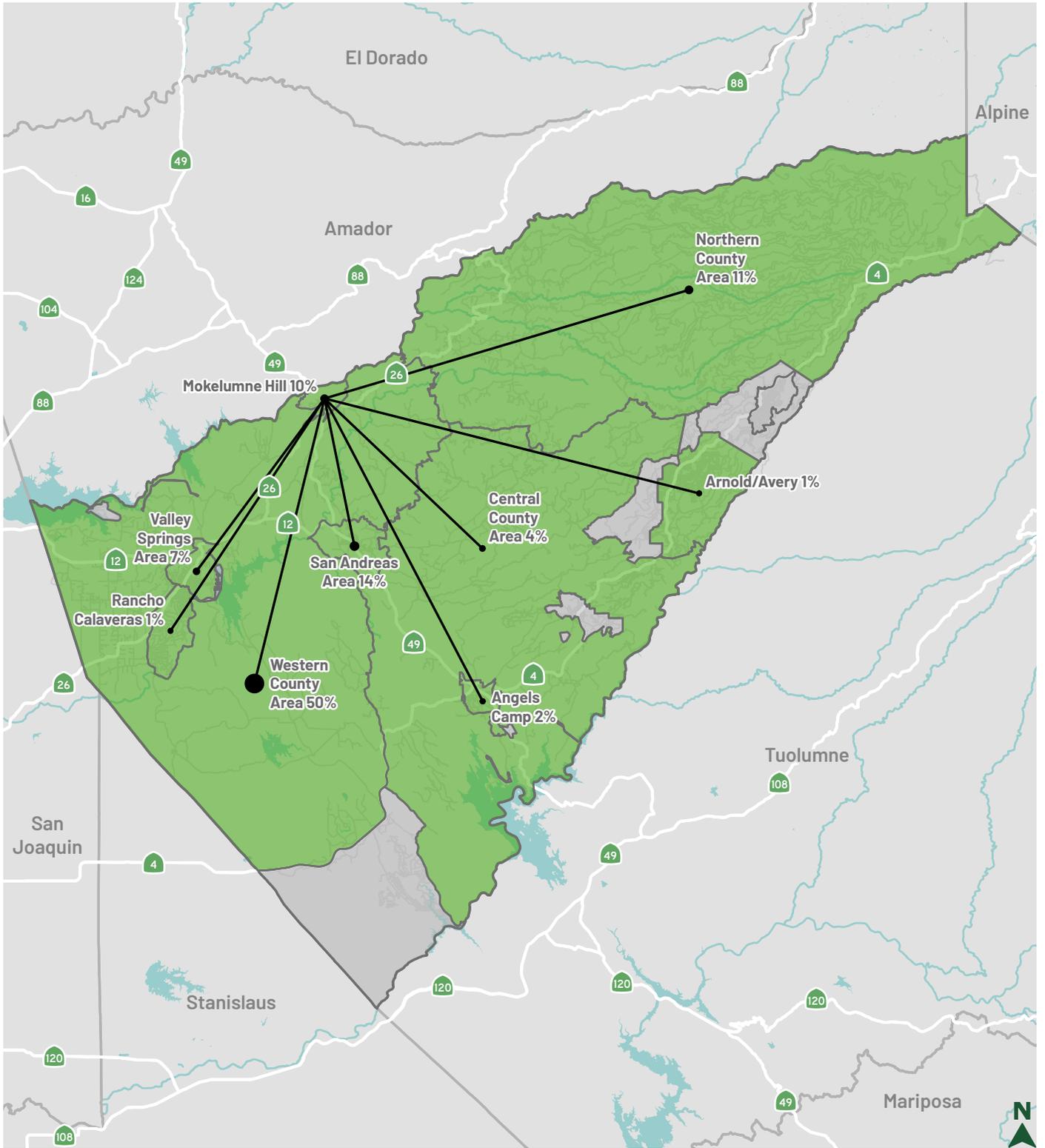
Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 6





Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

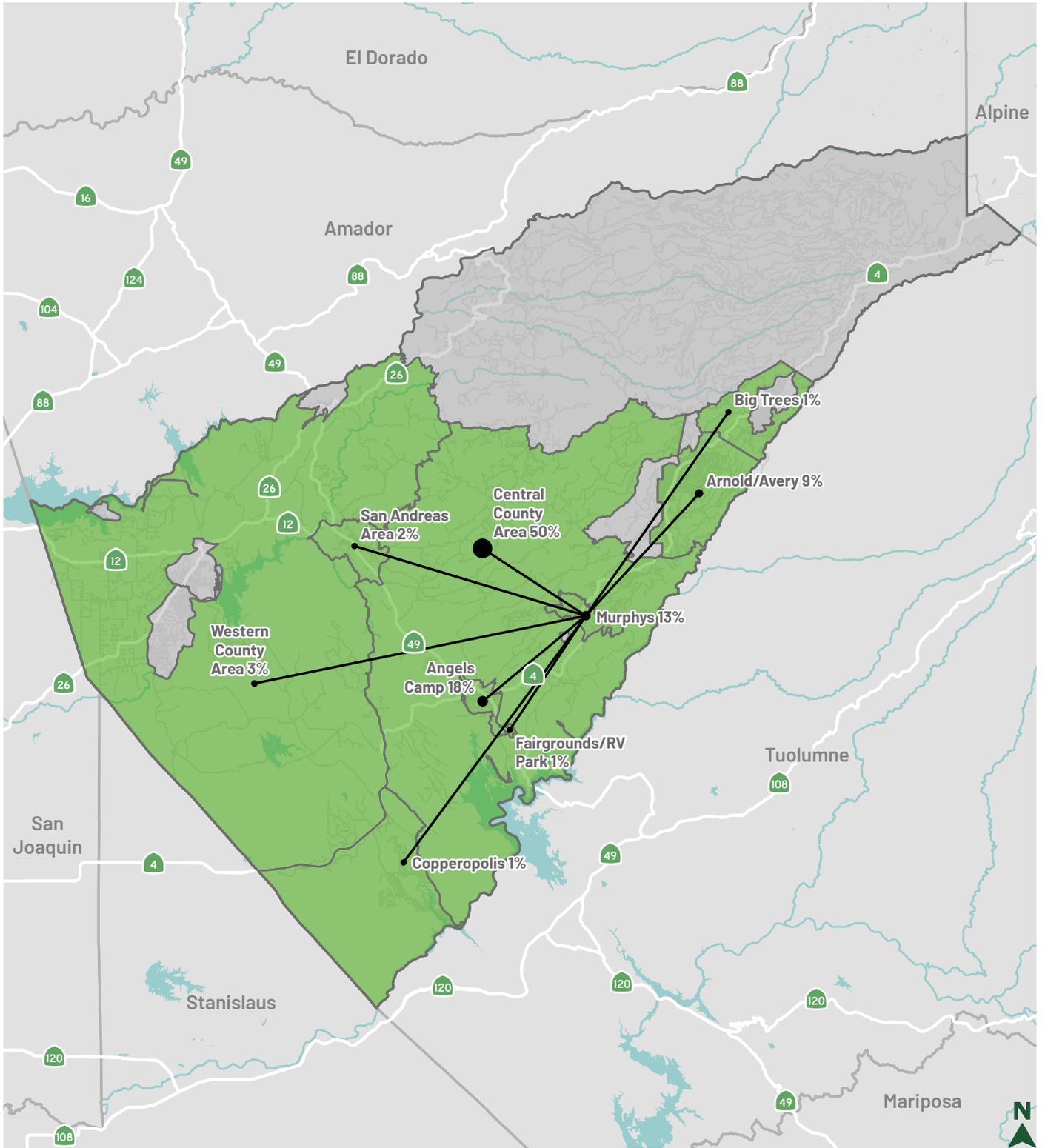
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 7



Mokelumne Hill: Community O-D Analysis

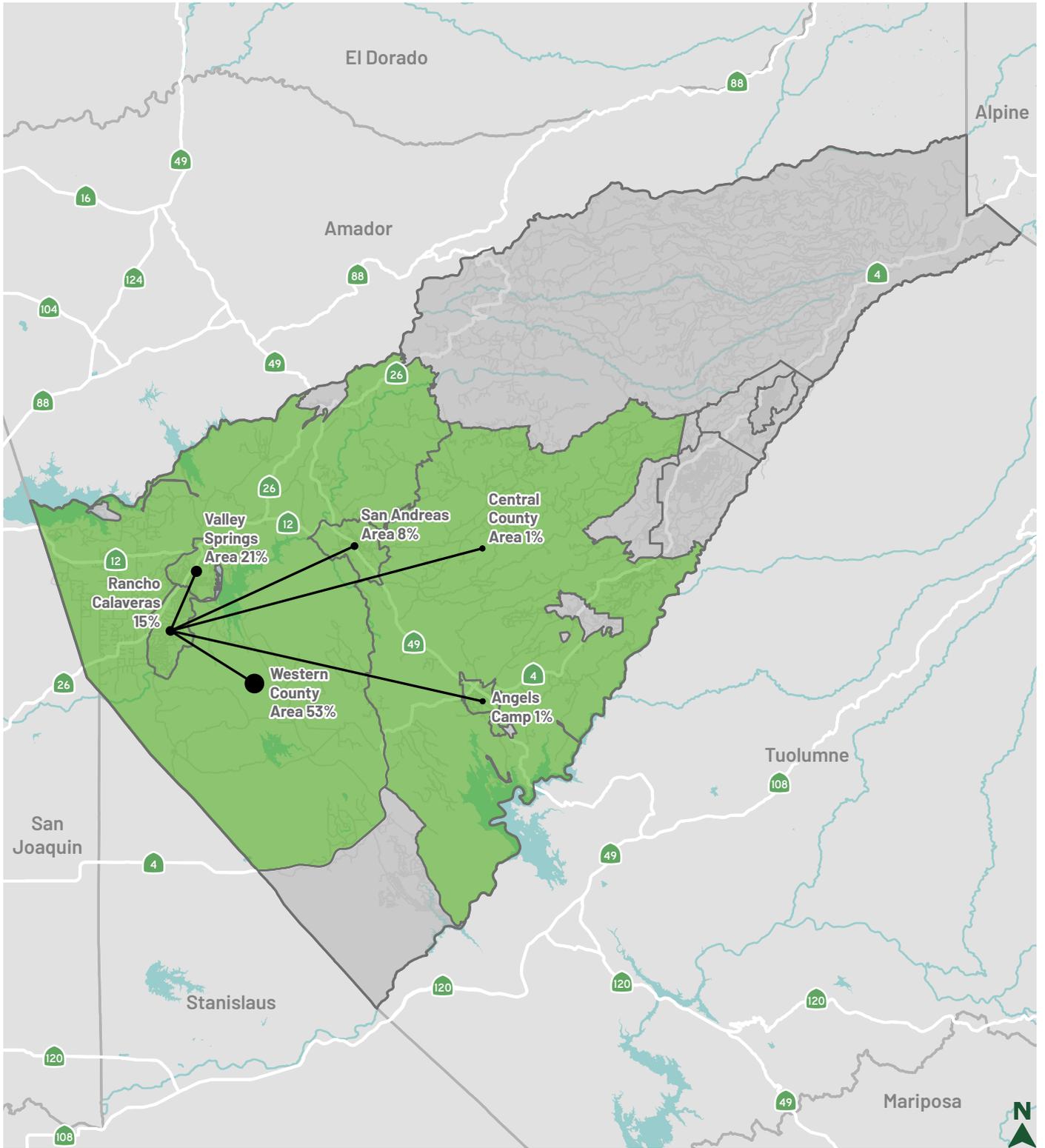


Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water  
 ■ ≥1% Travel to  
 ■ <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 8





Destination Area Boundary    —●— Origin to Destination Trip Percentage    ■ Body of Water

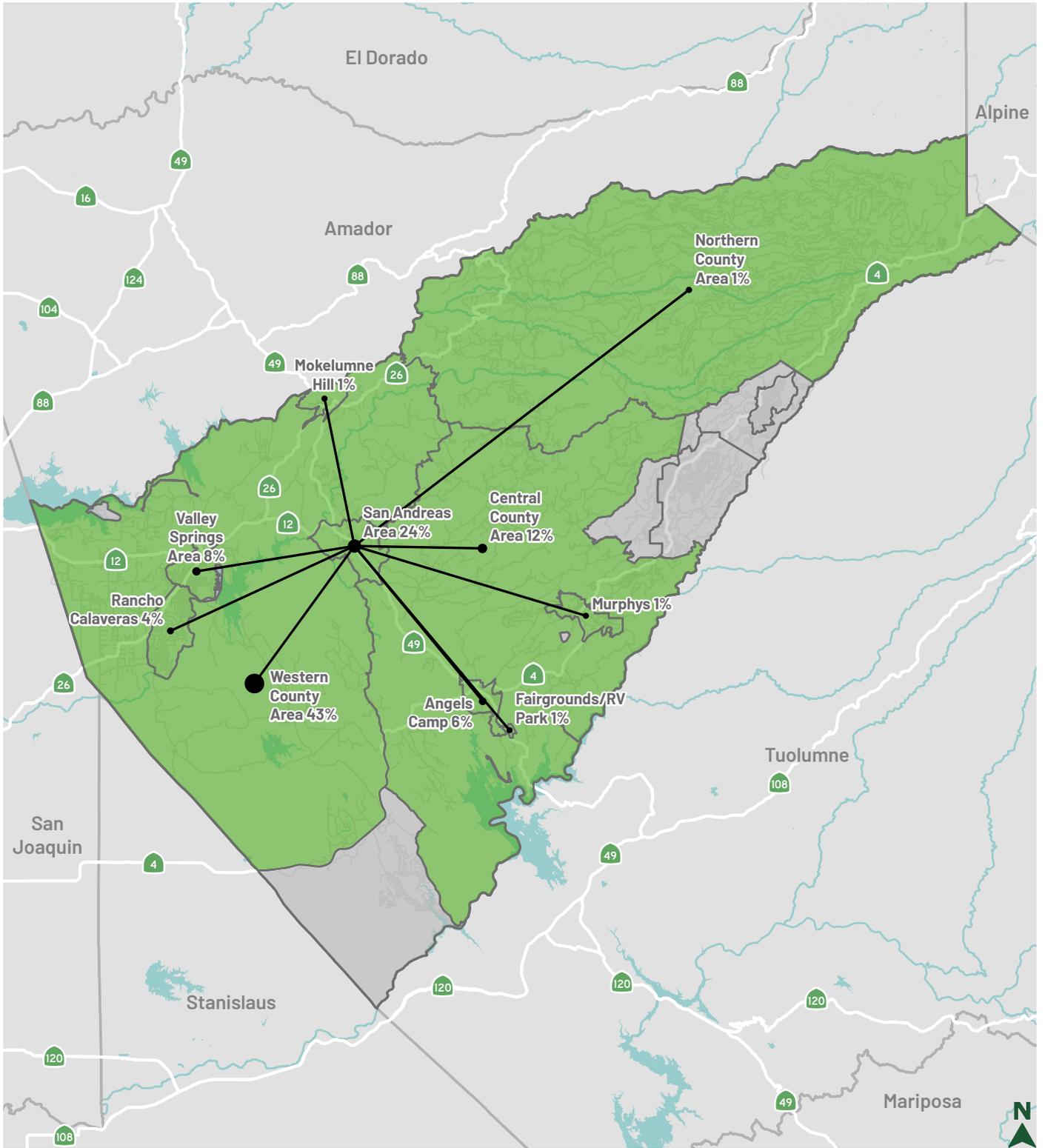
■ ≥1% Travel to  
 ■ <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 9



Rancho Calaveras: Community O-D Analysis



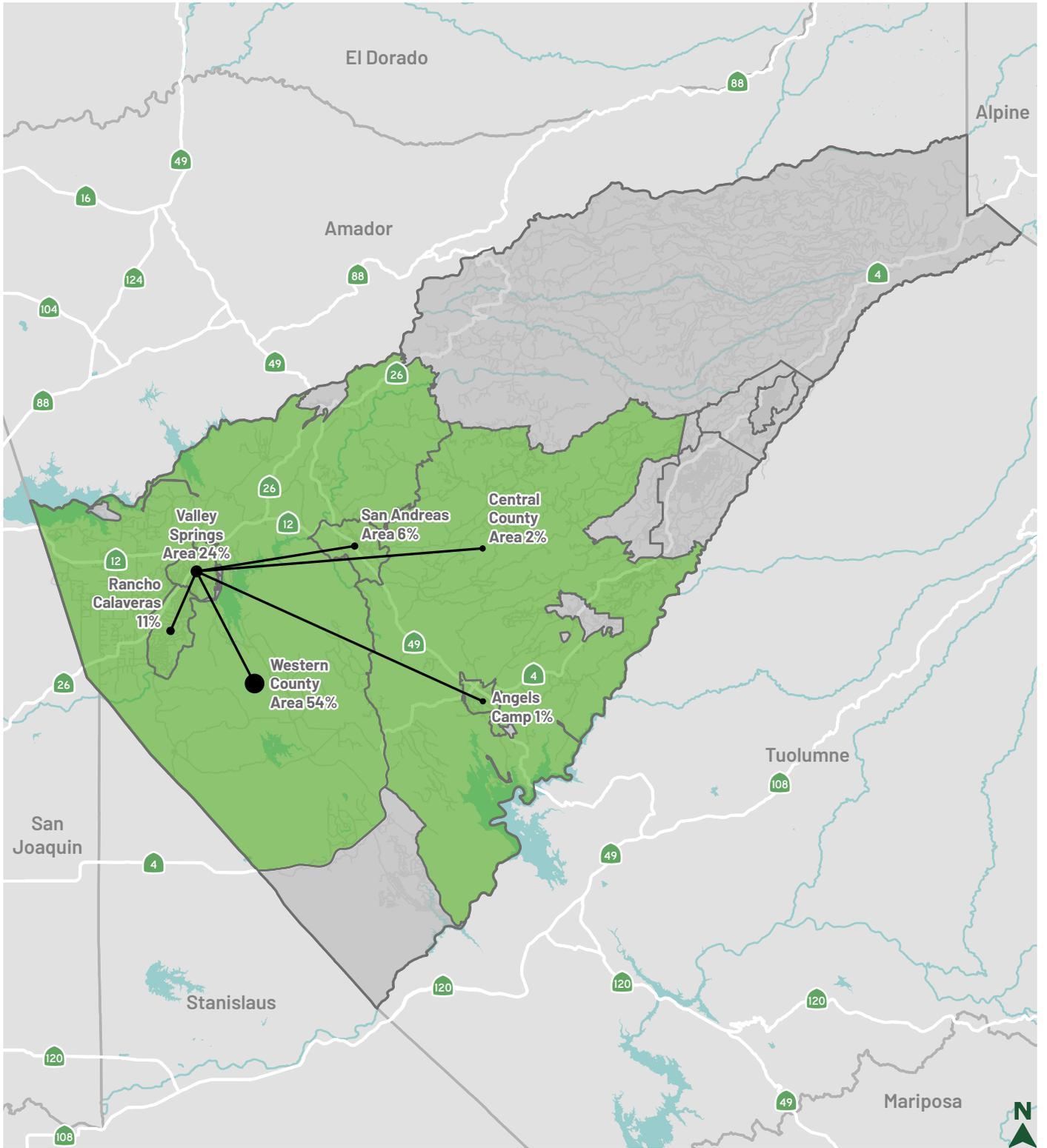
Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 10





Destination Area Boundary    —●— Origin to Destination Trip Percentage    ■ Body of Water

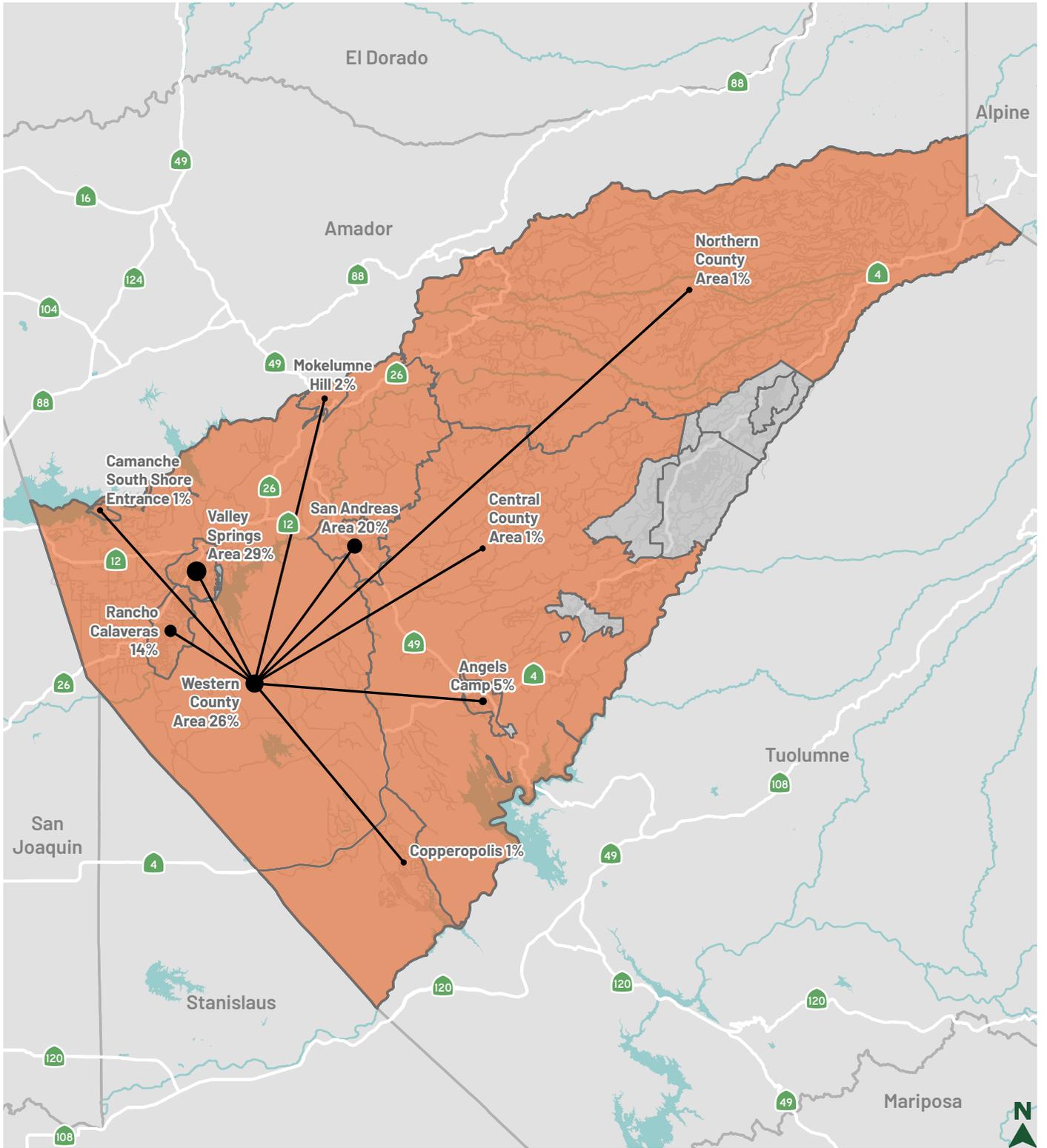
■ ≥1% Travel to  
 ■ <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 11



Valley Springs: Community O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

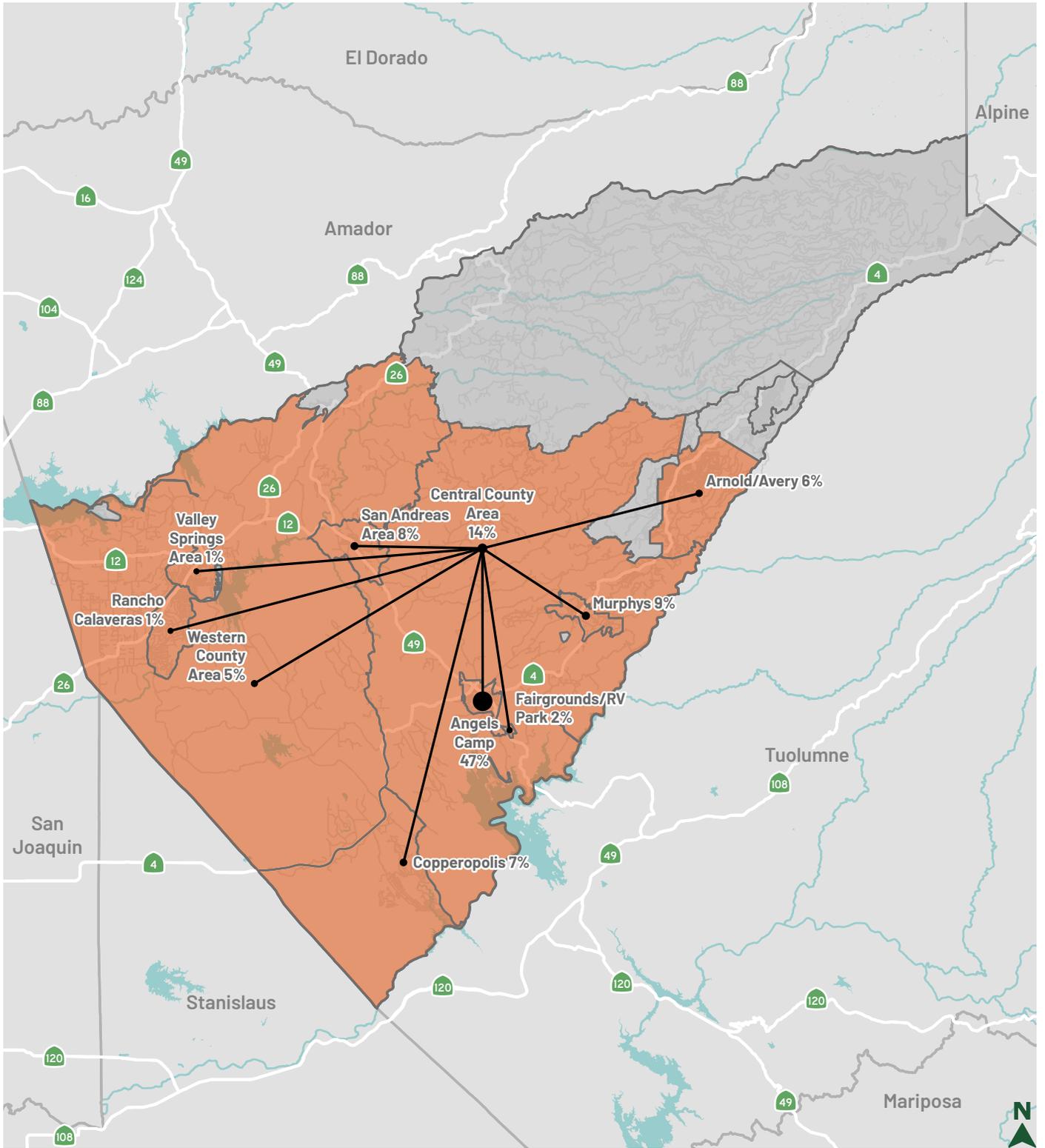
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 12



County Zone West: Broader County O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

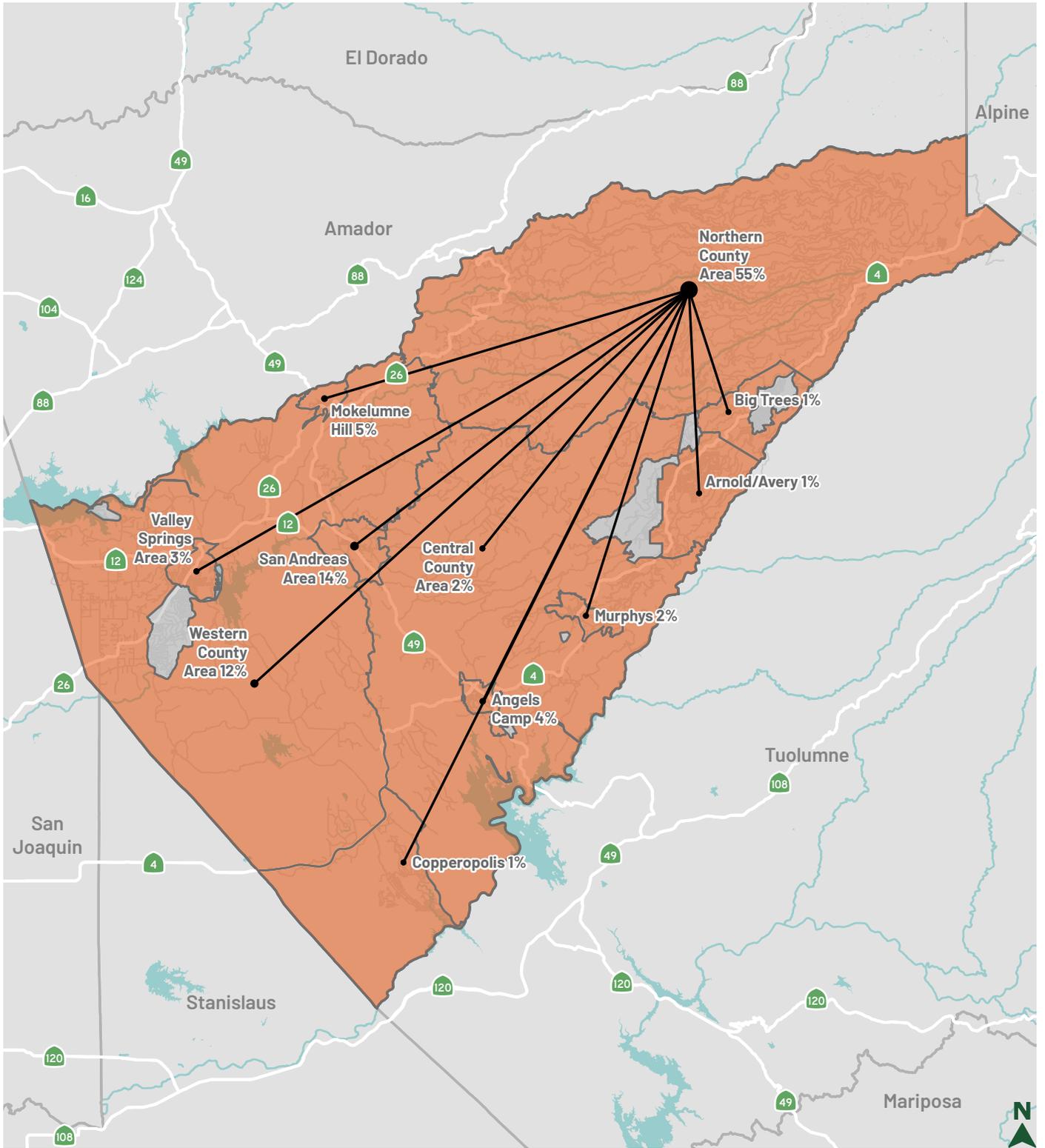
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 13



County Zone Central: Broader County O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical weekday travel patterns based on Streetlight Data

Figure 14



County Zone North: Broader County O-D Analysis

**Table 5: Community Trip Length Information by Internal Trips<sup>1</sup>**

Community	Internalization %	% of Internal Trips 0-1 Miles	% of Internal Trips 1-3 Miles	% of Trips with Walk/Bike Conversion Potential
<b>Angels Camp</b>	<b>32</b>	<b>33</b>	<b>54</b>	<b>87</b>
<b>Arnold/Avery</b>	<b>57</b>	<b>11</b>	<b>46</b>	<b>57</b>
Copperopolis	54	9	19	28
Dorrington	22	19	41	60
<i>Mokelumne Hill</i>	<i>10</i>	<i>49</i>	<i>25</i>	<i>74</i>
<i>Murphys</i>	<i>13</i>	<i>49</i>	<i>36</i>	<i>85</i>
Rancho Calaveras	15	9	33	42
<b>San Andreas</b>	<b>24</b>	<b>38</b>	<b>49</b>	<b>87</b>
<b>Valley Springs</b>	<b>24</b>	<b>15</b>	<b>50</b>	<b>65</b>
County Zone West	26	10	21	31
County Zone Central	14	17	33	50
<b>County Zone North</b>	<b>55</b>	<b>10</b>	<b>43</b>	<b>53</b>

Notes:

**Bold** indicates higher internalization and higher walk/bike conversion potential.

*Italicized* indicates high walk/bike conversion potential but lower internalization.

<sup>1</sup> Trip length information derived from Streetlight data. Percentages shown reflect the percentages of internal trips with a trip length between 0-1 and 1-3 miles. For example, 32% of trips in Angels Camp are internal and of those internal trips, 87% have a trip length of 3 miles or less.

Source: Fehr & Peers, 2024

**Table 6: Community Trip Length Information by Destination<sup>1</sup>**

Community	% of All Trips 0-1 Miles	% of All Trips 1-3 Miles	% of All Trips with Walk/Bike Conversion Potential
<b>Angels Camp</b>	<b>21</b>	<b>37</b>	<b>58</b>
<b>Arnold/Avery</b>	<b>7</b>	<b>27</b>	<b>34</b>
Copperopolis	6	12	18
Dorrington	8	19	27
Mokelumne Hill	10	6	16



**Table 6: Community Trip Length Information by Destination<sup>1</sup>**

Community	% of All Trips 0-1 Miles	% of All Trips 1-3 Miles	% of All Trips with Walk/Bike Conversion Potential
Murphys	14	15	29
Rancho Calaveras	3	17	20
<b>San Andreas</b>	<b>18</b>	<b>24</b>	<b>42</b>
<b>Valley Springs</b>	<b>8</b>	<b>28</b>	<b>36</b>
County Zone West	9	21	30
<b>County Zone Central</b>	<b>16</b>	<b>28</b>	<b>44</b>
County Zone North	5	23	28

Notes:

**Bold** indicates higher internalization and higher walk/bike conversion potential.

Trip length information derived from Streetlight data. Percentages shown reflect the percentages of a trips within the specified distance with the community as the destination reference point. For example, 21% of trips ending in Angels Camp were 0-1 miles in length.

Source: Fehr & Peers, 2024

The data presented above indicates that Angels Camp, Arnold/Avery Area, San Andreas, Valley Springs, Mokelumne Hill, Murphys, and the County Zone Central have the greatest potential for converting vehicular trips into walking or biking trips. It is noted that the communities of Mokelumne Hill and Murphys specifically have a very high percentage of internal trips three miles or less but the total percentage of internal trips within these communities is lower compared to other communities in the county. The lower internalization could be in part caused by more visitor trips to both of these communities as well as less local options for services like health care, grocery stores, etc. resulting in more external travel. Nonetheless, the vast majority of trips that are internal have the potential to be converted to walking or biking trips. County Zone North has higher internalization and a higher percentage of internal trips three miles or less; however, given the lack of clear and easily identifiable destinations within this zone, it may be more challenging to identify where bicycle and pedestrian infrastructure is needed. Copperopolis has a higher total percentage of internal trips, but the percentage of trips that could be converted to walking or biking is lower due to the larger special distribution of this community.

While public outreach is ongoing and responses to the online survey and interactive map are still being reviewed and summarized, early review of the comments indicate strong support for walking and biking facilities in the communities with high conversion potential referenced above. A total of 360 responses were received for the online survey and many commenters specifically reference needed improvements on highways. It has become clear during this existing conditions evaluation that a key constraint and large barrier to walking and biking throughout the County is the fact that for almost all communities, highways are the primary roadways that provide internal access in specific communities as well as external access



between adjacent communities. As previously noted, there are minimal walking and biking facilities on the highways and due to high speeds, high volumes, and little to no shoulder in many locations, residents do not feel comfortable walking or biking even though they are making short trips and have a desire to walk or bike. For example, multiple residents commented (both in person and online) that they have a desire to walk between the residential communities of La Contenta and Gold Creek Estates to Valley Springs. These residential communities are approximately one to two miles from the jobs, shopping, and educational services located in Valley Springs; however, because there are no walking or biking facilities on State Route 26, residents drive.

During the next phase of the project, O-D patterns in communities with high walk/bike conversion potential will be more closely evaluated to identify specific connections needed such as the one described above. Internal community trip O-D data will be reviewed in conjunction with the location of key community destinations, currently identified on the interactive map developed for the project<sup>5</sup>, to identify where potential improvement projects and connections could and should be made. It is noted that a separate zone was developed for each school in the County and trip making characteristics for schools (specifically as it relates to providing more opportunities for kids to walk or bike to school) will also be included in the next phase of the project. Nonetheless, school enrollment information is provided in **Table 7** as enrollment and/or number of students affected by improvements may be a criteria used during the project prioritization phase.

**Table 7: School Enrollment**

School	Location	Grades Served	Total Enrollment <sup>1</sup>
Albert A. Michelson Elementary	Murphys	K-5	213
Avery Middle	Avery	6-8	198
Bret Harte High	Angels Camp	9-12	587
Calaveras County Special Education <sup>2</sup>	Angels Camp	N/A	N/A
Calaveras High	San Andreas	9-12	746
Calaveras River Academy <sup>2</sup>	San Andreas	N/A	N/A
<i>Calaveras Unified Alternative – Sierra Hills Education Center</i>	<i>San Andreas</i>	<i>K-12</i>	<i>111</i>
Copperopolis Elementary	Copperopolis	K-6	203
Gold Strike High	San Andreas	11-12	49

*Table continued next page*

<sup>5</sup> Interactive Map: [https://devapps.fehrandpeers.com/Calaveras\\_County\\_ATRTP\\_Crowdsource\\_Plus/](https://devapps.fehrandpeers.com/Calaveras_County_ATRTP_Crowdsource_Plus/)



**Table 7: School Enrollment (Continued)**

School	Location	Grades Served	Total Enrollment <sup>1</sup>
Hazel Fischer Elementary	Arnold	K-5	176
Jenny Lind Elementary	Valley Springs/Ranch Calaveras	K-5	442
<i>Learners, Empowered Academic Progress (LEAP)</i>	<i>Angels Camp</i>	3-8	9
Mark Twain Elementary	Angels Camp	K-8	518
Mokelumne Hill Elementary	Mokelumne Hill	K-6	171
<i>Mountain Oaks</i>	<i>San Andreas</i>	<i>K-12</i>	<i>402</i>
Oakendell Community <sup>2</sup>	San Andreas	N/A	N/A
San Andreas Elementary	San Andreas	K-7	320
Toyon Middle	Valley Springs	6-8	531
Vallecito Continuation High	Altaville	10-12	46
Vallecito Independent Study (Alternative) <sup>2</sup>	Avery	N/A	N/A
Valley Springs Elementary	Valley Springs	K-5	408
West Point Elementary	West Point	K-6	121

Notes:

*Italicized* indicates school is independent study.

<sup>1</sup> School Enrollment Information derived from each school’s School Accountability Report Card (SARS) for the 2022-2023 School Year.

<sup>2</sup> Calaveras County Special Education, Calaveras River Academy, Oakendell Community, and Vallecito Independent Study (Alternative) schools are identified on the California Department of Education’s website; however, detailed school information was not available.

Source: Fehr & Peers, 2024

## Recreational Trips

As previously noted, a combination of local knowledge, stakeholder and community input, Streetlight Origin-Destination (O-D) data, Strava and All Trails were reviewed to evaluate key recreational destinations and travel patterns in the County. Key recreational trails are displayed in **Figure 15**. Specific zones were drawn for the following key recreational destinations identified:

- Angels Creek Trail Area - Parking Areas (excluding boat parking and ramps)
- Arnold Rim Area
- Big Trees Area



- Calaveras County Fairgrounds
- Camanche Southshore Entrance (unable to exclude boat related trips given this is the only entrance into southshore)
- Ironstone Vineyards
- Lake Hogan Area - River of Skulls, Observation Point, Cameron Trail, and Wrinkle Cove parking areas (excluding boat parking and ramps)
- Eastbay Municipal Utility District (EBMUD) Mokelumne Coast to Crest Area - Cooks Mesa Trailhead and Campo Seco Staging Area
- Natural Bridges

It is noted that Ironstone Vineyards and the Calaveras County Fairgrounds differ from the remaining recreational destinations in that trips to/from these destinations can be heavily dependent on whether an event is occurring while the other destinations are primarily recreational trails. However, given that these facilities are recreational, can generate a substantial number of trips, are used year-round for multiple events, and community members expressed a desire to be able to walk and/or bike to these destinations, they are included in this analysis.

O-D pairings for recreational related trips are displayed in **Figures 16 through 24**. Recreational trip length by destination is displayed in **Table 8**.

**Table 8: Recreational Trip Length Information by Destination<sup>1</sup>**

Recreational Destination	% of All Trips 0-1 Miles	% of All Trips 1-3 Miles	% of All Trips 3-5 Miles	% of All Trips with Walk/Bike Conversion Potential
Angels Creek Trail Area <sup>2</sup>	11	20	18	49
Arnold Rim Area	6	25	13	44
Big Trees Area	6	18	7	31
Calaveras County Fairgrounds	18	20	23	61
Camanche Southshore Entrance	29	23	7	59
EBMUD - Mokelumne Coast to Crest Area	4	0	34	38
Ironstone	1	32	2	35
Lake Hogan Area	2	18	24	44
Natural Bridges <sup>2</sup>	11	0	7	18



Notes:

<sup>1</sup>Trip length information derived from Streetlight data. Percentages shown reflect the percentages of a trips within the specified distance with the community as the destination reference point.

<sup>2</sup>Very low sample size may be skewing trip length information.

Source: Fehr & Peers, 2024

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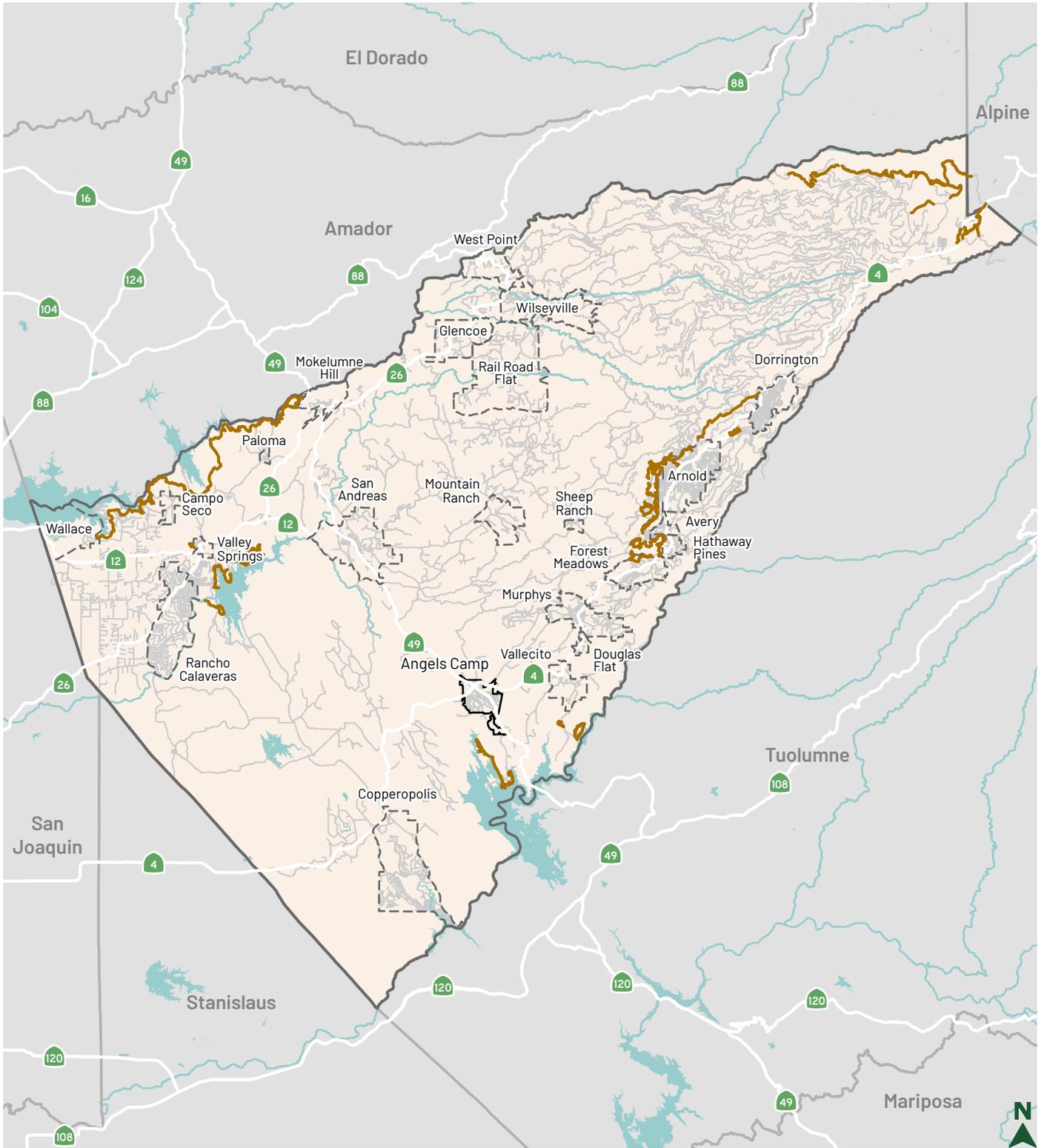
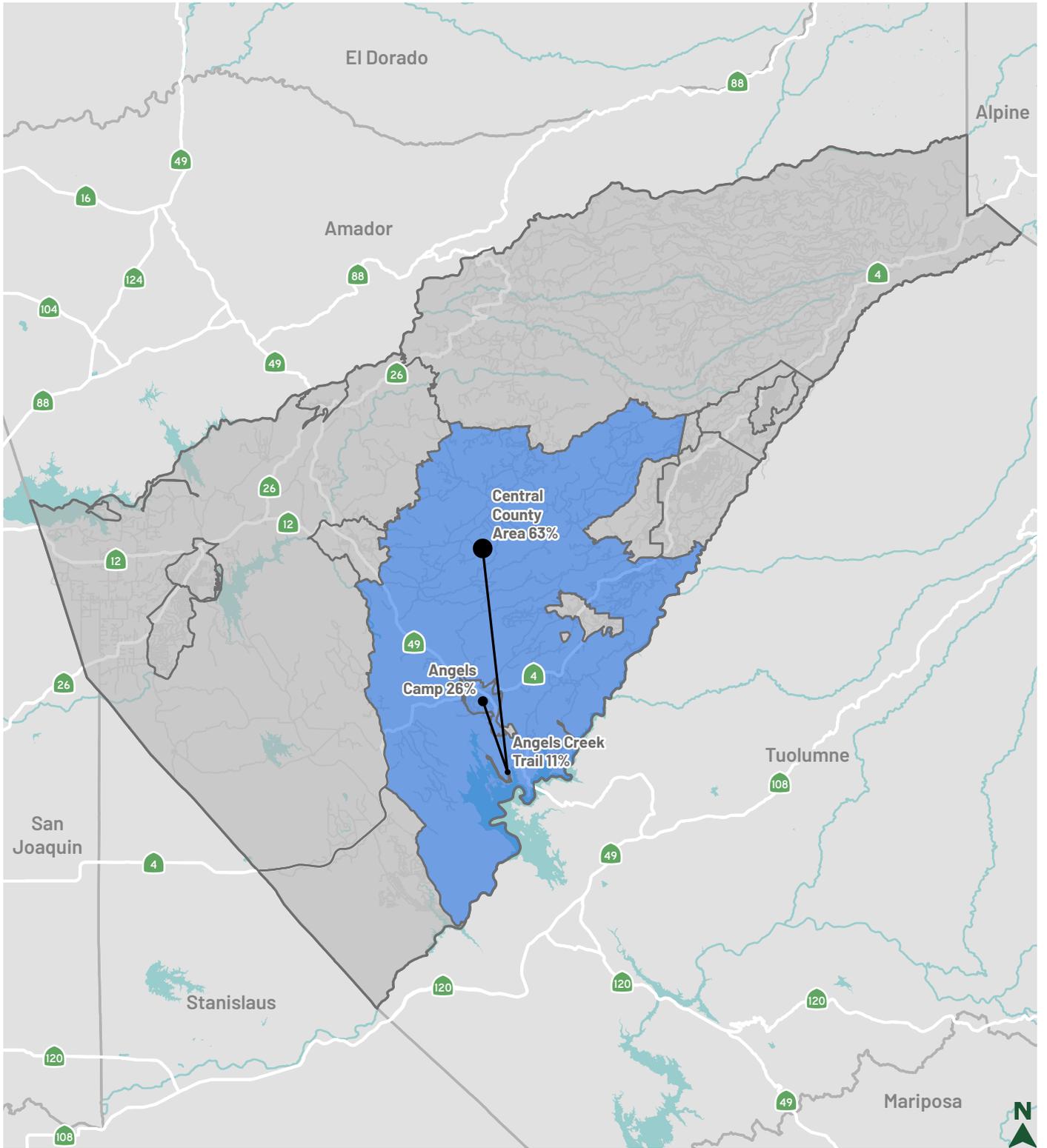


Figure 15



Existing Recreational Trails



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

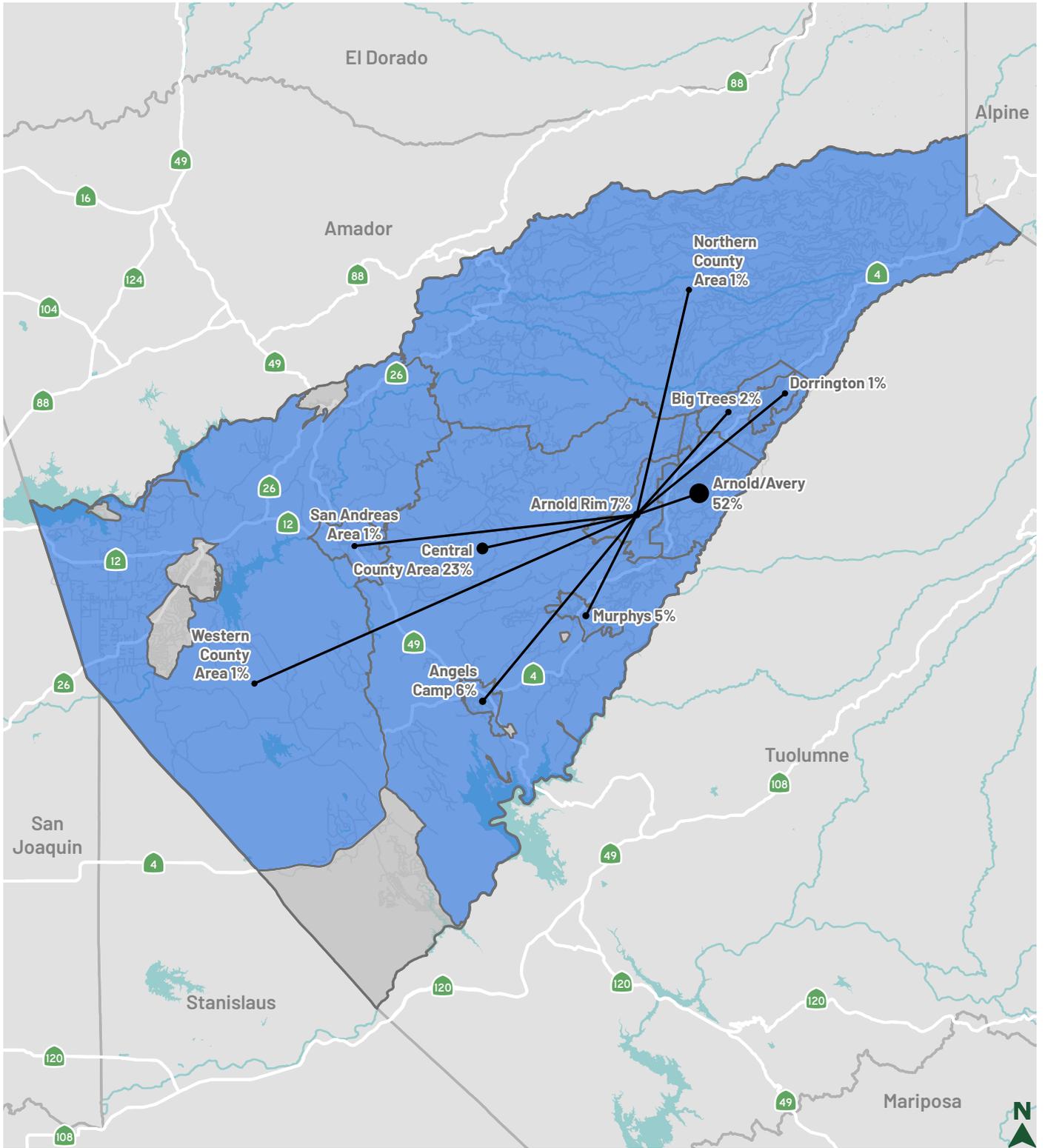
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 16



## Angels Creek Trail Area: Recreational Trail O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

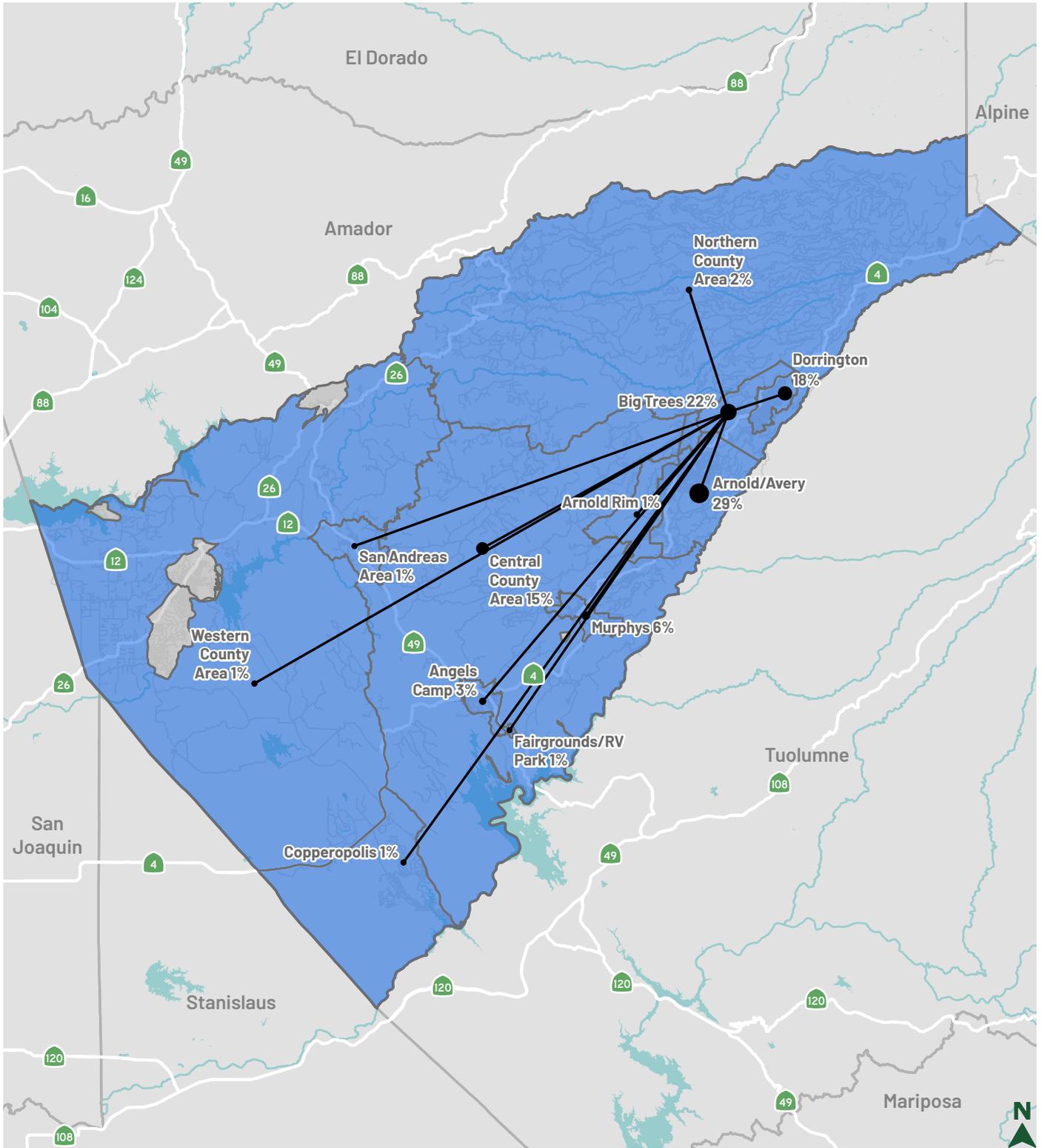
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 17



## Arnold Rim Area: Recreational Trail O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

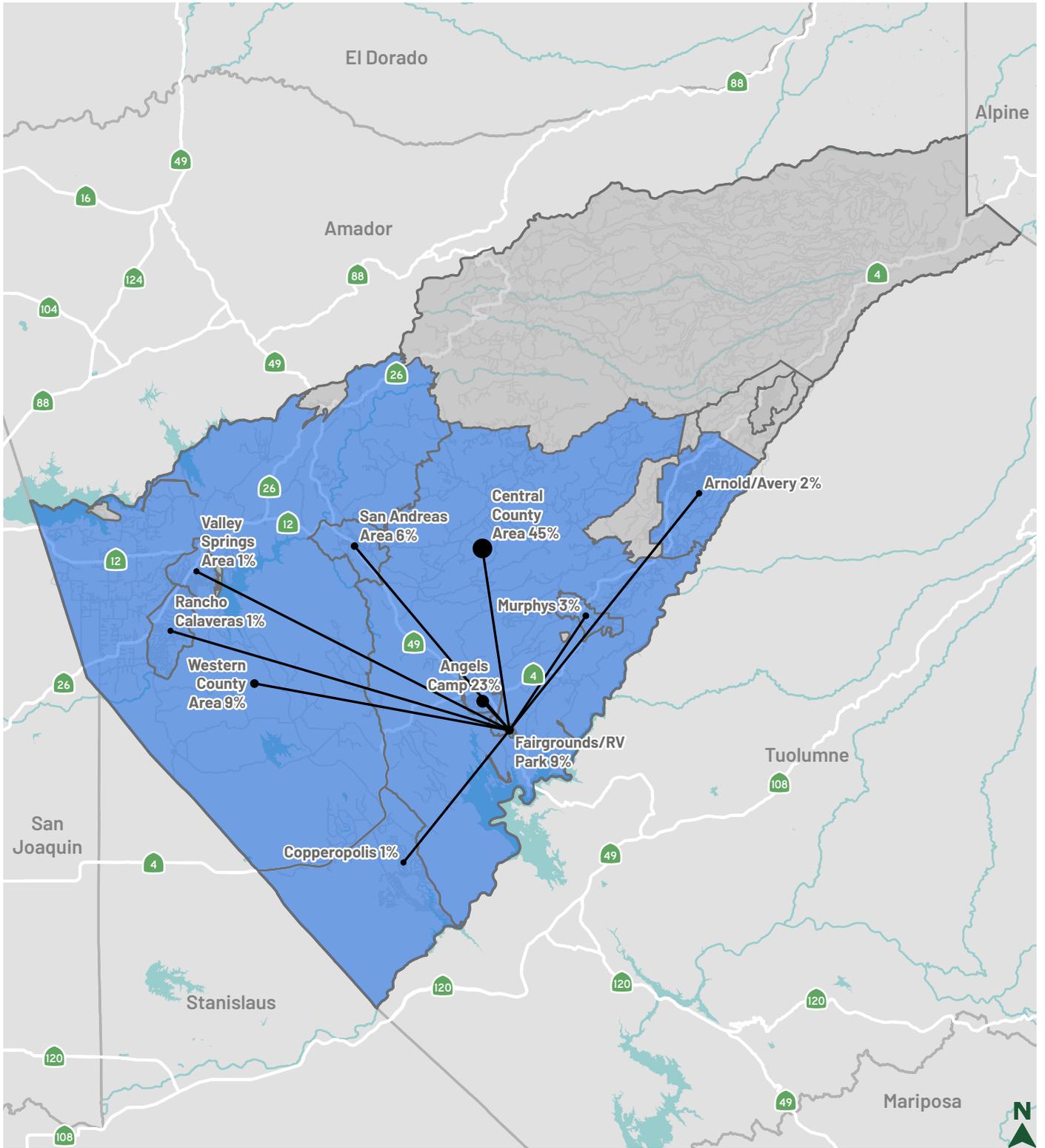
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 18



Big Trees Area: Recreational Trail O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

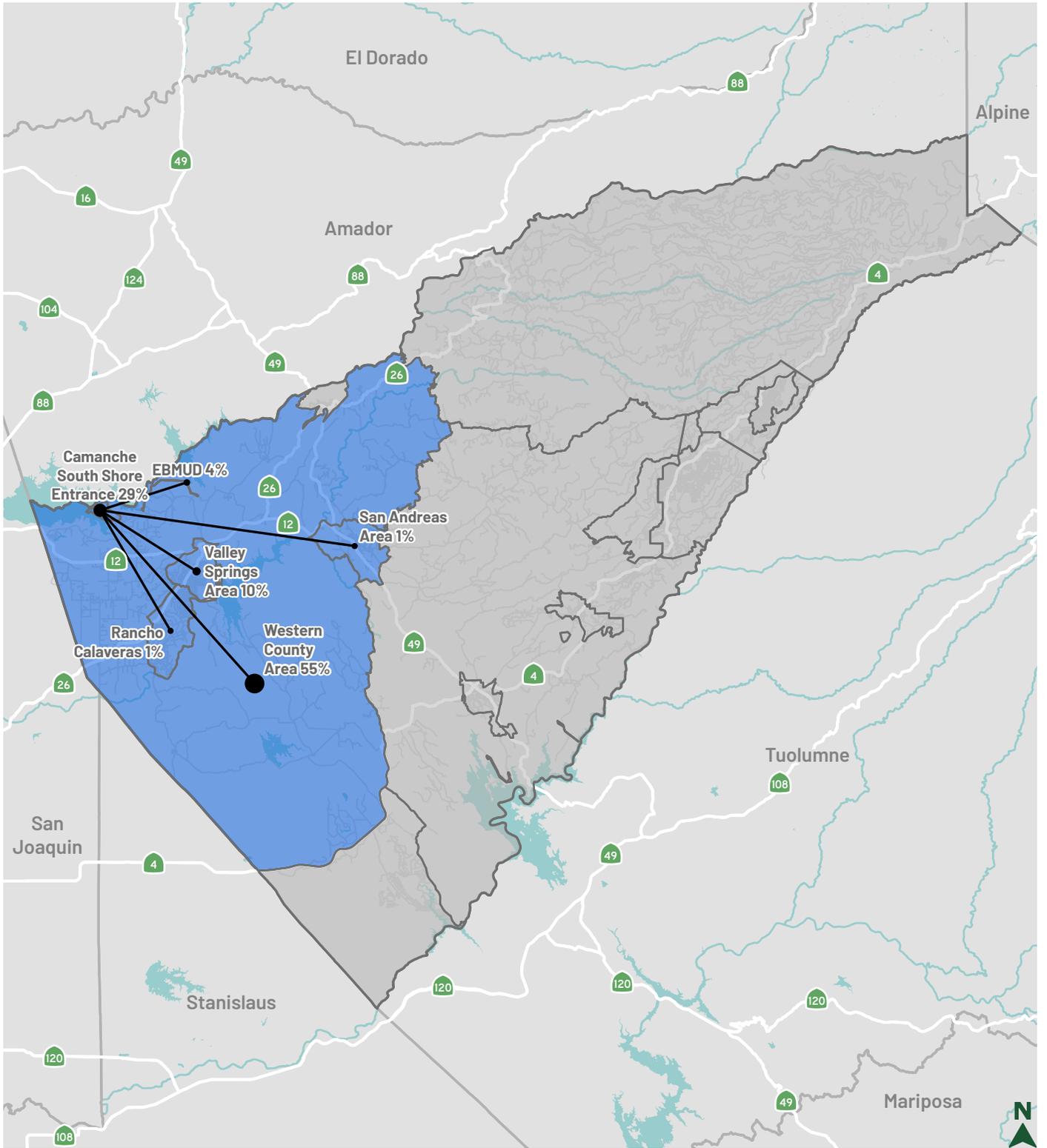
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 19



## Calaveras County Fairgrounds Area: Recreational Trail O-D Analysis



Destination Area Boundary —●— Origin to Destination Trip Percentage ■ Body of Water

■ ≥1% Travel to

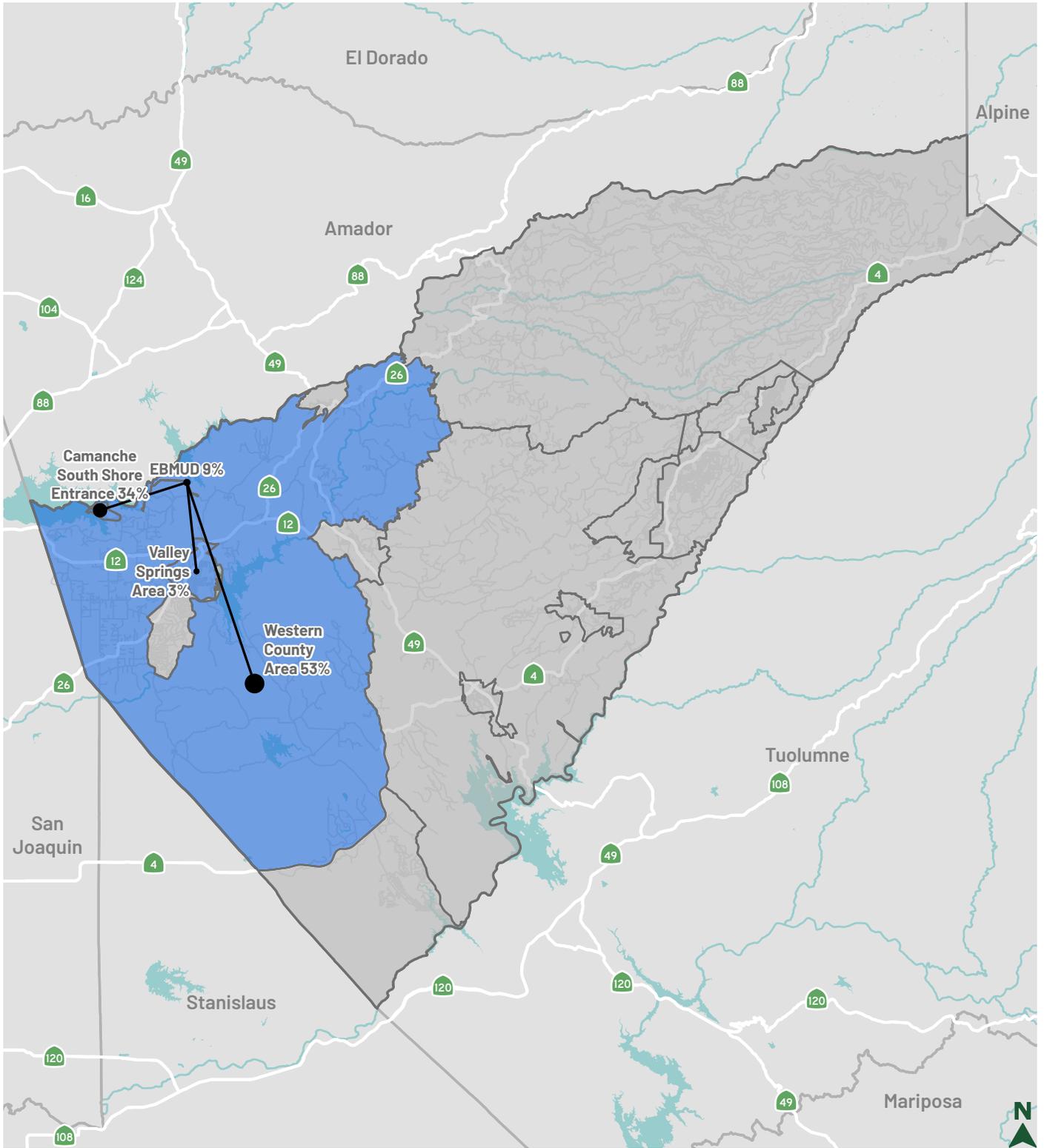
■ <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 20



Camanche South Shore Entrance: Recreational Trail O-D Analysis



Destination Area Boundary —●— Origin to Destination Trip Percentage    Body of Water

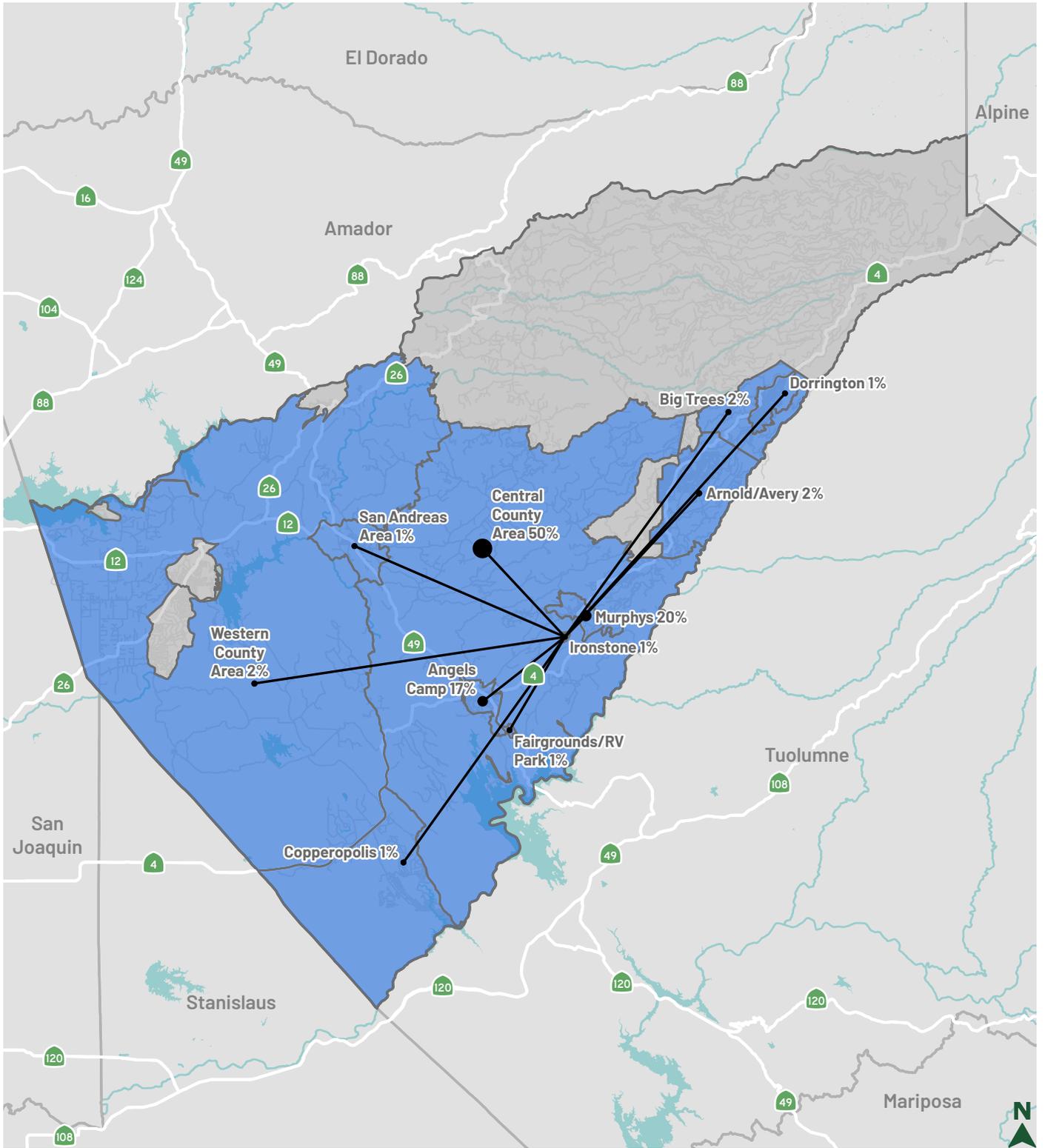
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 21

EBMUD - Mokelumne Coast to Crest Area: Recreational Trail O-D Analysis





Destination Area Boundary —●— Origin to Destination Trip Percentage ■ Body of Water

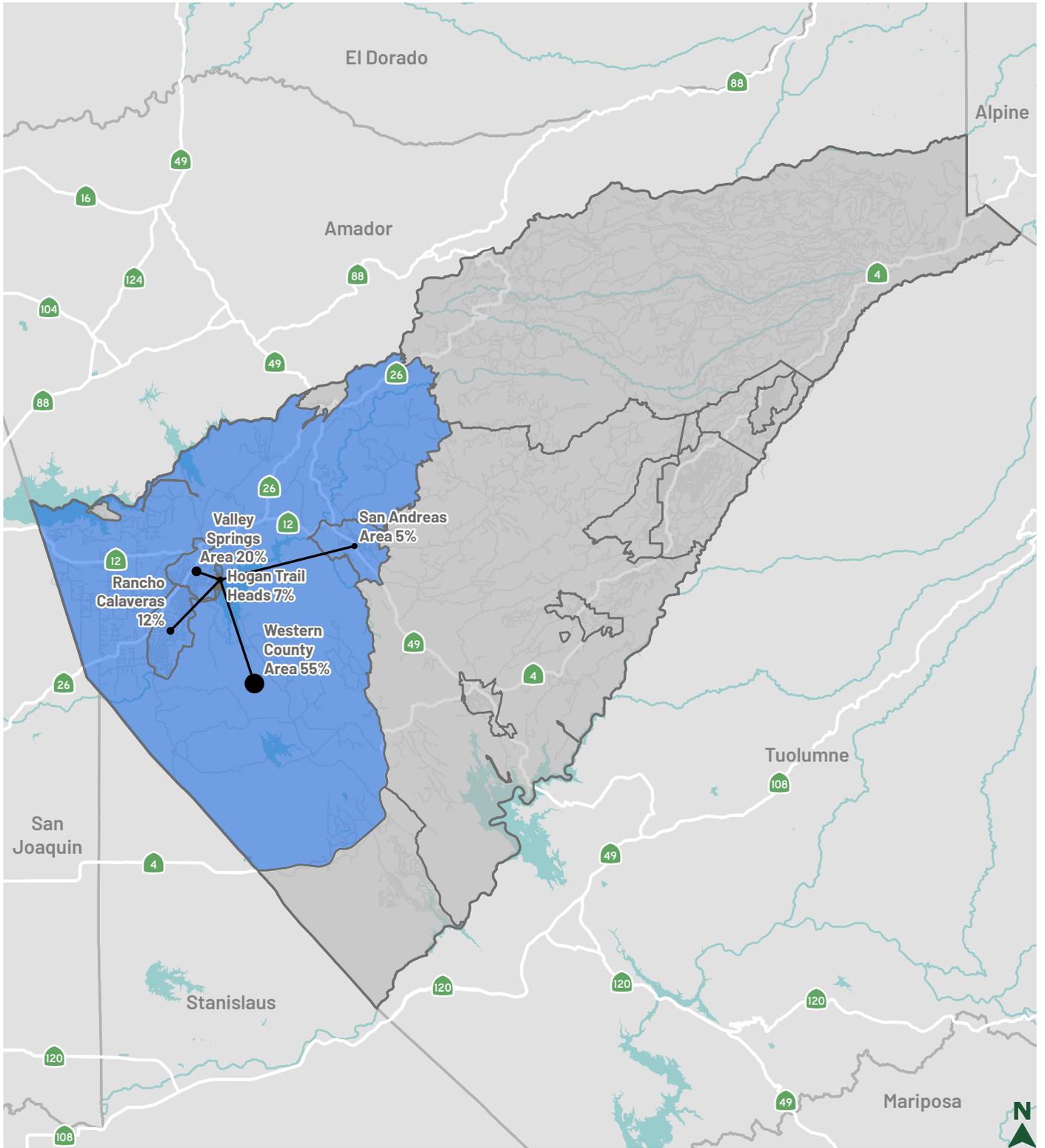
≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 22



Ironstone: Recreational Trail O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

Blue box: ≥1% Travel to

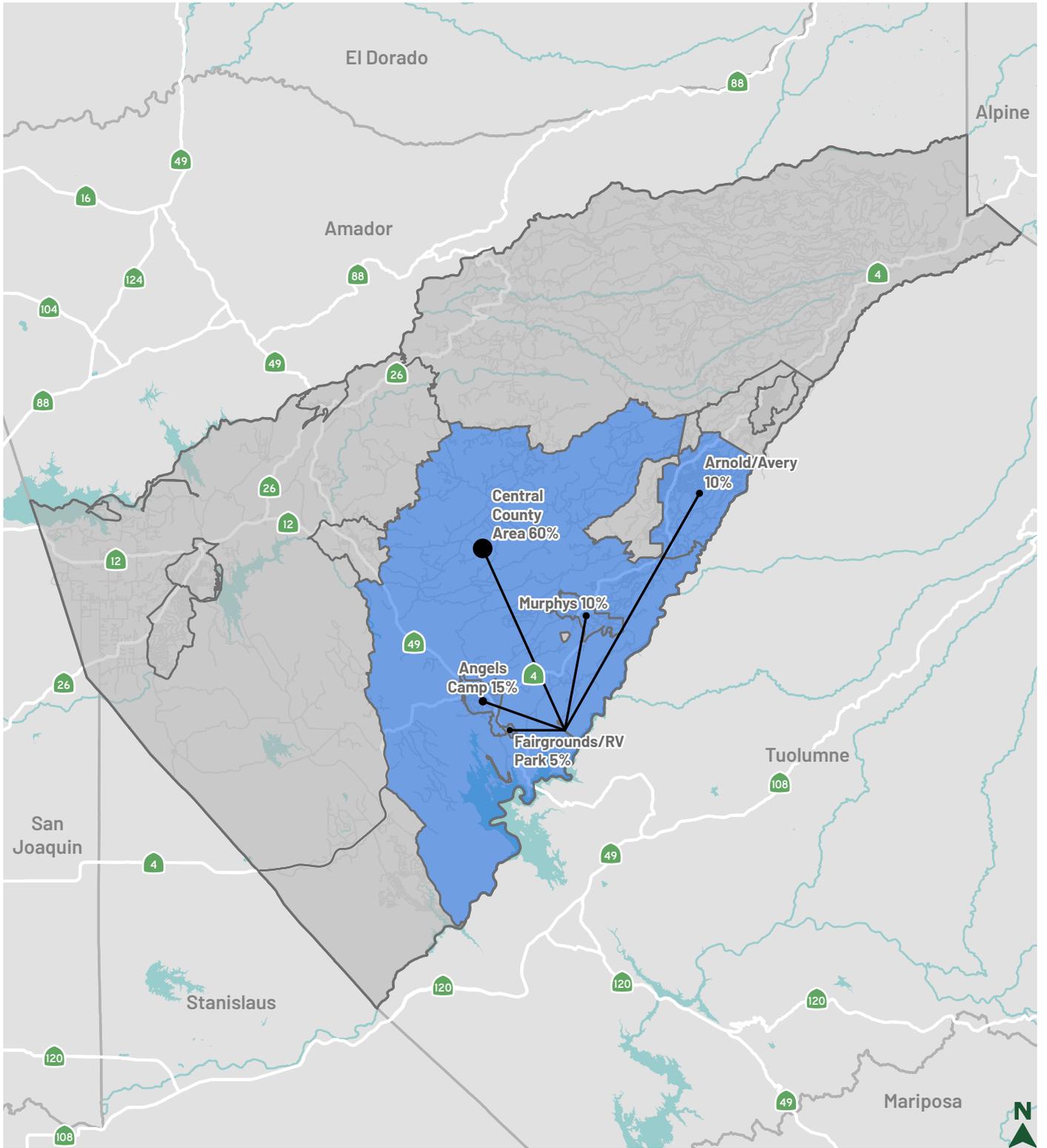
Grey box: <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 23



# Lake Hogan Area: Recreational Trail O-D Analysis



Destination Area Boundary — Origin to Destination Trip Percentage — Body of Water

≥1% Travel to  
 <1% Travel to

Note: O-D pairings represent typical daily (weekday and weekend) travel patterns based on Streetlight Data

Figure 24



Natural Bridges: Recreational Trail O-D Analysis

## 5. Existing Bicycle, Pedestrian, Transit, and Recreational Trail Infrastructure

Fehr & Peers and Green DOT evaluated existing bicycle, pedestrian, transit, and recreational trail infrastructure throughout the County. Multiple sources were reviewed to complete this infrastructure evaluation including:

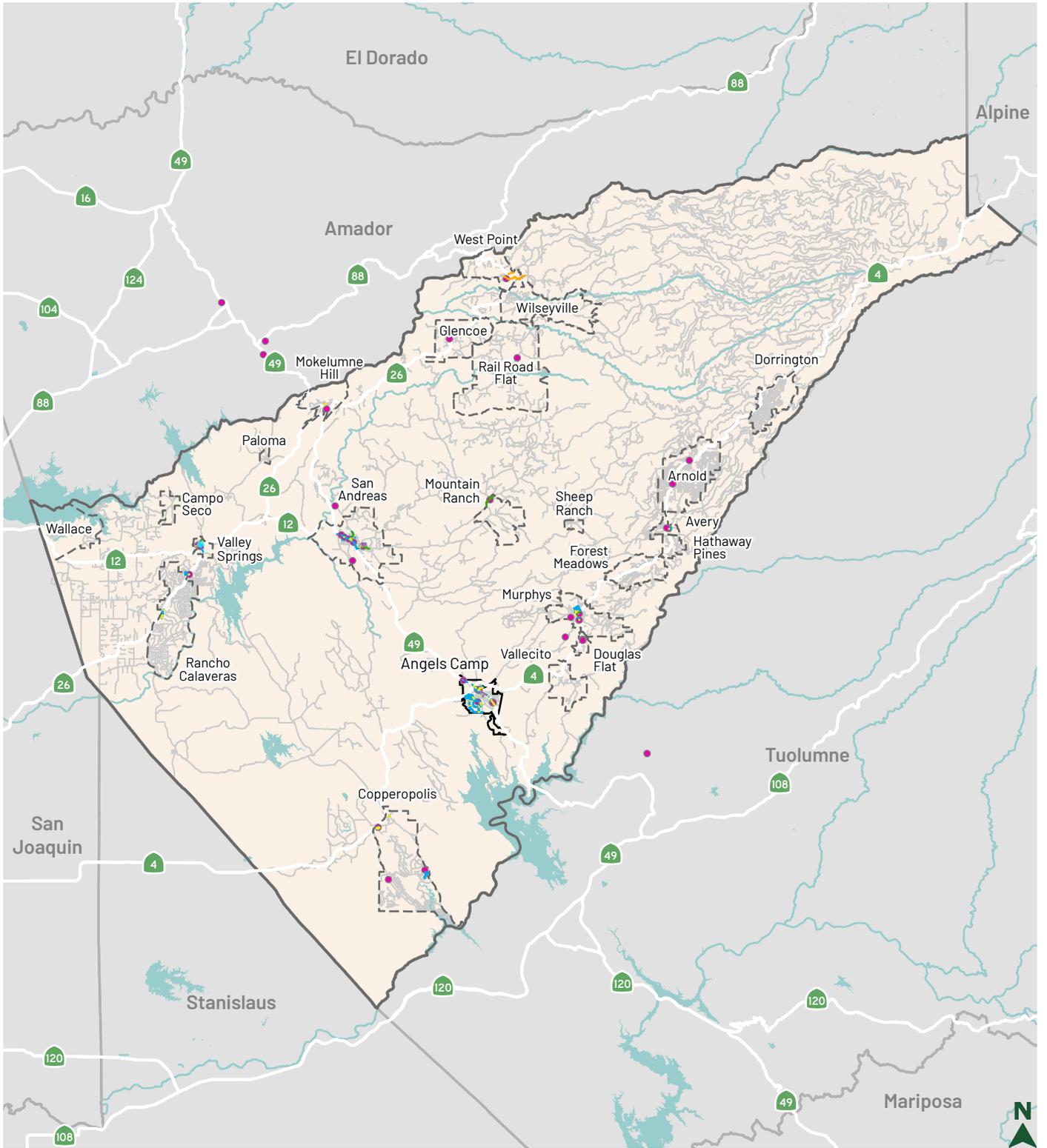
- Previous planning documents
- Caltrans data
- OpenStreetMap (OSM)
- Physical observations
- Aerial imagery
- Published recreational trail maps
- Strava
- All Trails
- Trail Forks
- Calaveras Connect website

**Figures 25 and 15** display the countywide bicycle, pedestrian, transit and recreational trail infrastructure<sup>6</sup>. In addition to these countywide figures, communities with the most existing infrastructure in the County are shown in greater detail below.

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<sup>6</sup> It is noted that in addition to the transit stops identified on Figure 25, Calaveras Connect provides a dial-a-ride transit service which provides curb-to-curb service for various communities in Calaveras. Figure 25 also identifies existing stops in both Amador and Tuolumne County. Although Calaveras Connect provides service to these locations, the ATRTP will not evaluate bicycle/pedestrian facilities to/from these stops given they are not within the County.



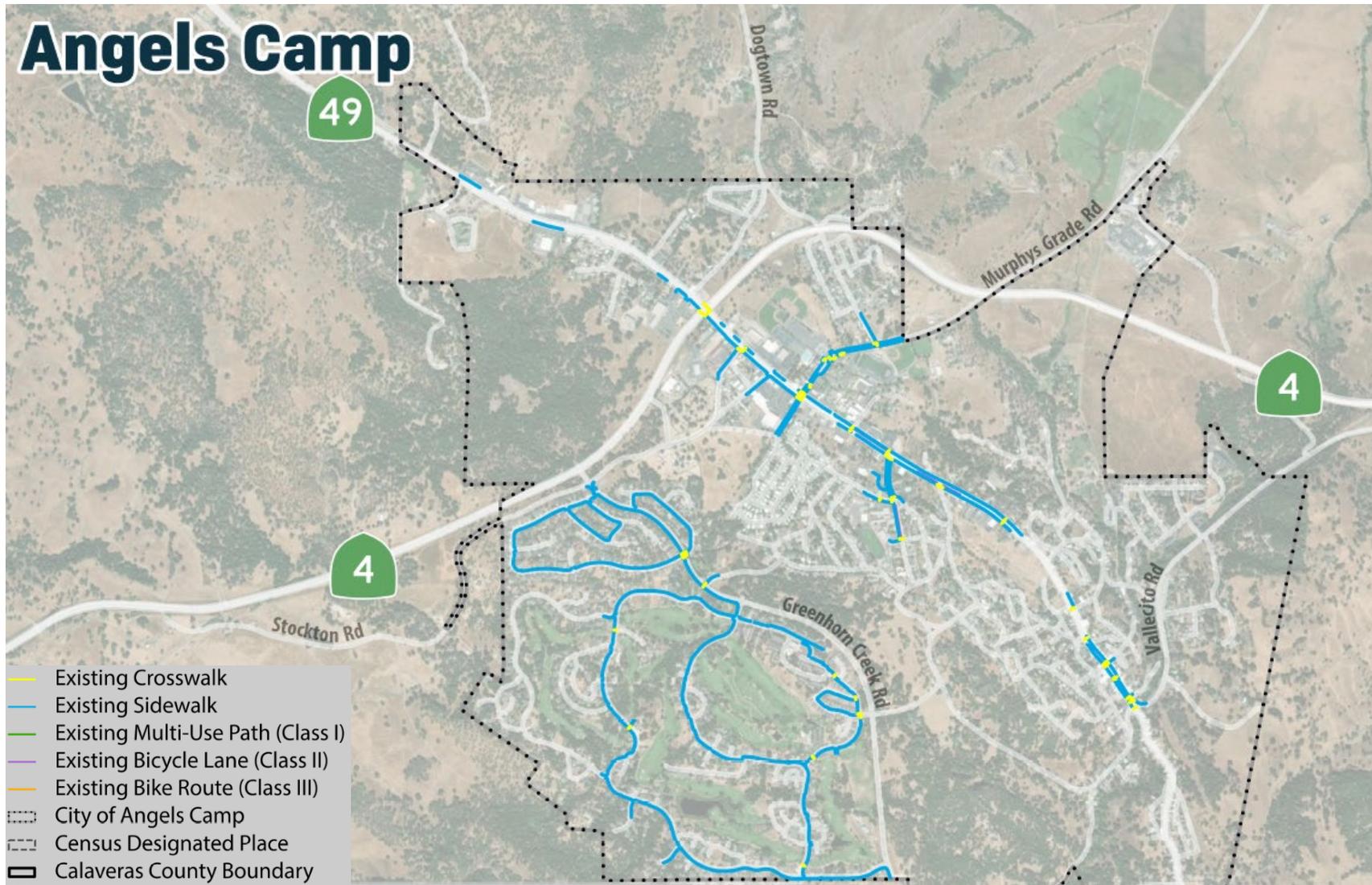


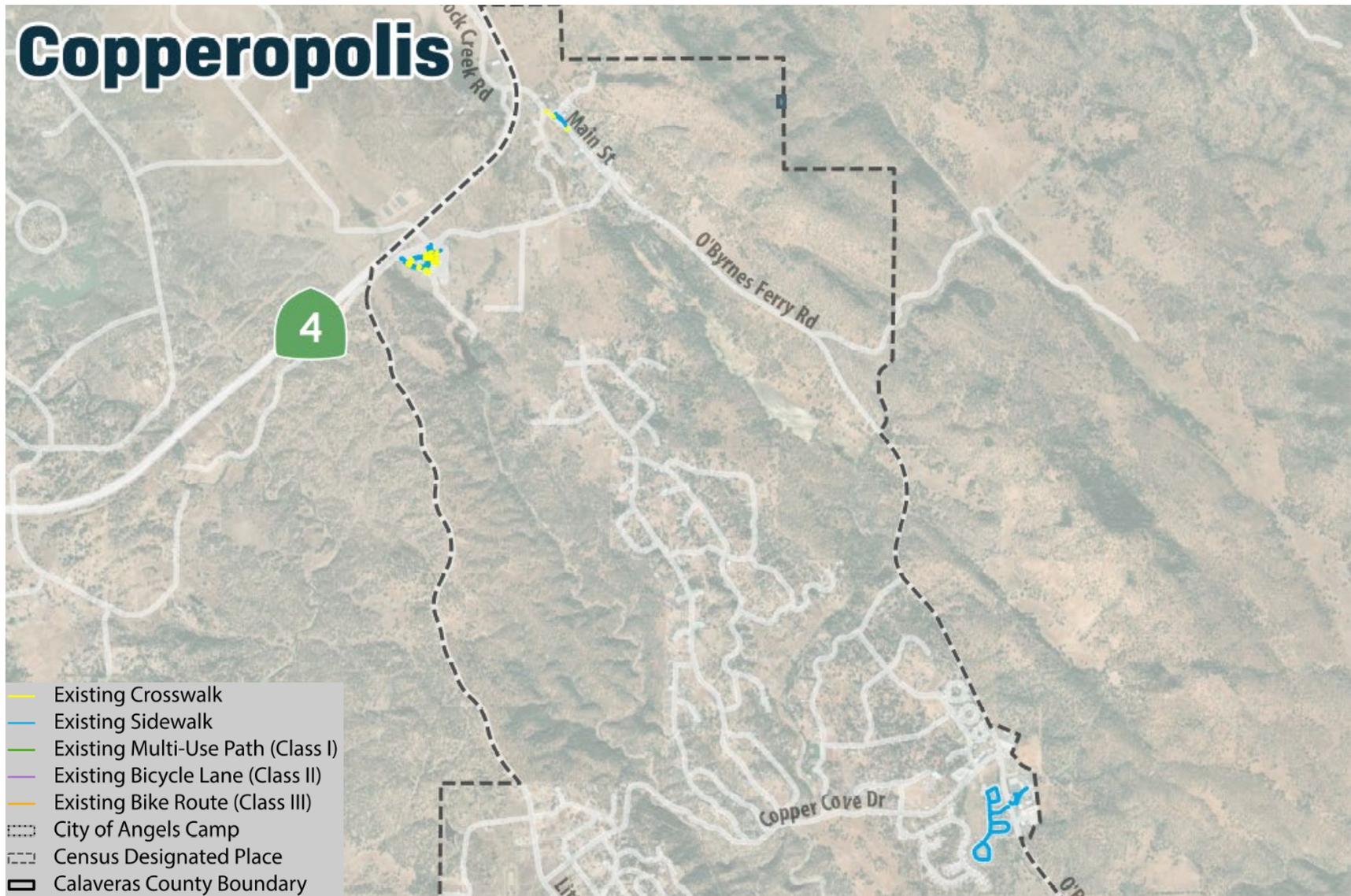
- Calaveras Connect Bus Stop
- Multi-Use Path (Class I)
- Bicycle Lane (Class II)
- Bike Route (Class III)
- Crosswalk
- Sidewalk
- City of Angels Camp
- Census Designated Place
- Calaveras County Boundary
- Body of Water

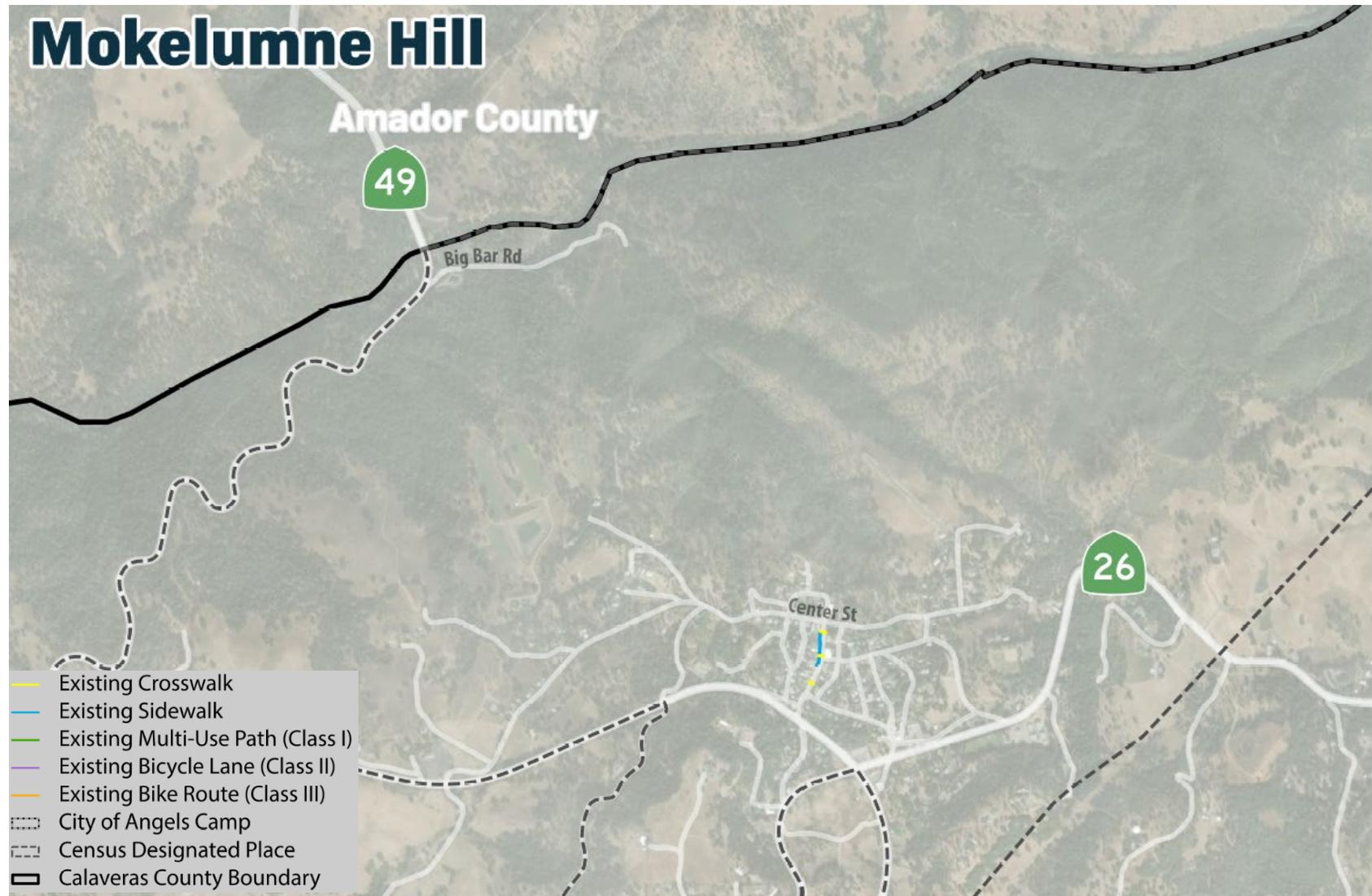
Figure 25

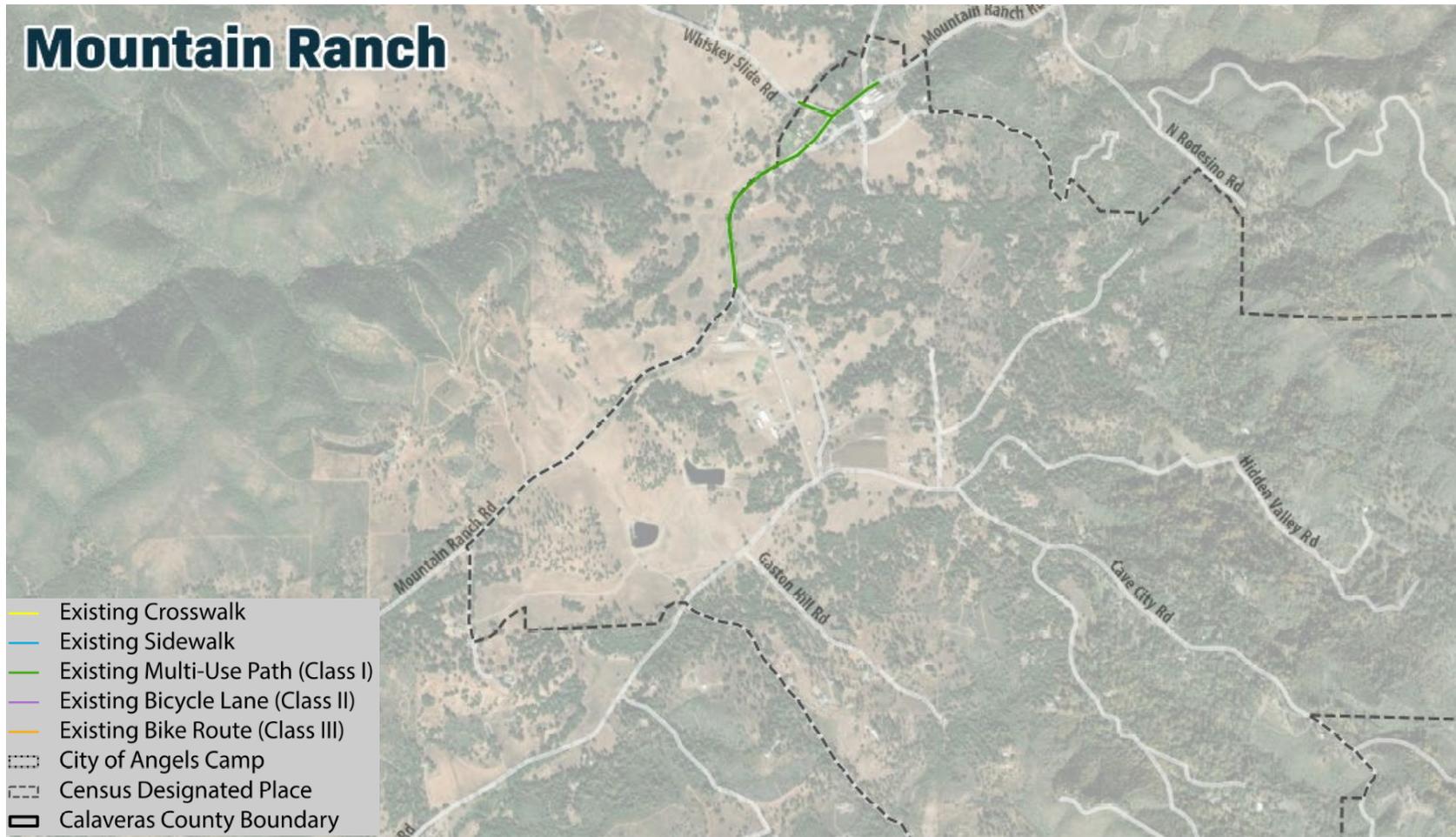


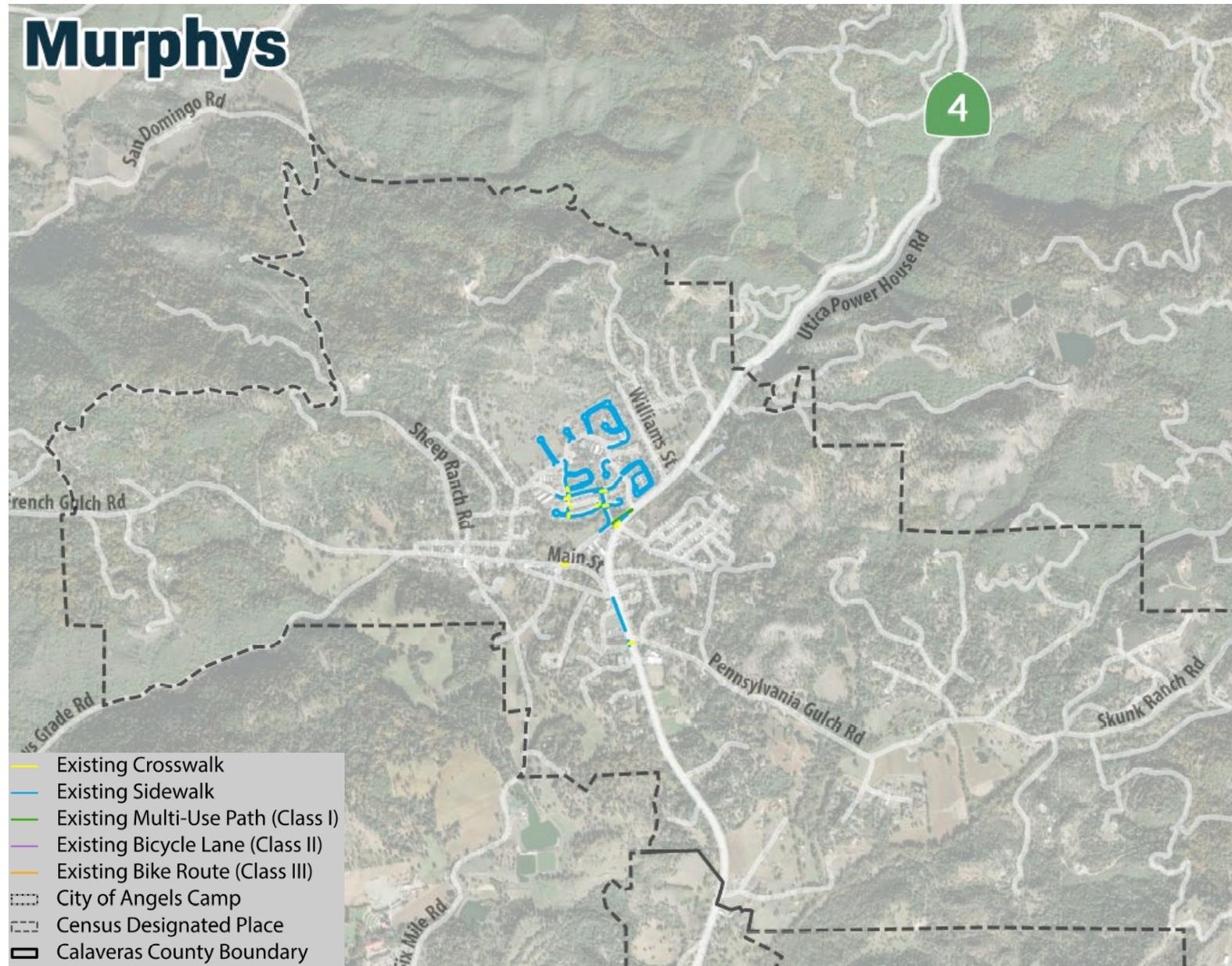
## Existing Bicycle, Pedestrian, and Transit Facilities

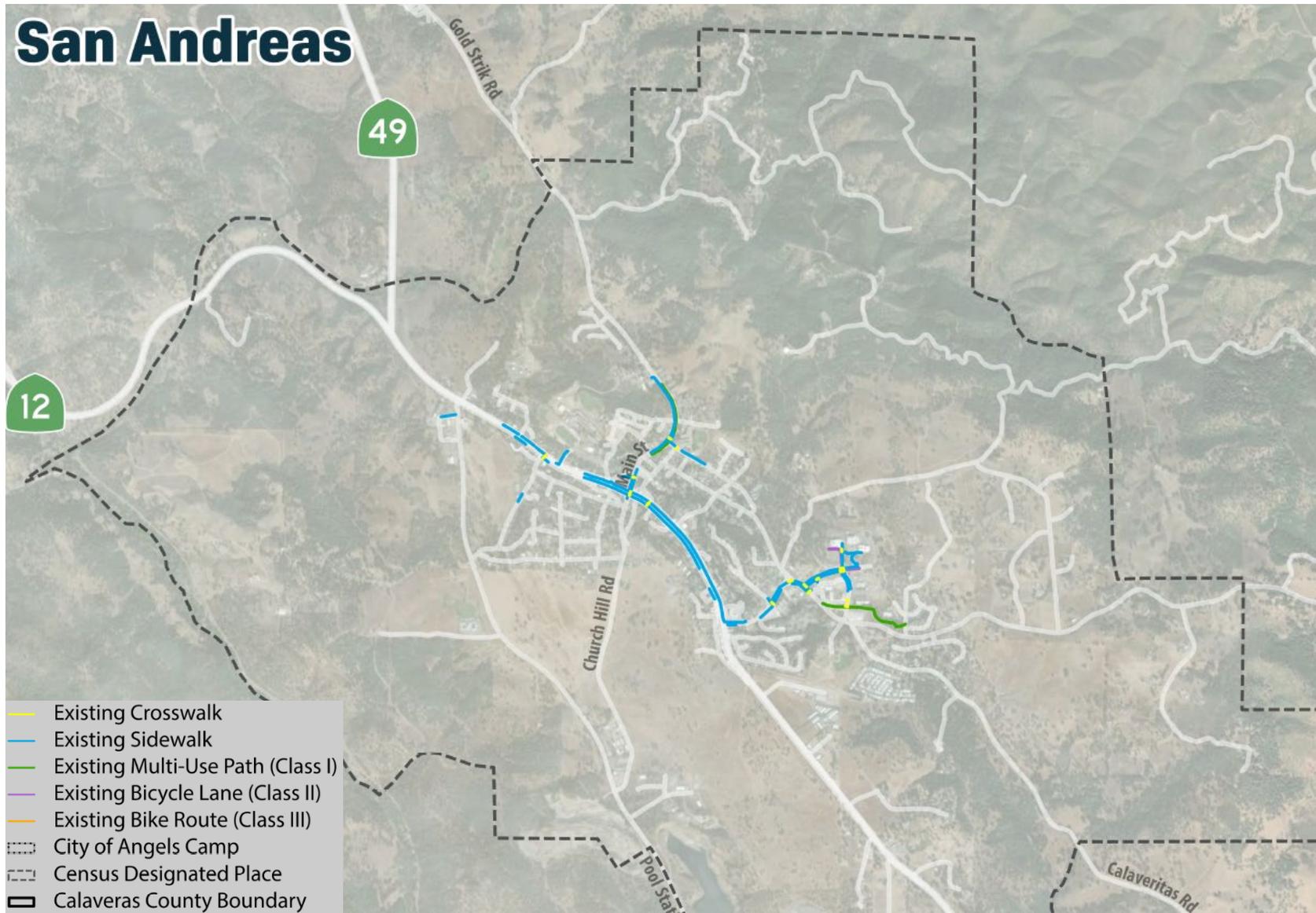




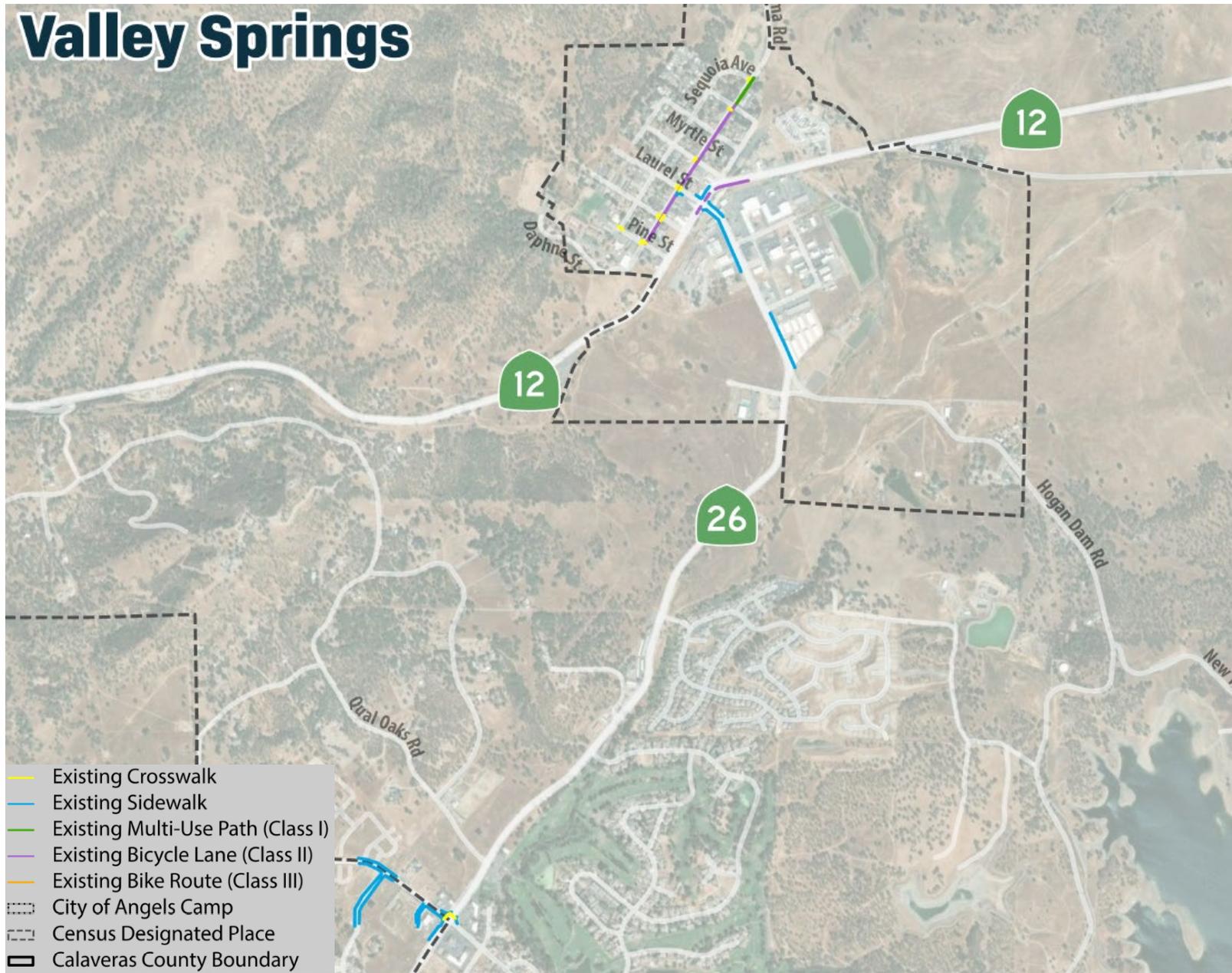


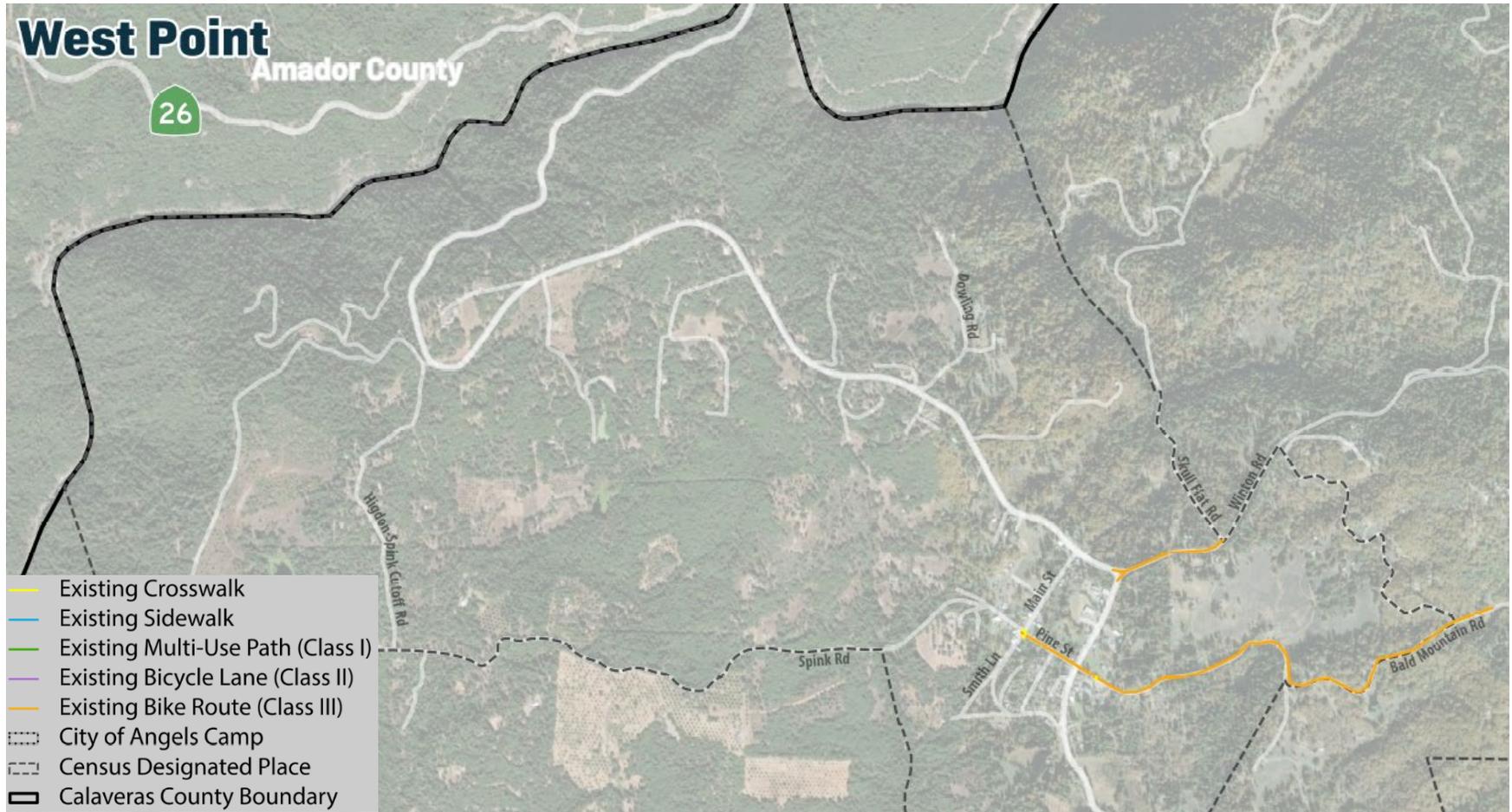






# Valley Springs





# 6. Safety and Collision Analysis

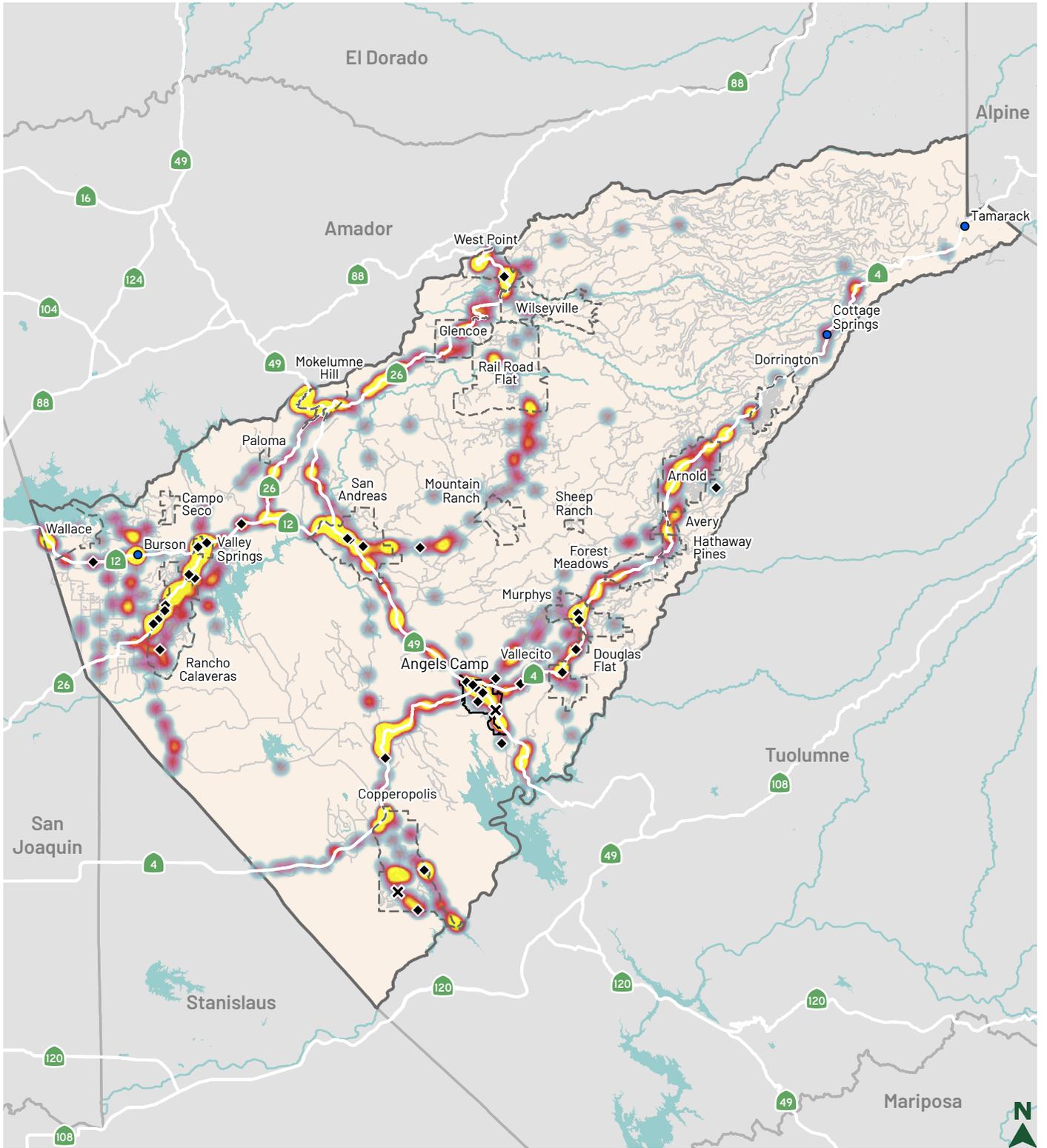
Fehr & Peers evaluated collision patterns in Calaveras County using UC Berkeley's Safe Transportation Research and Education Center (SafeTREC) Transportation Injury Mapping System (TIMS). TIMS data focuses on injury collisions and does not include property damage only collisions. Collision data is geolocated and is valuable for mapping and identifying collision patterns, particularly for fatal and severe injury collisions and collisions involving bicyclists and pedestrians. Collisions reported between 2018 and 2022 (the most recent five-year period available) were used for this analysis.

## Collision History

Between 2018 and 2022, there were 1,089 reported collisions in the County, including 232 severe injury collisions and 57 fatal collisions. There were 13 collisions involving bicyclists (resulting in five severe injury collisions and no fatal collisions) and 25 collisions involving pedestrians (resulting in four severe injury and two fatal collisions). Approximately 65 percent of all collisions occurred on state highways or at an intersection with a state highway.

**Figures 26 through 32** display a heat map of all reported collisions in the County during the study time period, as well as the location of fatal and non-fatal bicycle and pedestrian involved collisions. For the purposes of this plan, all collision data is displayed in addition to bicycle and pedestrian involved collision data because all collision data can help identify higher risk roadways and intersections that pedestrians and bicyclists may intentionally avoid (i.e. the absence of bicycle and/or pedestrian involved collisions does not indicate an intersection or roadway is safe and in many cases in rural communities, bicycle and pedestrian collision numbers may be low simply because residents are too afraid to walk or bike). The Bike Tourism Plan previously discussed included a level of traffic stress (LTS) analysis (which is a ranking system approximating the level of stress felt when riding a bike on a given stretch of roadway, with 1 being the lowest level of stress and 4 being the highest) on major roadways in Calaveras County and similar to the results of the 2021 Caltrans District 10 Active Transportation Plan, concluded that all major highways were high stress and have an LTS of 4. When these conditions exist, many individuals interested in biking are unwilling to do so because of the high stress environment.

The majority of hot spot locations and bicycle and pedestrian collisions occur on state highways or at intersections with state highways. It is noted that average daily traffic (ADT) volumes for all roadways are not available and collision numbers, rather than collision rates are presented. Therefore, more collisions may be occurring on state highways simply due to higher volumes. Nonetheless, this information is useful for identifying locations where bicycle and pedestrian improvements should be more carefully evaluated during the project identification phase of the ATRTP.



Bicycle and Pedestrian Collisions

- ✕ Fatal
- ◆ Non-Fatal

Collision Density



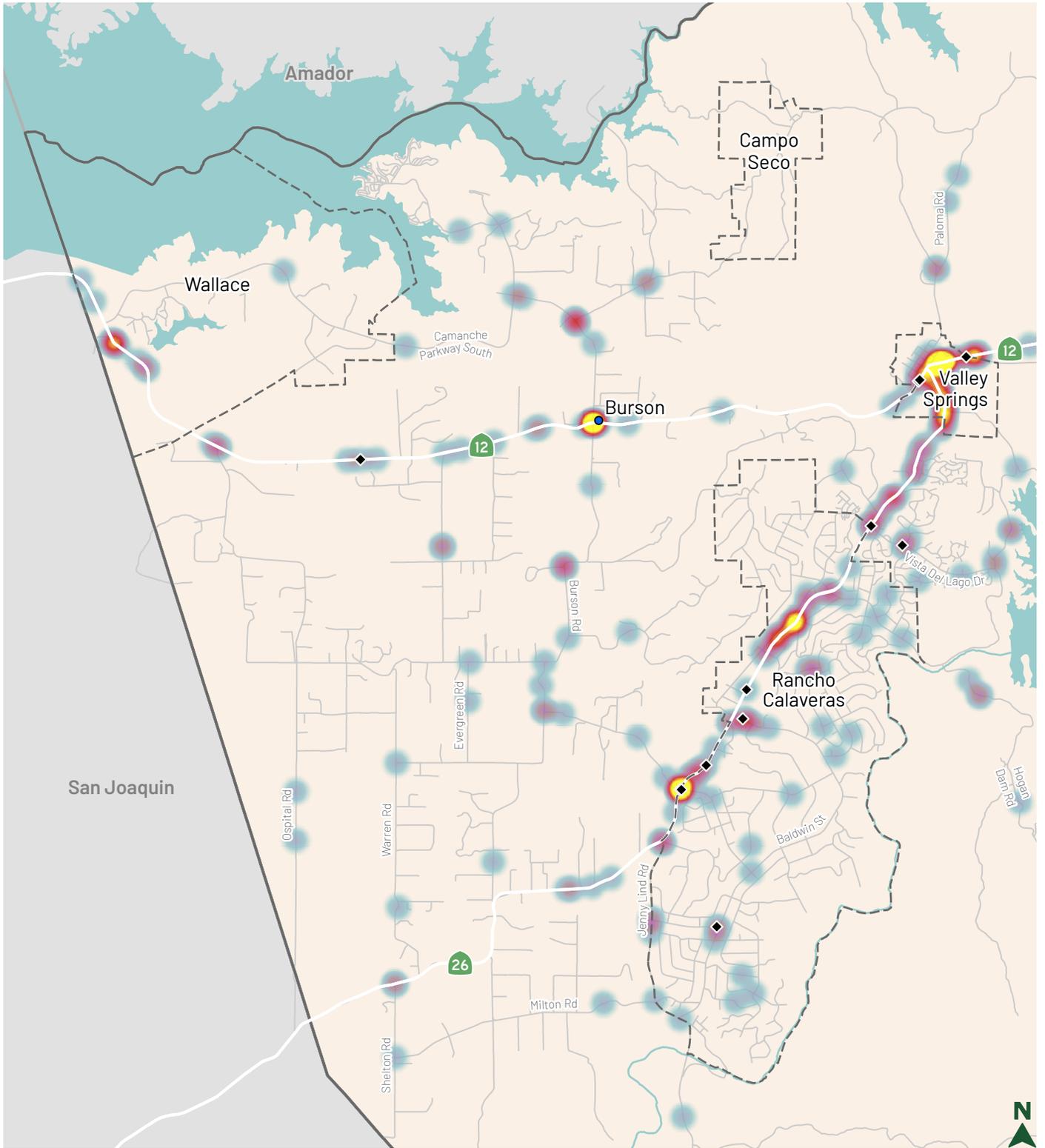
- Community
- ▭ City of Angels Camp
- - - Census Designated Place
- ▭ Calaveras County Boundary
- ▭ Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 26

Collisions  
2018 - 2022





**Bicycle and Pedestrian Collisions**

- ✕ Fatal
- ◆ Non-Fatal

**Collision Density**



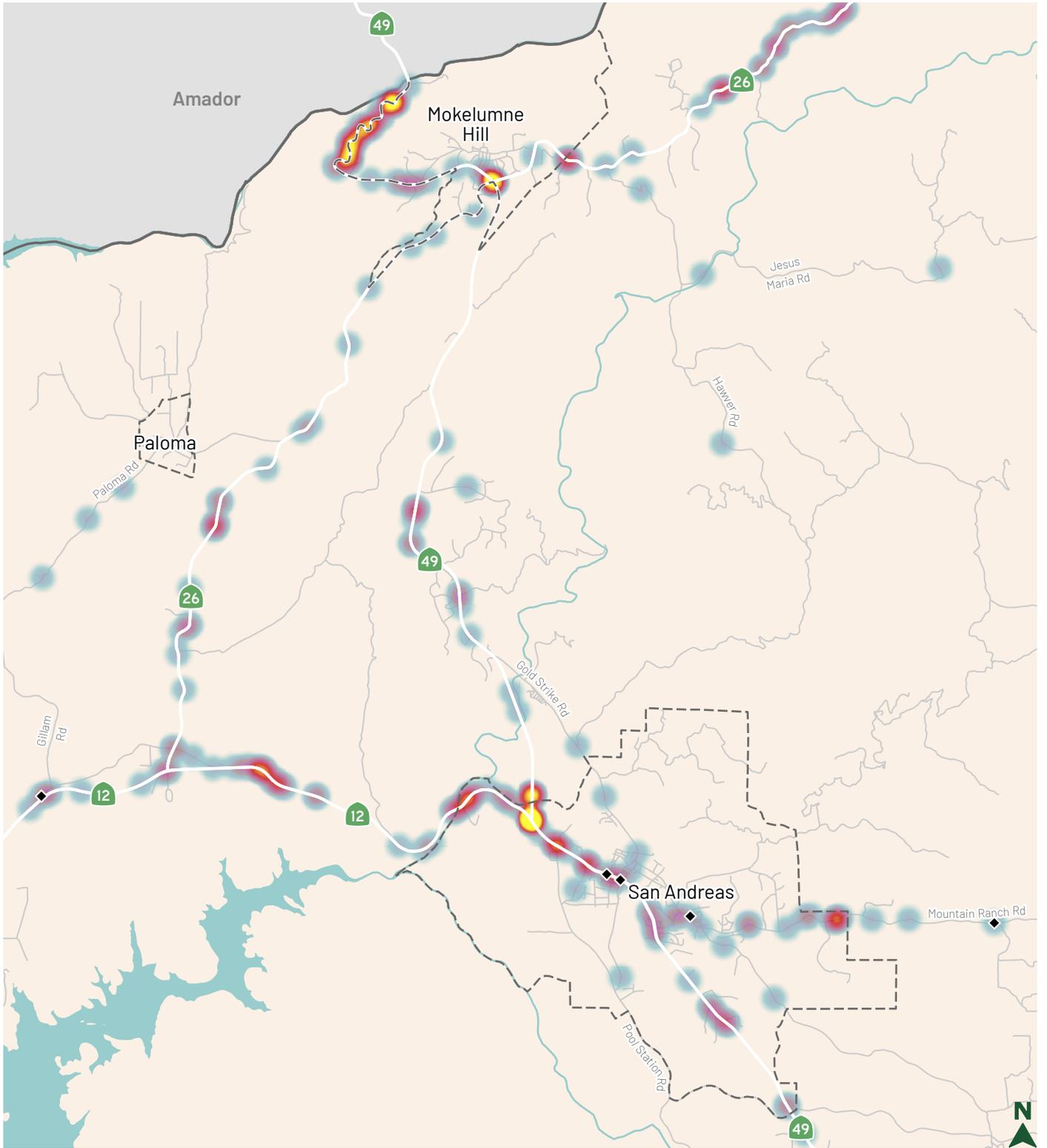
- Community
- Census Designated Place
- ▭ Calaveras County Boundary
- Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 27



**Collisions 2018-2022  
1 - Western Subregion**



Bicycle and Pedestrian Collisions

- ✕ Fatal
- ◆ Non-Fatal

Collision Density



Census Designated Place

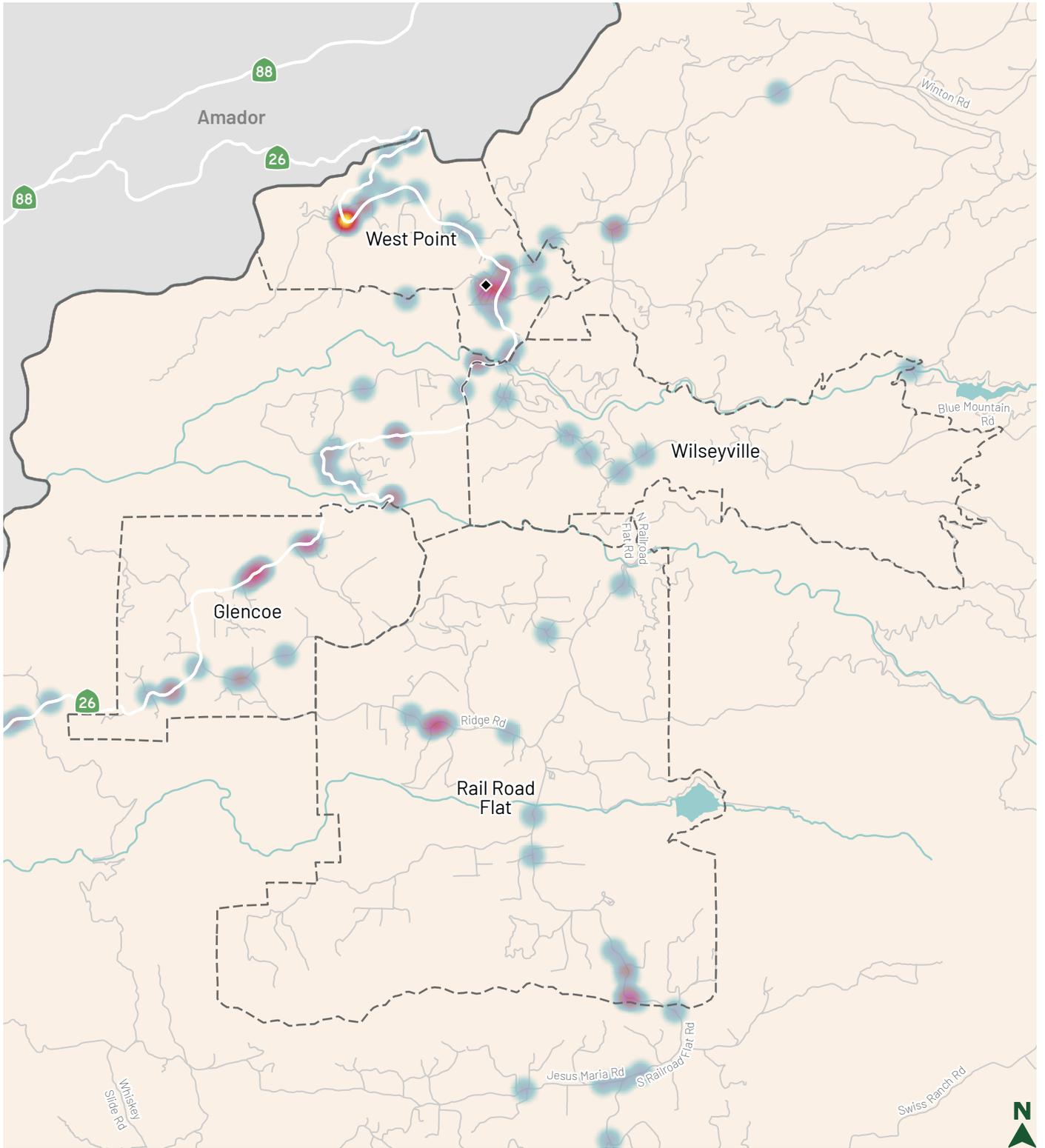
- Census Designated Place
- Calaveras County Boundary
- Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 28

Collisions 2018-2022  
2 -North Central Subregion





Bicycle and Pedestrian Collisions

- ✕ Fatal
- ◆ Non-Fatal

Collision Density



Census Designated Place

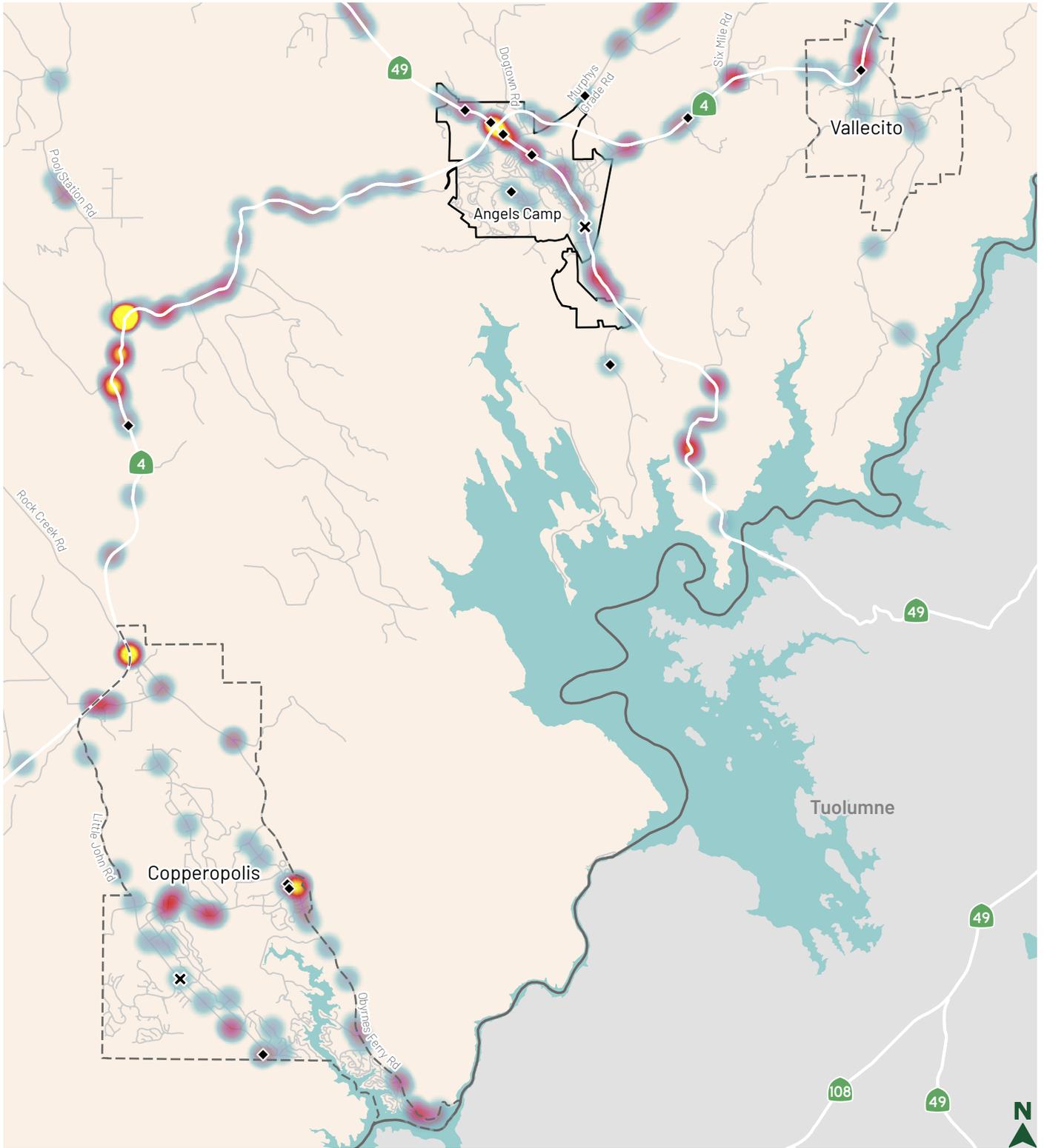
- ▭ Census Designated Place
- ▭ Calaveras County Boundary
- ▭ Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 29



Collisions 2018-2022  
3 - Northeast Subregion



Bicycle and Pedestrian Collisions

- ✕ Fatal
- ◆ Non-Fatal

Collision Density



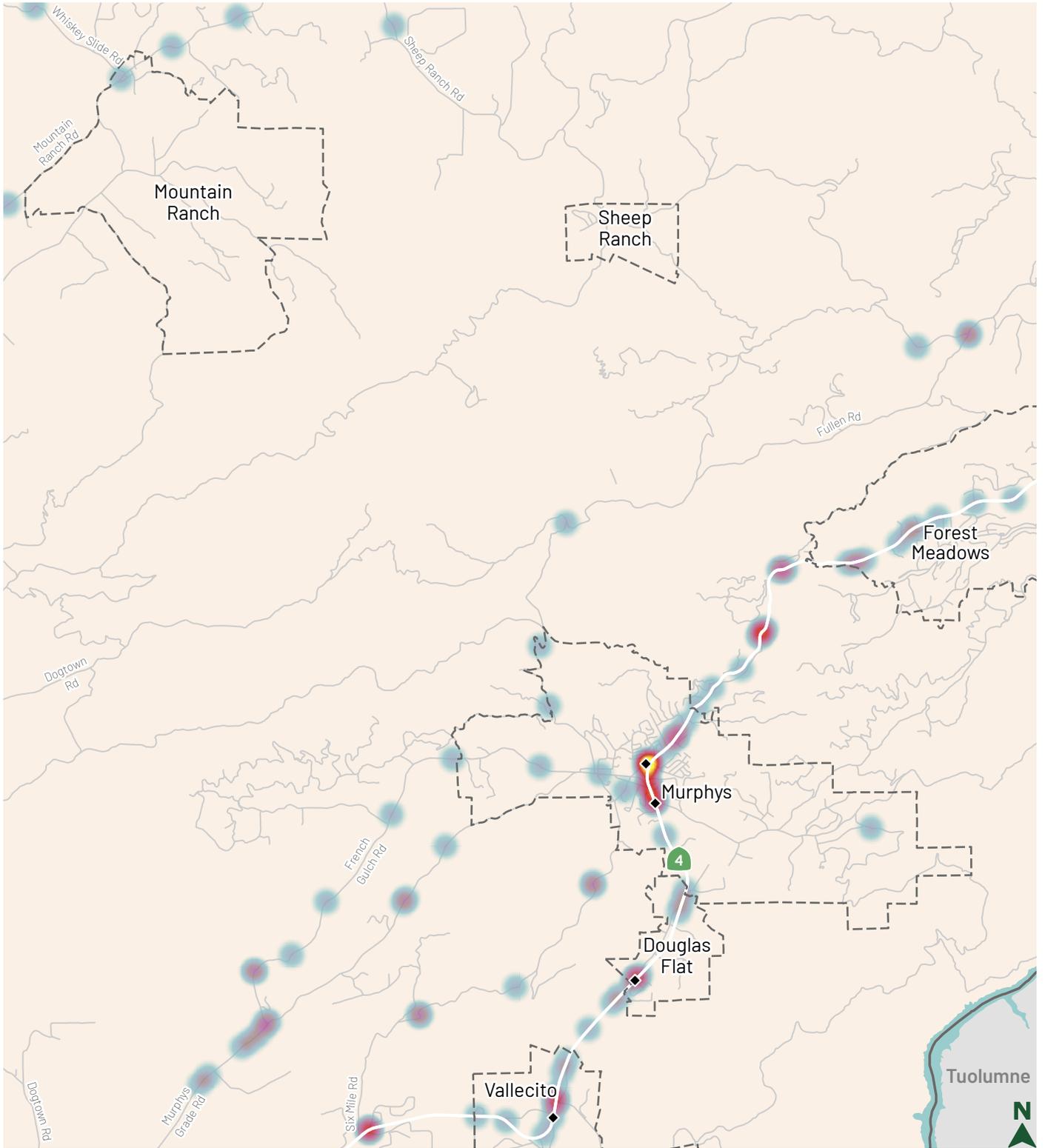
- City of Angels Camp
- Census Designated Place
- Calaveras County Boundary
- Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 30

Collisions 2018-2022  
4 - Southwest Subregion





Bicycle and Pedestrian Collisions

- ✘ Fatal
- ◆ Non-Fatal

Collision Density



Census Designated Place

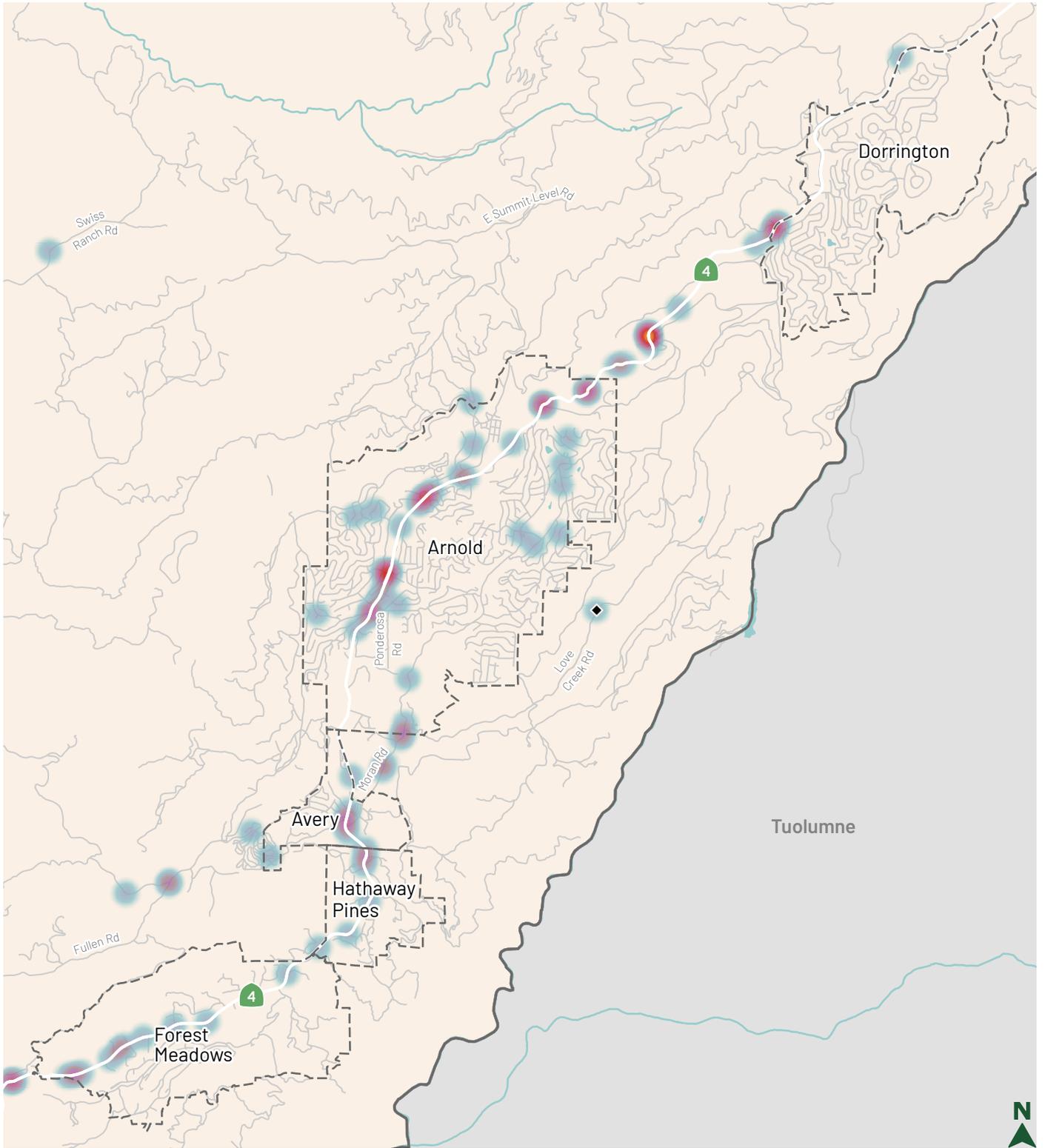
- ▭ Census Designated Place
- ▭ Calaveras County Boundary
- ▭ Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 31



Collisions 2018-2022  
5 - Central Subregion



Bicycle and Pedestrian Collisions

- ✕ Fatal
- ♦ Non-Fatal

Collision Density



Census Designated Place

- Census Designated Place
- Calaveras County Boundary
- Body of Water

Census Designated Places are derived from the US Census Bureau TIGER/Line data. Community locations derived from Calaveras County GIS Open Data Portal.

Figure 32

Collisions 2018-2022  
6 - Eastern Subregion



**Table 9** displays the primary collision factors (PCF) for all collisions, separated by all collisions and killed and severe injury (KSI) collisions. **Tables 10 through 15** display the PCF, time of day, lighting, age of victims, and location information for bicycle and pedestrian involved collisions, followed by a short summary of the data below each table.

**Table 9: PCF Violation Category: All Collisions – 2018-2022**

Category	Total Collisions	%	KSI Collisions	%
Improper Turning	383	35	97	34
Unsafe Speed	202	19	42	15
Driving Under the Influence	199	18	80	28
Vehicle Right of Way Violation	148	14	30	10
Wrong Side of Road	76	7	27	9
Other Than Driver	33	3	6	2
Other <sup>1</sup>	48	4	7	2
Total	1,089	100	289	100

<sup>1</sup>Includes collisions attributed to impeding traffic, following too closely, improper passing, pedestrian right of way violation/pedestrian violation, traffic signals and signs, hazardous parking, other hazardous violation, unsafe starting or backing, other improper driving, not stated and unknown.

Represents the two highest categories for collisions.

Source: TIMS, Fehr & Peers, 2024.

As displayed, the most common PCFs for all collisions include improper turning, unsafe speed, driving under the influence and vehicle right of way violation. The percent of KSI collisions by PCF relative to total collisions is generally proportional; however, KSI collisions attributed to driving under the influence are disproportionately high compared to total collisions.

**Table 10: PCF Violation Category: Bicycle and Pedestrian Involved Collisions – 2018-2022**

Category	Bicycle Involved Collisions	%	Pedestrian Involved Collisions	%
Wrong Side of Road	4	31	-	-
Improper Turning	3	23	3	12
Unsafe Speed	2	15	4	16
Other Improper Driving	2	15	0	0
Vehicle Right of Way Violation	1	8	0	0
Pedestrian Right of Way Violation	-	-	4	16

**Table 10: PCF Violation Category: Bicycle and Pedestrian Involved Collisions – 2018-2022**

Category	Bicycle Involved Collisions	%	Pedestrian Involved Collisions	%
Pedestrian Violation	-	-	8	32
Unsafe Starting or Backing	-	-	2	8
Other than Driver	-	-	1	4
Traffic Signals and Signs	-	-	1	4
Unknown or Not Stated	1	8	2	8
Total	13	100	25	100

Represents the two highest categories for collisions.

Source: TIMS, Fehr & Peers, 2024.

The most common PCFs for bicycle involved collisions include wrong side of road and improper turning. The most common PCFs for pedestrian involved collisions include pedestrian violation, pedestrian right of way violation, and unsafe speed. Notably, pedestrian violations account for almost 50 percent (12 collisions) of all pedestrian involved collisions. Of these 12 collisions, nine involved pedestrians crossing (two in a crosswalk at an intersection, two in a midblock crossing, and five crossing outside of a crosswalk) and three involved pedestrians walking in the road (including the shoulder). However, the classification of pedestrian violation is not truly representative of the cause of the collision as it may be viewed as the pedestrian being at fault. Upon further review of these specific collisions, the PCF violation detail indicates that four of these 12 collisions were due to the driver not yielding at a crosswalk, four indicate the pedestrian crossed outside of a crosswalk or legal crossing but there is no crossing (marked or unmarked) near where the collision occurred, and one has no additional details regarding the cause of the collision so it is unclear what the pedestrian violation was.

While this indicates there may be opportunity for increasing pedestrian visibility at crosswalks (both midblock and at intersections) and/or installing crosswalks or sidewalks in locations they do not currently exist, the location of these collisions is inconsistent and no single intersection stands out as having a high frequency of collisions based on this data set. However, as noted, in some cases bicyclists and pedestrians intentionally avoid certain roadways and/or intersections due to safety concerns. Potential locations this may be occurring at will be evaluated during the next phase of the ATRTP.

**Table 11: Time of Day and Lighting – 2018-2022**

Time	Bike Collisions	%	Pedestrian Collisions	%
Overnight (7 PM-6 AM)	1	8	11	44
Morning Peak (6 AM-10 AM)	4	31	2	8

**Table 11: Time of Day and Lighting – 2018-2022**

Time	Bike Collisions	%	Pedestrian Collisions	%
Midday (10 AM-3 PM)	7	54	4	16
Evening Peak (3 PM-7 PM)	1	8	8	32

Source: TIMS, Fehr & Peers, 2024.

**Table 12: Lighting – 2018-2022**

Age	Bike Collisions	%	Pedestrian Collisions	%
Dark, No Streetlights	1	8	10	40
Dark, Streetlights	-	-	3	12
Daylight	12	92	12	48

Source: TIMS, Fehr & Peers, 2024.

Tables 11 and 12 indicate lighting is not likely a key contributor to bicycle involved collisions; however, it could be a key contributor to pedestrian involved collisions. The majority of pedestrian involved collisions occurred when it was dark and approximately 40 percent occurred in locations with no streetlights. These collisions occurred both as pedestrians were crossing the street and walking on the road.

**Table 13: Age – 2018-2022**

Age	Bike Collisions	%	Pedestrian Collisions	%
Under 15	1	8	5	19
15-64	9	69	15	58
65+	3	23	6	23

Source: TIMS, Fehr & Peers, 2024.

Table 13 indicates approximately 40 percent of victims of bicycle/pedestrian involved collisions are under 15 or 65 and over. These ages are often considered more vulnerable populations and can be disadvantaged from a transportation perspective if they are unable to drive and/or do not have access to a vehicle.

**Table 14: Location – 2018-2022**

Location	Bike Collisions	%	Pedestrian Collisions	%
Roadway	11	85	15	60
Intersection	2	15	10	40

Source: TIMS, Fehr & Peers, 2024.

**Table 15: Location of Pedestrian Involved Collisions – 2018-2022**

Location	Pedestrian Collisions
Crossing in Crosswalk at Intersection	3
Crossing in Crosswalk Not at Intersection	2
Crossing Not in Crosswalk	6
In Road, Including Shoulder	13
Not in Road	1

Source: TIMS, Fehr & Peers, 2024.

Tables 14 and 15 indicate the majority of bicycle and pedestrian involved collisions occurred in the roadway; however many pedestrian involved collisions did occur at intersections. Pedestrians were walking on the road/shoulder in over half of the collisions (note, sidewalks are not present in almost all locations these collisions occurred) and crossing outside of a crosswalk (often because no crosswalk was present) in almost 25 percent of the collisions.

**Conclusion**

As previously noted, between 2018 and 2022, there were 1,089 reported collisions in the County, including 232 severe injury collisions and 57 fatal collisions. There were 13 collisions involving bicyclists (resulting in five severe injury collisions and no fatal collisions) and 25 collisions involving pedestrians (resulting in four severe injury and two fatal collisions). Approximately 65 percent of all collisions and the majority of hot spot locations and bicycle and pedestrian collisions occur on state highways or at intersections with state highways.

The most common PCFs for all collisions include improper turning, unsafe speed, driving under the influence and vehicle right of way violation. The most common PCFs for bicycle involved collisions include wrong side of road and improper turning, The most common PCFs for pedestrian involved collisions include pedestrian violation, pedestrian right of way violation, and unsafe speed. However, as discussed in greater detail above, the classification of pedestrian violation is not truly representative of the cause of the collision in many cases.

During the next phase of this analysis, collision data will be reviewed in conjunction with results of the online survey responses to identify if there are additional locations where near miss collisions occur and/or if there are specific locations community members intentionally avoid walking and/or biking due to safety concerns.

# Appendix I - Project Fact Sheets

**I-64**

CALAVERAS COUNTY

# State Route 4 in Murphys

## Project Description

The Murphys SR 4 Main Street Complete Streets project aims to create a robust, fully connected bicycle and pedestrian network on SR 4 that is comfortable for users of all ages and abilities. In Murphys, SR 4 serves as a Main Street and provides a critical connection between residential neighborhoods and grocery, commercial, retail, recreational, and service type uses, as well as key community destinations serving vulnerable populations such as an elementary school and a senior center.

Key components of the project include design and construction of two roundabouts, intended to slow speeds and reduce fatal and severe injury collisions, and construction of bicycle and pedestrian facilities which vary by segment but include Class I shared-use paths, Class IV separated bikeways, sidewalk gap fill, and crossings.

## Key Facts

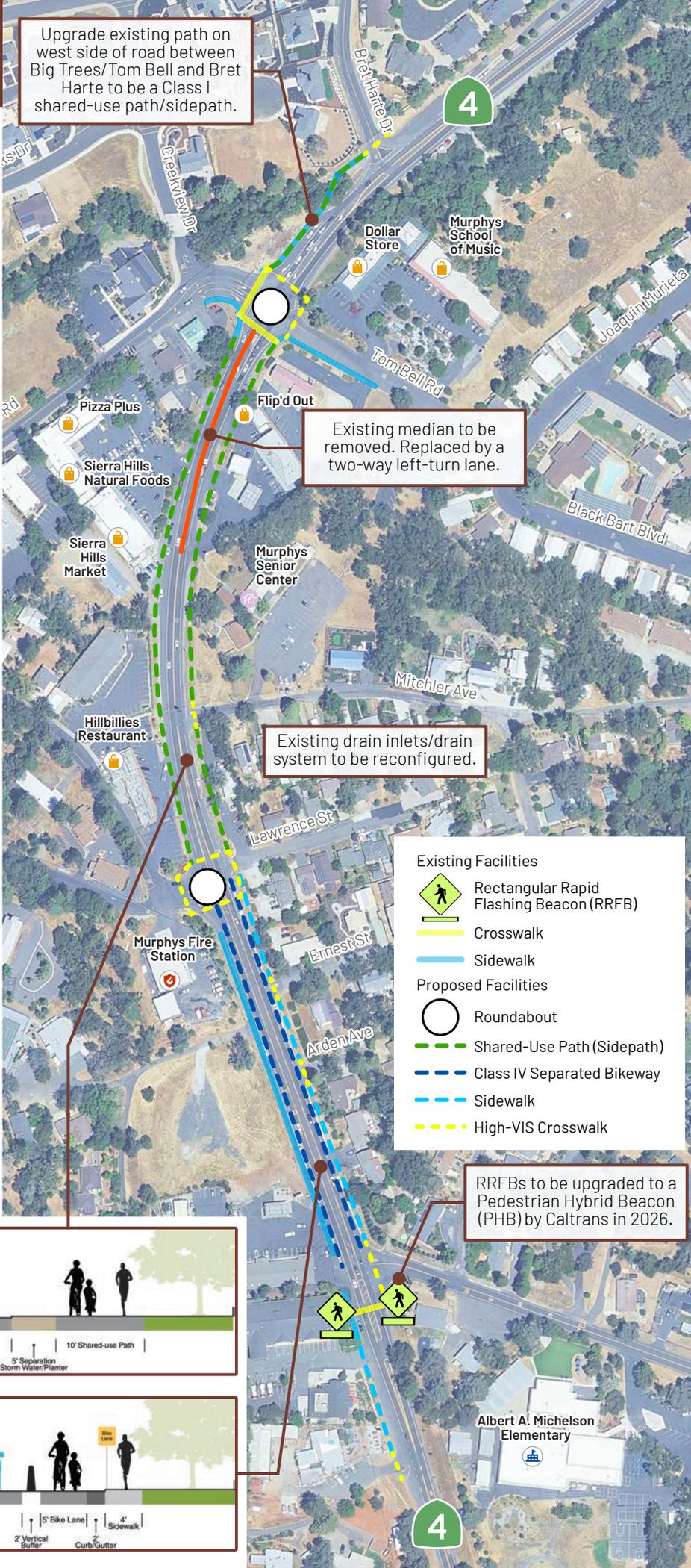
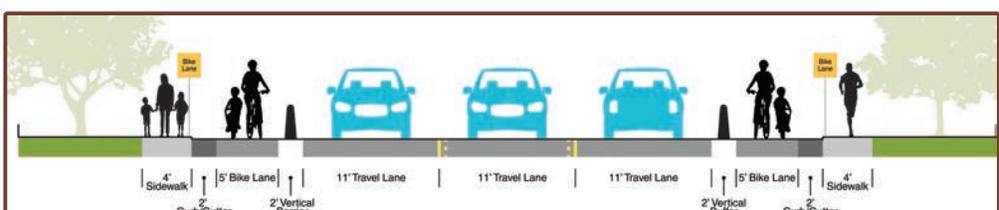
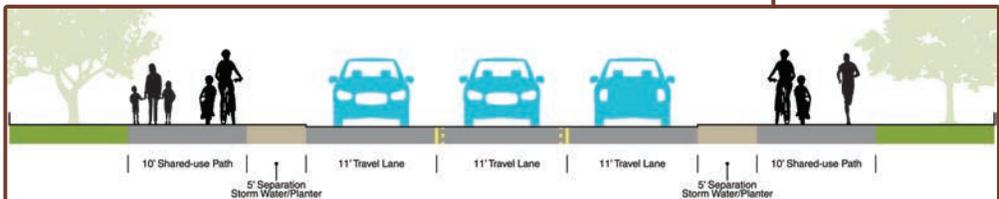
SR 4 provides primary access between residential neighborhoods and the communities only elementary school, senior center, and grocery store.

- Downtown Murphys is a high traffic, year-round tourist destination with limited parking. Tourists often park on side streets and walk on SR 4 to access Main Street.
- Community has consistently vocalized a desire for bicycle, pedestrian, and safe routes to school improvements for almost 25 years, as documented in the following planning efforts:
  - Calaveras County Active Transportation and Recreational Trails Plan (2026)
  - Murphys SR 4 Complete Streets Plan (2019)
  - Regional Bicycle, Pedestrian, and Safe Routes to School Plan (2015)
  - Calaveras County Bicycle Master Plan (2007)
  - Calaveras County Pedestrian Master Plan (2007)
  - Murphys Circulation, Pedestrian, Bicycling, and Parking Study Final Report (2002)

**Demographic Context of Murphys CDP (2024 ACS 5-year Estimates):**

- Population: 1,951
- Median Household Income: \$73,571 which is less than 80% of the statewide median household income of \$98,613 (disadvantaged community indicator)
- Median Age: 64.6 compared to the state median age of 38.4, indicating a higher percentage of senior aged residents

Updated Cost Estimates to be Provided



# State Route 26 in Valley Springs

## Project Description

The SR 26 Valley Springs Main Street Complete Streets project aims to provide a bicycle and pedestrian pathway between residential neighborhoods and key community destinations including the Valley Oaks Shopping Center, Nove Plaza and downtown Valley Springs, where the elementary school, library, two parks/recreational areas, and various retail/commercial businesses are located. The project includes design and construction of an approximately 1.5 mile shared-use path along SR 26 from Vista Del Lago Drive to Hogan Dam Road (north) where it would transition to an existing sidewalk. Design and construction of an approximately 1,100 foot sidewalk north of the existing sidewalk terminus is also included which would close the gap in the existing network and create a cohesive, connected, and accessible facility for users of all ages and abilities along the entire length of SR 26 between downtown Valley Springs and Vista Del Lago Drive.

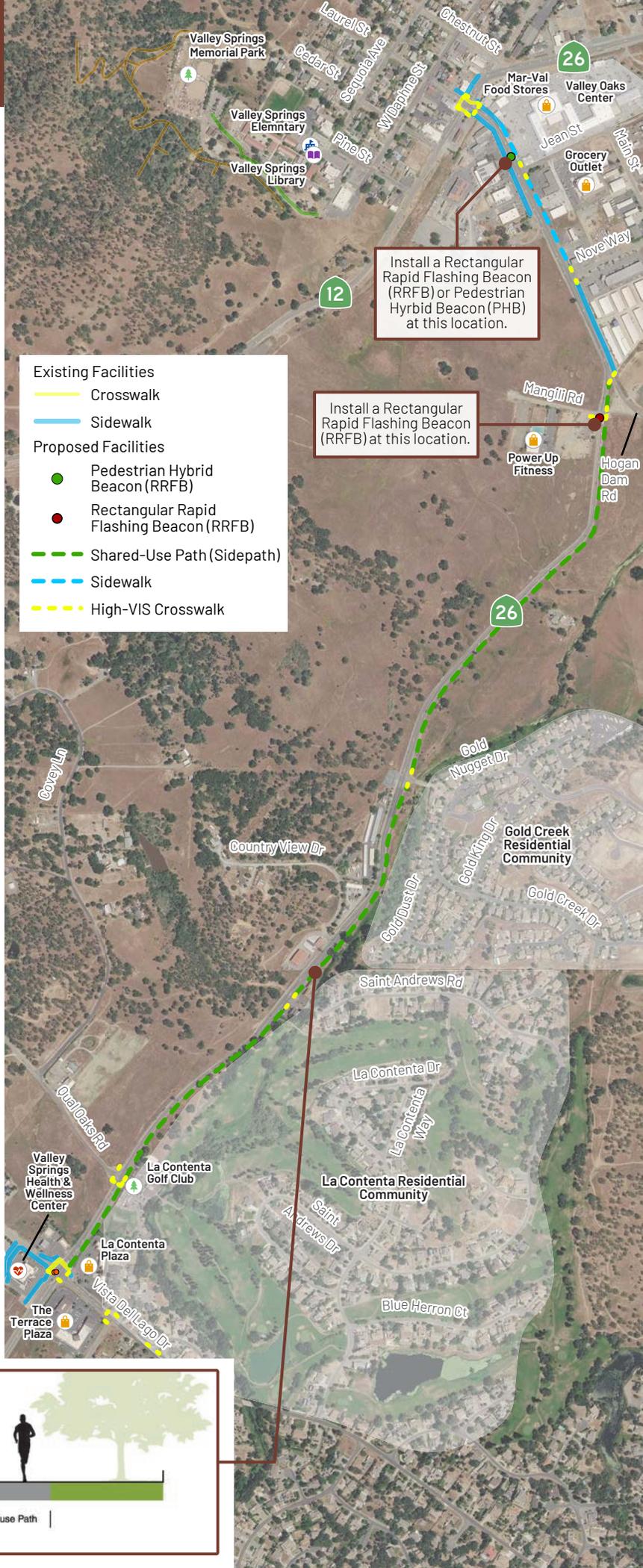
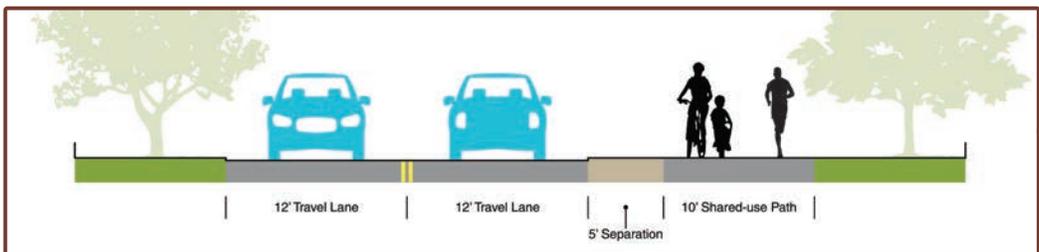
## Key Facts

- SR 26 provides the primary connection between residential communities in Valley Springs and key destinations such as grocery, commercial/retail, medical, service, recreational, and educational land uses.
- Residents currently walk in the ditch adjacent to SR 26 to avoid vehicular traffic.
- Community support for walking/biking facilities is previously documented in the following planning efforts:
  - Calaveras County Active Transportation and Recreational Trails Plan (2026)
  - Valley Springs Town Center Connectivity Plan (2020)
  - Regional Bicycle, Pedestrian, and Safe Routes to School Plan (2015)
  - Calaveras County Bicycle Master Plan (2007)
  - Calaveras County Pedestrian Master Plan (2007)

**Collision Data:** Between 1/1/2020 and 12/31/2024, 41 reported injury related collisions have occurred within the project segment, including three pedestrian involved collisions, one of which was fatal. High volumes, high speeds, lack of shoulders and lack of pedestrian facilities contribute to collisions on the corridor. Most common collision types include:

- Broadside (29%)
- Overturned (17%)
- Hit Object (15%)
- Rear-End (12%)
- Head-On (12%)
- Vehicle/Pedestrian (7%)

Updated Cost Estimates to be Provided



# Angels Creek Trail Phases I & II

## Project Description

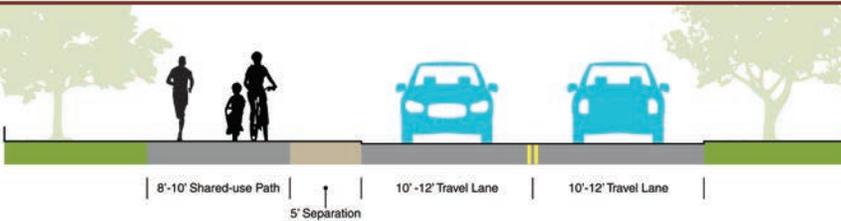
The Angels Creek Trail Phases I & II project is a multi-purpose trail project that aims to reduce VMT by providing walking and biking access from residential neighborhoods to historic downtown Angels Camp, improve public health through the creation of a recreational trail along Angels Creek within the City limits, and preserve and protect vegetation and natural habitats along the creek corridor by providing a designated space for walking and biking. The project includes design and construction of a Class I shared-use path adjacent to Angels Creek, starting at Kurt Drive and ending at Main Street (SR 49), a Class III bike route along Finnegan Lane from Main Street (SR 49) to Angel Oaks/Greenhorn Creek Road, and a Class I shared-use path along the Angel Oaks/Greenhorn Creek Road alignment to connect the Greenhorn Creek subdivision to Finnegan Lane.

## Key Facts

Project has received environmental clearance (SCH #: 2023050036)  
 Community has consistently vocalized support for walking/biking improvements within the project area through the following planning projects:  
 Calaveras County Active Transportation and Recreational Trails Plan (2026)  
 Regional Bicycle, Pedestrian, and Safe Routes to School Plan (2015)  
 Angels Creek Trail Master Plan and Trail (2012)  
 Angels Camp 2020 General Plan (2009)  
 Calaveras County Bicycle Master Plan (2007)  
 Calaveras County Pedestrian Master Plan (2007)

Demographic Context of City of Angels (2024 ACS 5-year Estimates)  
 Population: 3,716  
 Median Age: 55.0 compared to the state median age of 38.4, indicating a higher percentage of senior aged residents  
 Median Household Income: \$62,188 which is less than 80% of the statewide median household income of \$98,613 (disadvantaged community indicator)  
 Commuting Characteristics:  
 Approximately 4% of workers have no vehicle available  
 Approximately 14% of workers walk to work

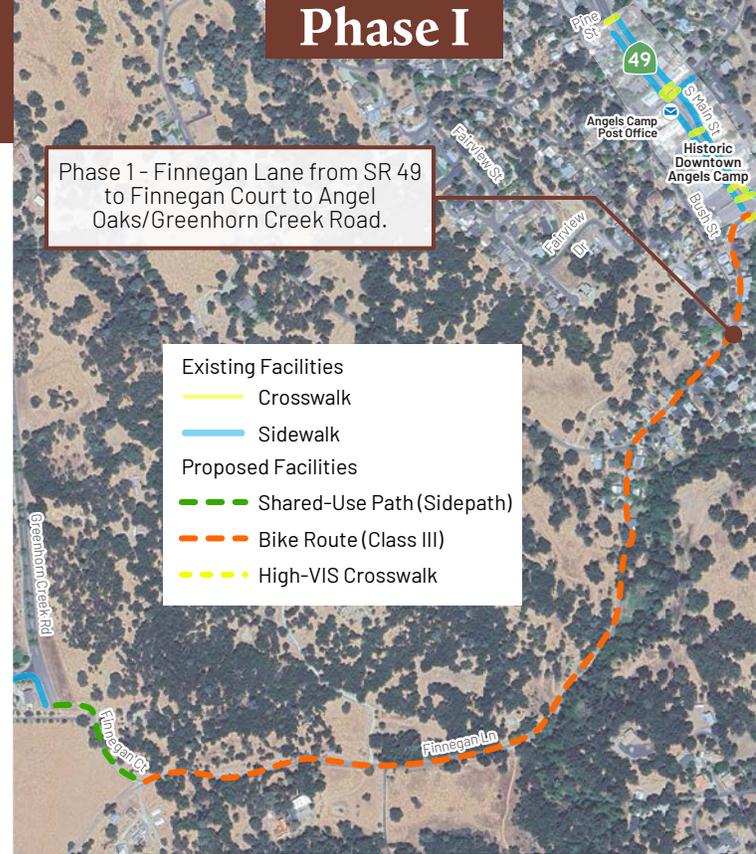
Updated Cost Estimates to be Provided



## Phase I

Phase 1 - Finnegan Lane from SR 49 to Finnegan Court to Angel Oaks/Greenhorn Creek Road.

- Existing Facilities
  - Crosswalk
  - Sidewalk
- Proposed Facilities
  - Shared-Use Path (Sidepath)
  - Bike Route (Class III)
  - High-VIS Crosswalk



## Phase II

Phase 2 - Vallecito Road from Kurt Drive/Depot Road to SR 49/Finnegan Lane.

