



City of Santee

Active Santee Plan

January 2021

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City Staff

Minjie Mei, Project Manager
Tom Romstad, Community Services Department

Project Working Group

Brandon Tobias, Caltrans District 11
Mario Sanchez, City of El Cajon
Zachary J. Hansen, Health and Human Services Agency
Beverly Neff, Metropolitan Transit System
Madai Parra, SANDAG
Andy Hanshaw, San Diego County Bicycle Coalition
Traffic Sergeant Joe Passalacqua, San Diego County Sheriff Department
Susie Murphy, San Diego Mountain Biking Association
Julia Richards, San Diego River Conservancy
Dustin Harrison, San Diego River Conservancy
Rob Hutsel, San Diego River Park Foundation
Kristen Dare, Santee Chamber of Commerce
Deputy Chief Tim Stuber, Santee Fire Department
Charles Myers, Santee School District

Consultant Team

Chen Ryan Associates



Executive

Summary

Project Overview & Planning Process

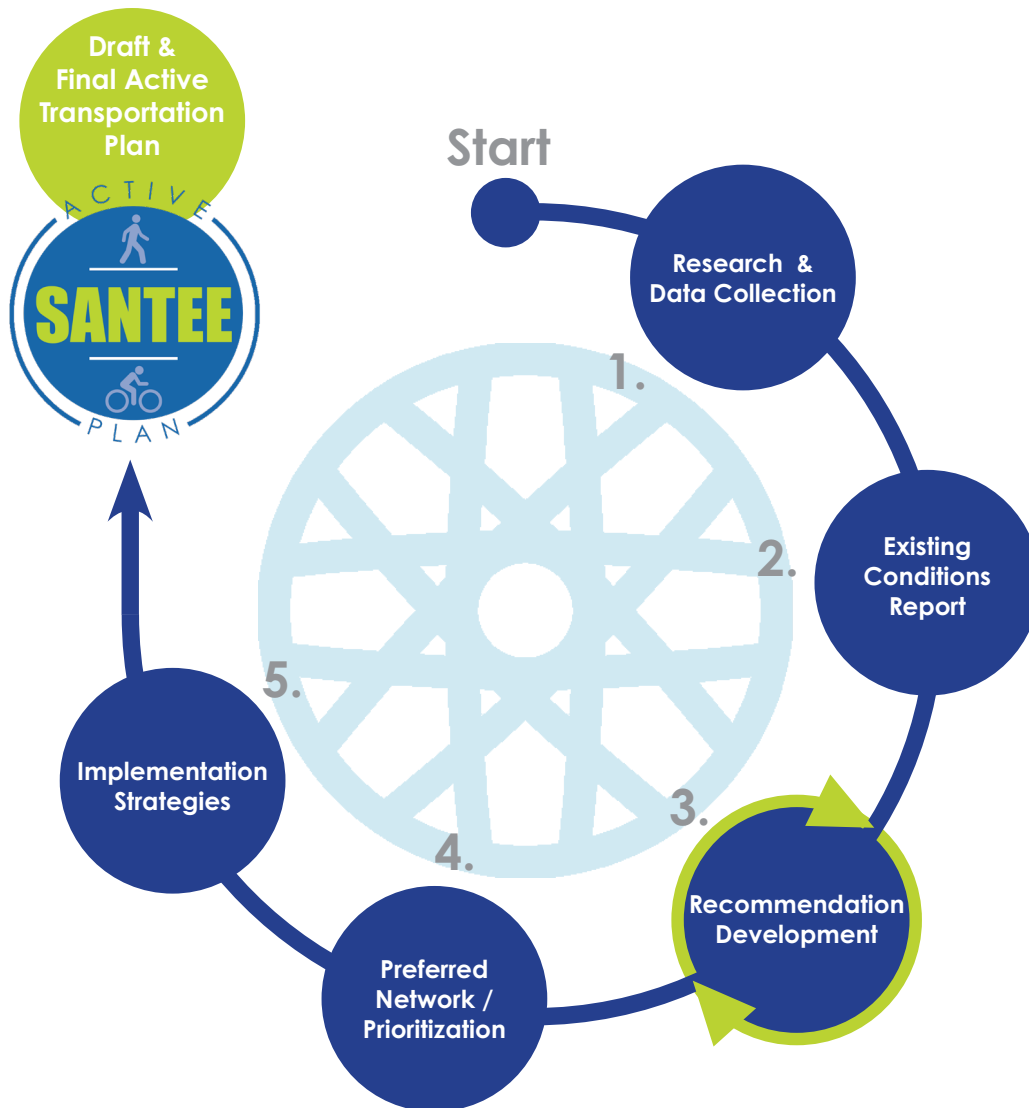
The Active Santee Plan (ASP) is the City of Santee's Active Transportation Plan. The ASP focuses on enhancing the safety and comfort of existing pedestrian and bicycle facilities, identifying needed improvements to the system, as well as increasing connectivity to key attracting land uses such as schools, employment centers, retail districts, and recreational areas.

The planning process initiated with an extensive data collection effort and existing conditions analysis, which was further informed by a wide-reaching community engagement process.

Goals, objectives, and policies, along with project recommendations, for infrastructure projects, and programs – were developed in response to the key opportunities and constraints identified in the initial project phase. Recommendations were further refined through additional community and stakeholder input as well as feasibility evaluations.

The final project recommendations are supported by implementation measures consisting of a prioritization process, project descriptions, cost estimates, and conceptual designs.

This Plan replaces and updates the current Bicycle Master Plan.



Community Engagement

Different engagement methods were used to maximize the reach of the outreach process, to engage different segments of the population, and to make providing input as convenient as possible. The public participation strategy took into consideration the varying schedules and availability of community members to attend regular City meetings. Considering this, various outreach strategies were held over the course of the project, including the convening of a Project Working Group (PWG) at key project milestones, the creation and maintenance of a project website, the development and distribution of a questionnaire available in-person and online, and pop-up workshops at community events.

Project Working Group

The PWG was established with representatives of various organizations, intended to represent the interests of groups with some role in walking and/or bicycling in the City of Santee. Early in the project, an invitation was extended to different entities requesting their participation throughout the planning process. Each PWG member was tasked with representing their unique perspective, identifying priorities, and providing feedback on draft deliverables. Additionally, the PWG reported back to the organizations they represented, helping spread the word about the plan development and opportunities for the public to participate.

A total of three PWG meetings were held throughout the project.

- PWG #1 – Priorities for active transportation
- PWG #2 – Existing conditions
- PWG #3 – Recommendation development and refinement

Project Website and Questionnaire

The Active Santee Plan had a designated website – activesantee.com – which informed residents about the planning process, upcoming events, and provided a mechanism for community members to submit comments and questions about the plan.

The planning process included a questionnaire, designed to solicit information which would help the project team identify active transportation travel patterns, problems areas and the priorities of residents. Paper copies of the questionnaire were made available at all of the events the outreach team attended. The questionnaire was also available online if residents preferred taking it electronically.

Pop-Up Events

The project team made an effort to attend scheduled community events and host “pop-up” workshops consisting of project fact sheets, questionnaires, large scale maps of the city and transportation infrastructure, and project team members available to discuss the project.

The pop-up events gave the project team the opportunity to interact with residents of the City and hear first-hand any concerns and/or questions community members had about the Active Santee Plan.

Events attended included:

- Santee Street Fair: May 25, 2019
- Two summer concerts in the park: June 20, 2019 & July 11, 2019.

Existing Conditions

An extensive research and data collection effort was undertaken at the project onset to inform the identification of existing issues and opportunities. This information was analyzed and memorialized in an Existing Conditions Report (ECR), documenting the state of pedestrian and bicycle demand, facility quality, network connectivity, and user safety in Santee.

Key opportunities identified through the existing conditions process include building from existing community assets like the San Diego River Trail, Forrester Creek Trail and pathways around the Town Center. Constraints facing active transportation include the large intersections, wide roadways, and high volumes of vehicular traffic on major arterials. These findings, along with the themes identified throughout the community engagement process played a large role in the formulation of project recommendations.



Bike Route Sign

Goals, Objectives, and Policies

The community engagement and existing conditions findings were used to develop the goals intended to guide development of the plan recommendations and future pedestrian and bicycle activities in the City. The goals were supported by a series of objectives, policies, and performance indicators, covering topics related to the five E's of planning: engineering, education, encouragement, enforcement, and evaluation. The following four overarching goals were identified as desired future outcomes for active transportation within Santee:

- A balanced, interconnected multimodal transportation network that allows for the efficient and safe movement of all people and goods, and that supports the current and future needs of Santee community members and travel generated by planned land uses.
- Encourage alternative means of transportation on a regional and community scale for all trip types: work commute, school commute, errands and recreation.
- Designate the location and the appropriate type of bikeways and paved bicycle trails that would have the greatest potential to serve the commuter and recreational needs of the community of Santee.
- To create an environment that allows for school aged children to safely walk and ride their bicycles to school on convenient and connected networks.

Recommendations

In addition to goals, objectives, and policies, the ASP includes recommendations consisting of sidewalk infill and curb ramp locations, a bicycle network, trail accessibility enhancements, and programmatic recommendations. The recommendations sought to address the key themes gathered through the community engagement activities taking into consideration of the opportunities and constraints identified through the existing conditions analysis.

Sidewalk Infill Groupings

A citywide sidewalk and curb ramp inventory process was undertaken as part of the existing conditions analysis. The locations identified as missing sidewalks were then reviewed and grouped together to form sidewalk infill projects based on location proximity, while also taking project size into consideration. The resulting sidewalk infill projects are depicted in **Figure ES.1**.



Woodglen Vista Park

Bicycle Network Improvements

Recommended bicycle facilities consist of three classifications recognized by Caltrans: Class I Bike Paths, Class II Bike Lanes (buffered and non-buffered), and Class III Bike Routes. Additionally, paved multi-use paths, similar to Class I Bike Paths, were also recommended. The multi-use paths largely align with recommendations set forth in other planning documents around the Santee Town Center, the Mission Gorge Road corridor and Fanita Parkway.

Figure ES.2 provides a depiction of the four bicycle facilities included in this document, while the planned bicycle network is also shown in **Figure ES.3**.

In addition to the bicycle network, a pilot location for the installation of green conflict paint is recommended. Colored pavement within a bicycle lane increases the visibility of the facility, identifies areas of conflict and reinforces priority to bicyclists in conflict areas. Based on the review of need through the existing conditions analysis, consideration for green paint use is recommended at the Mission Gorge Road & SR-125 intersection.

The ASP also provides an inventory of traffic signals within the City of Santee, distinguishing between locations that have bike detection, do not have detection, or have detection in select directions. Signals that do not currently have full bicycle detection are recommended to be upgraded.



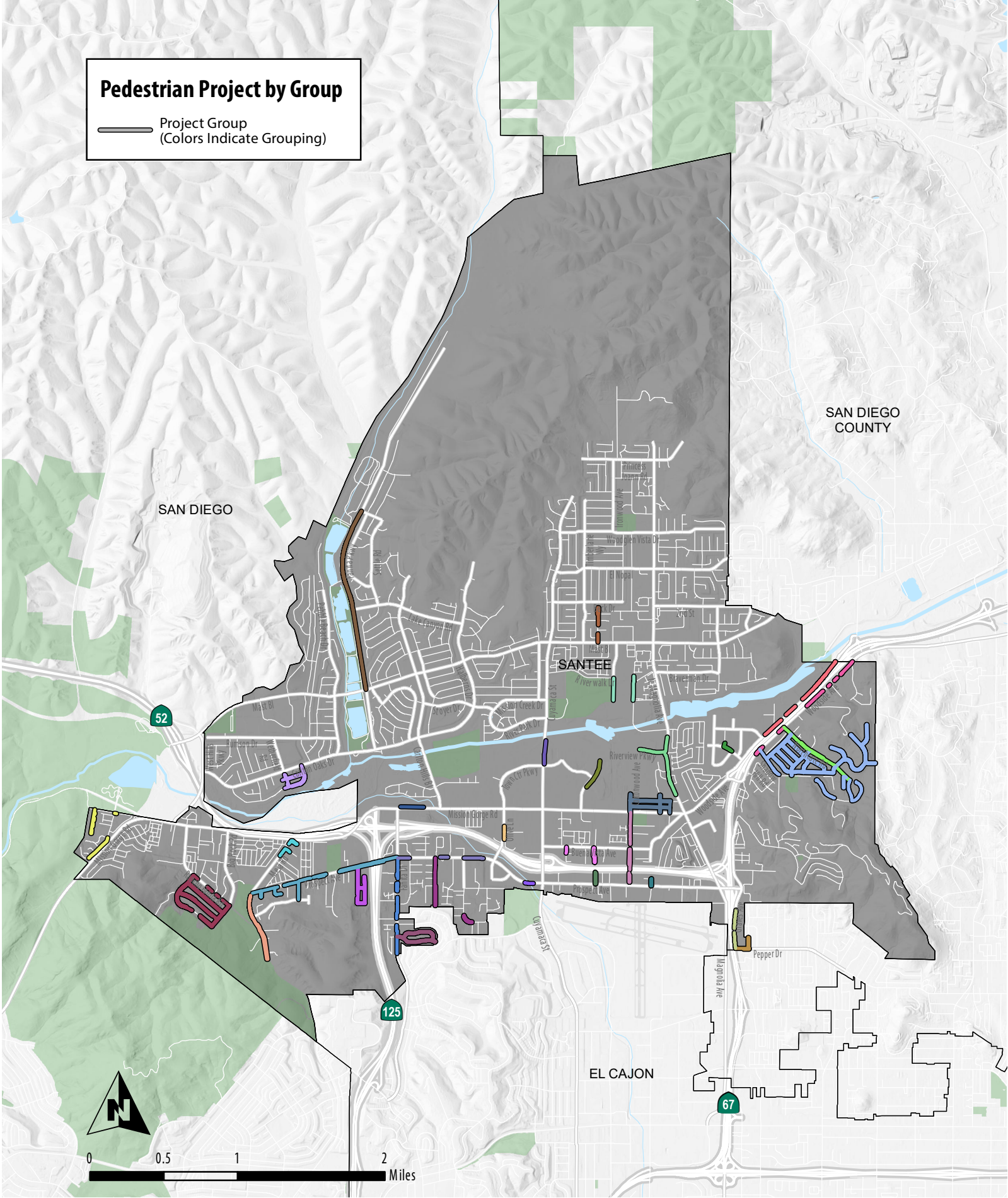
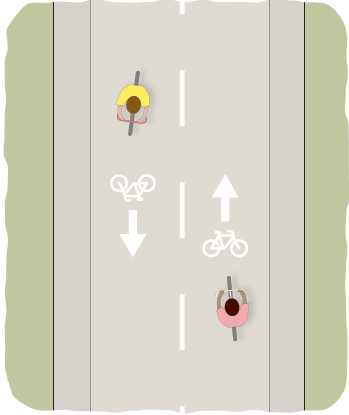
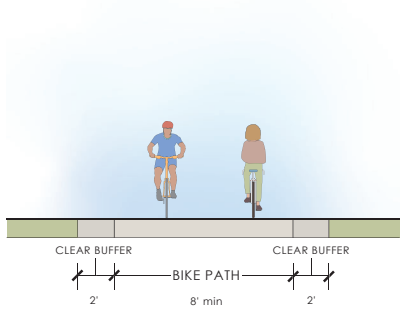
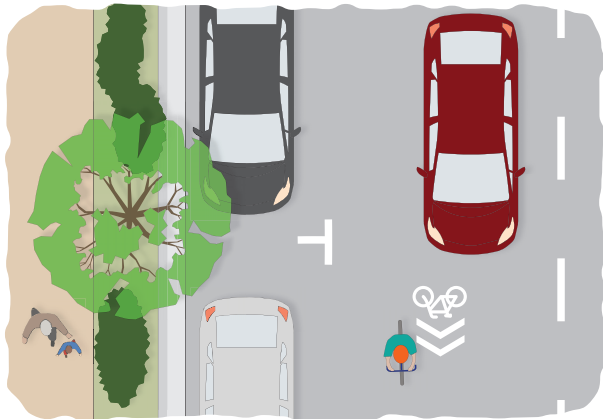
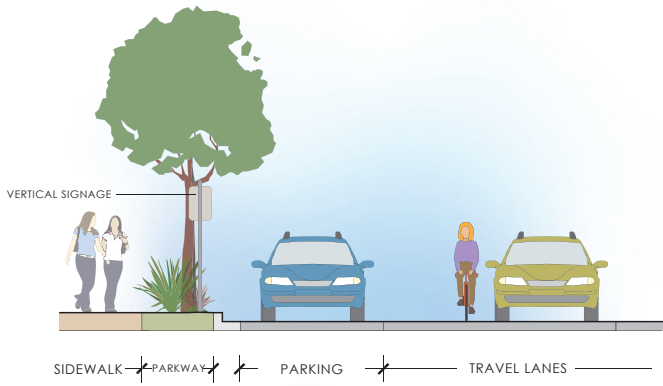
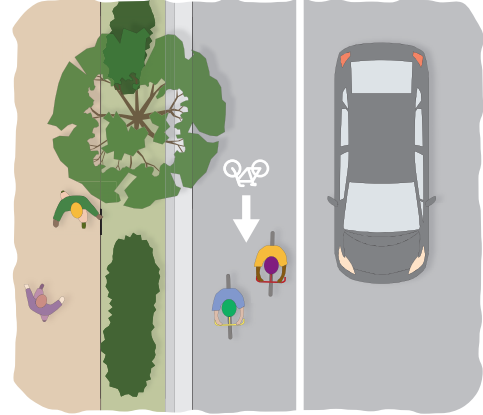
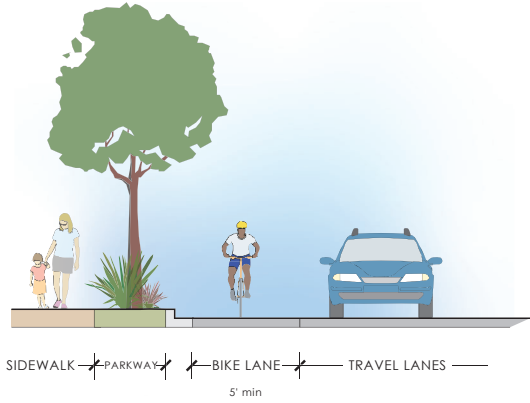


Figure ES.1 Sidewalk Infill Locations

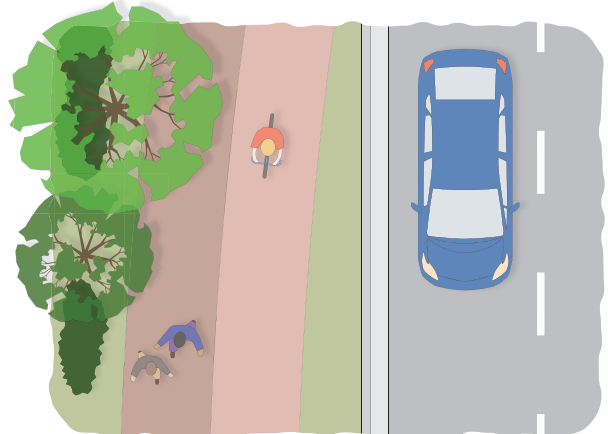
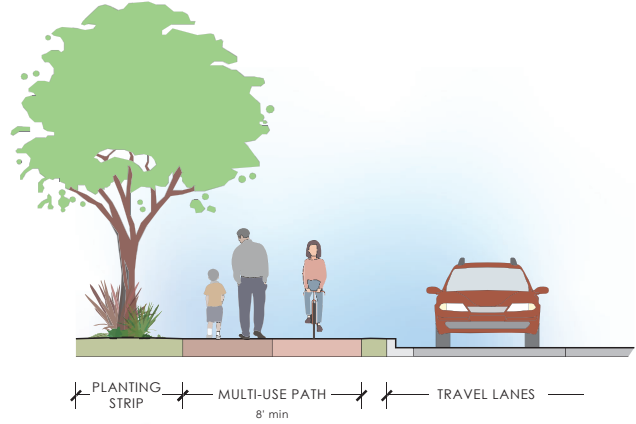
Class I Bike Path



Class II Bike Lane



Class III Bike Route



Multi-Use Paths

Figure ES.2 Bicycle Facility Types

Planned Bicycle Facilities

- Class I Bike Path
- Class II Bike Lane
- Class II Buffered Bike Lane
- Class III Bike Route
- Multi-Use Path (Paved)
- Multi-Use Path (Unpaved)

Existing Bicycle Facilities

- Class I Bike Path
- Class II Bike Lane
- Class II Buffered Bike Lane
- Class III Bike Route
- Multi-Use Path (Paved)
- Multi-Use Path (Unpaved)
- 90 US Bike Route 90

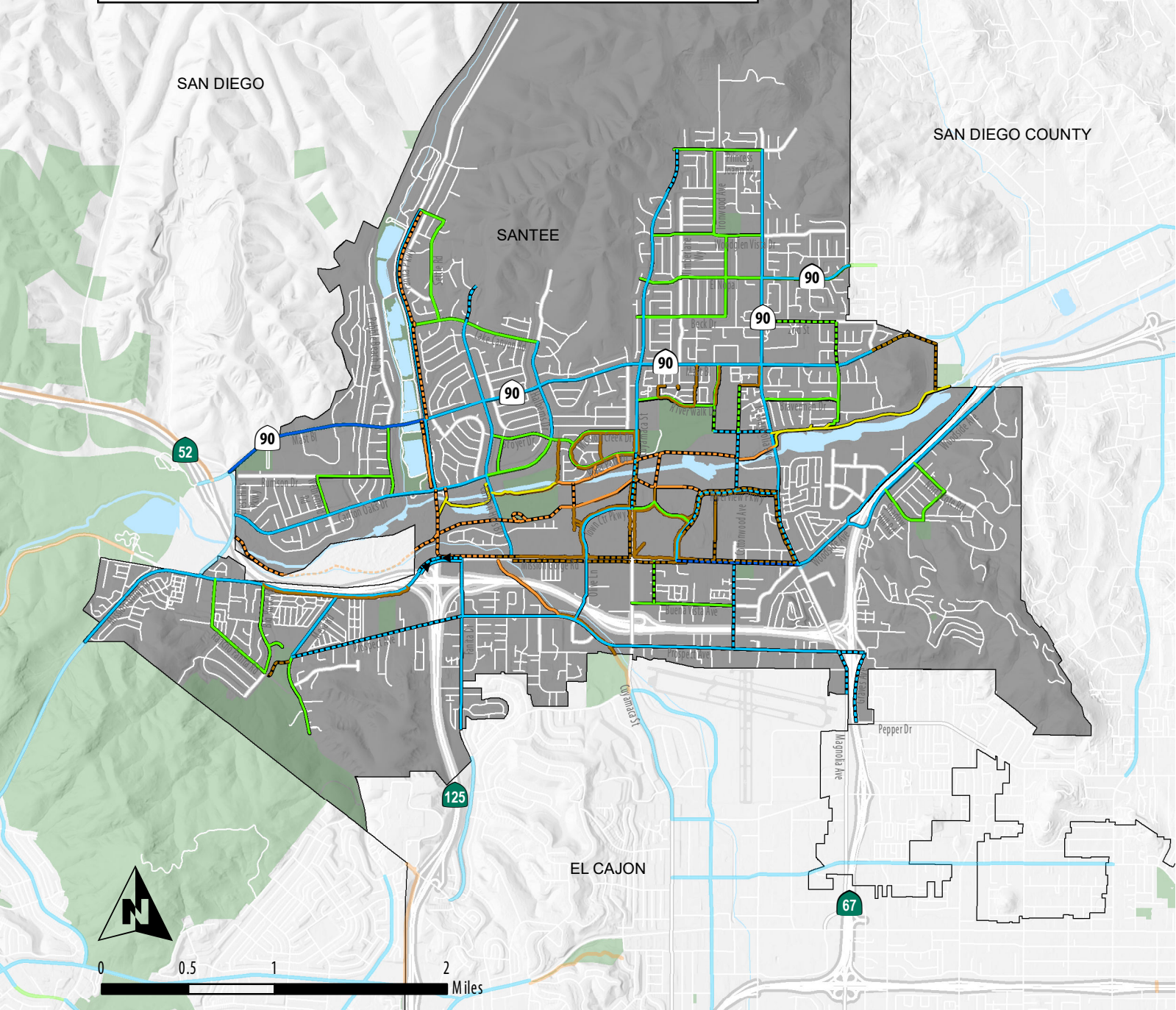
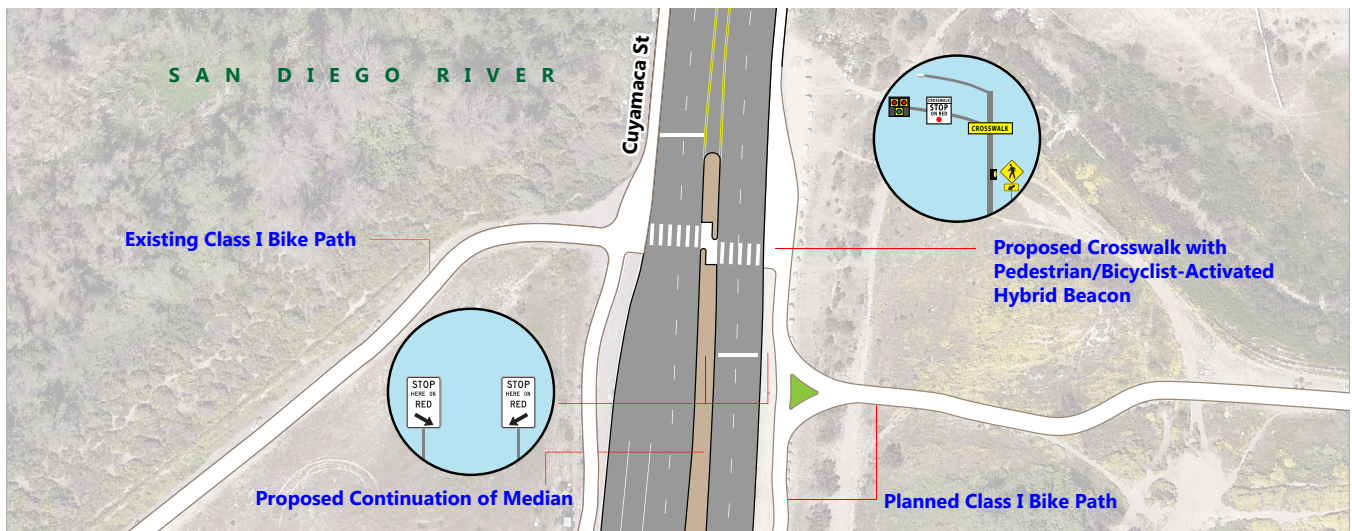


Figure ES.3 Planned Bicycle Network



Trail Access Enhancement Example

Trail Access Enhancements

The San Diego River Trail and Forrester Creek Trail are unique community assets, offering comfortable pedestrian and bicycle options for recreation and transportation trips alike. These paths encounter minimal roadway crossings and are largely separated from vehicle travel lanes.

Enhancements consisting of controlled crossings and supporting features are proposed at four locations to facilitate safe roadway crossings and improve pedestrian and bicycle access to the trails. The trail access enhancement locations include:

- San Diego River Trail (south of river) at Cuyamaca Street
- San Diego River Trail (north of river) at Magnolia Avenue
- Forrester Creek Trail at Mission Gorge Road
- Forrester Creek Trail at Prospect Avenue

Supporting Programs

Lastly, the ASP recommended a series of supporting programs to further improve safety, promote active transportation, and better understand the value and return of investments. Active transportation plans frequently discuss proposed changes through the lens of the “5 E’s” –

Engineering, Education, Encouragement, Enforcement, and Evaluation. Engineering is covered through the proposed infrastructure projects. The remaining four E’s – Education, Encouragement, Enforcement, and Evaluation – are addressed through supporting programs.

The supporting program section includes Education Programs such as Safety Messaging Campaigns, Adult Bicycle Education, and Safe Routes to School program. In addition, the supporting programs section includes Encouragement Programs such as Bike to Work Day/Month, Open Streets Events, and Pop-Up Neighborhood Event. Two other important programmatic considerations are Enforcement Programs and Evaluation Programs.

Evaluation Programs are intended to strengthen City staff and community member understanding of behaviors, active travel patterns, and related responses to investments in cycling and walking infrastructure and programmatic efforts. These types of programs include continued evaluation of pedestrian and bicycle collisions and continued collection of pedestrian and bicycle counts.

Prioritization Process

A prioritization process was conducted as a means to objectively rank the planned bicycle facilities and sidewalk infill projects. Prioritization criteria consists of inputs related to demand and safety.

Within the demand-related prioritization criteria, projects were assigned point values based on school proximity, active transportation propensity, regional significance, and public comment.

Within the safety-related prioritization criteria, projects were assigned point values based on number of collisions, CalEnviroScreen (areas most vulnerable to pollution), gap closure, roadway classification, posted speed, and staff input.

Pedestrian and bicycle infrastructure projects were prioritized separately, however, using the same criteria. The hybrid beacons proposed to enhance trail access were each evaluated as part of the bicycle network. **Table ES.1** presents the 10 highest ranking sidewalk infill projects. **Table ES.2** presents the 10 highest ranking bicycle facilities.

High priority project sheets consisting of project descriptions, conceptual graphics and planning-level cost estimates were created to support each of the 10 highest ranking sidewalk infill projects and bicycle projects.

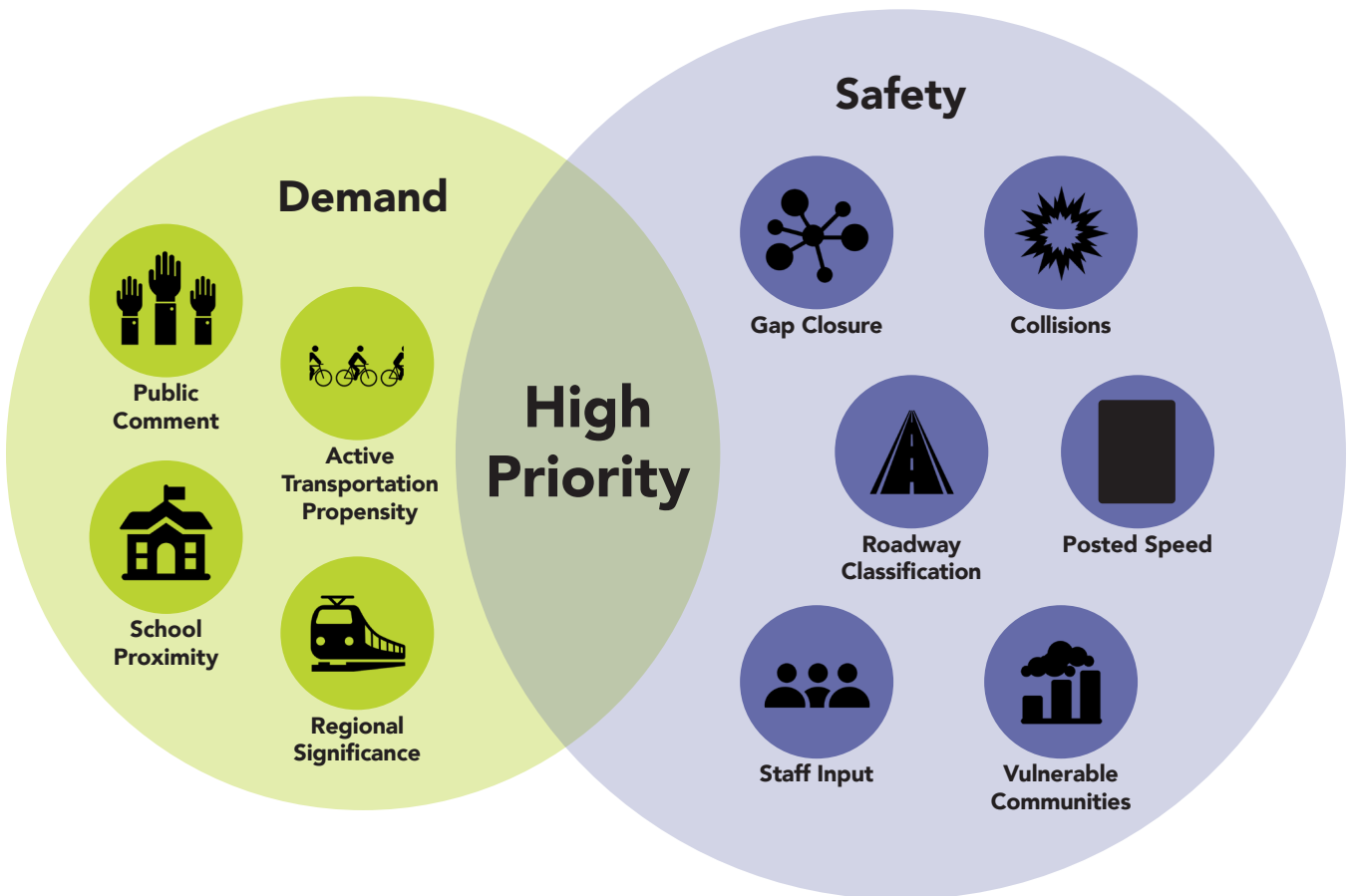


Table ES.1 Sidewalk Infill Grouping Prioritization Results

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score
1	Cuyamaca St (east side)	Town Center Pkwy to River Trail bridge (overpass)	847	--	--	--	17
2A	Graves Ave (east side)	Pepper Dr to ~750ft south of Prospect Ave	1,373	--	--	2	14
2B	Riverview Pkwy (east side)	Town Center Pkwy to North end	572	--	--	--	14
	Riverview Pkwy (southeast side)	Town Center Pkwy to ~400ft south of Town Center Pkwy	--	388	--	--	
2C	Woodside Ave (south side)	67-Fwy to Northcote Rd	559	--	--	3	14
	Woodside Ave (south side)	Northcote Rd to Woodside Terrace	2,178	--	3	--	
5	Magnolia Ave (west side)	Cottonwood Ave to Park Ave	2,032	--	--	--	13
	Riverview Pkwy (north side)	Magnolia Ave to West end (cul-de-sac)	--	987	--	--	
6A	Cottonwood Ave (both sides)	Prospect Ave to 52-Fwy	597	--	--	--	12
	Cottonwood Ave (both sides)	52-Fwy to Mission Gorge Rd	2,328	--	8	--	
6B	N Woodside Ave (north side)	Wheatlands Ave to N City Boundary	3,230	--	--	--	12
6C	Mission Gorge Rd (north side)	Fanita Dr to ~500ft west of Carlton Hills Blvd	--	1,211	--	--	12
6D	Park Center Dr (east side)	Riverwalk Dr to South end (cul-de-sac)	804	--	--	--	12
	Cottonwood Ave (west side)	Annie Ln to Claudia Ave	870	--	--	--	
10A	Fanita Dr (east side)	Prospect Ave to S City Boundary	2,276	--	3	3	11
	Fanita Dr (west side)	Prospect Ave to S City Boundary	953	--	3	8	

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score
10B	Prospect Ave (south side)	Atlas View Dr to Agent St	683	--	--	--	11
	Prospect Ave (south side)	Fanita Dr to Double M Rd	--	425	--	--	
	Prospect Ave (south side)	Granite House Ln to 100 ft east of Ellsworth Ln	373	--	--	--	
10C	Prospect Ave (south side)	Existing Class I east of Pathway St to 250 ft west of Cuyamaca St	297	--	--	--	11
10D	Pepper Dr (both sides)	Graves Ave to Teton Dr	690	--	--	--	11
	Teton Dr (both sides)	Pepper Dr to Andes Rd	--	788	--	--	

Table ES.2 Bicycle Project Prioritization Results

Rank	Segment	Extent	Facility	Miles	Score
1	Mission Gorge Rd (north side)	SR-125 / Existing Path to Carlton Hills Blvd	Class I Path	0.5	19
2A	Magnolia Ave	Prospect Ave to S City Boundary	Class II Bike Lane	0.3	16
2B	San Diego River Trail (south of river) at Cuyamaca Street	N/A	Hybrid Beacon	N/A	16
4A	River Trail Crossing	North side of Walmart to River Rock Ct	Class I Path	0.1	13
4B	Mission Gorge Rd	SR-52 to SR-125	Green Conflict Paint & Class II Bike Lane (WB)	0.3	13
6A	River Trail (south) Segment 8	Carlton Hills Blvd to Willowgrove Pl	Class I Path	0.5	12
6B	Prospect Ave	Mesa Rd to Fanita Dr	Class II Bike Lane	1.0	12
6C	Forrester Creek Trail at Prospect Avenue	N/A	Hybrid Beacon	N/A	12
9A	Cottonwood Ave	Mission Gorge Rd to Prospect Ave	Class II Bike Lane	0.5	11
9B	Mission Greens Rd	Mission Gorge Rd to Buena Vista Ave	Class III Bike Route	0.2	11
9C	2nd St	Magnolia Ave to Jeremy St	Class III Bike Route	0.4	11

A dirt path lined with a wooden fence and trees. The path is made of light-colored sand or dirt and curves gently to the right. On either side of the path is a rustic wooden fence made of vertical posts and horizontal rails. The trees are lush and green, with some showing signs of autumn. The sky is a clear, bright blue. The overall scene is peaceful and scenic.

Chapter 1

Introduction

1.1 Background

The Active Santee Plan builds on the City's previous planning efforts by providing a set of goals, a list of prioritized projects and possible funding sources to enhance the City's infrastructure to be more comfortable, safe and inviting for people who walk and bike, regardless of their age and ability. The recommendations outlined in this Plan consider the context of the City of Santee and are intended to reflect the desires expressed by the community.

The City of Santee is located in eastern San Diego County in Southern California, approximately 18 miles east of the Pacific Ocean and 14 miles north-east of downtown San Diego. The City of Santee is bordered to the west and north by Scripps Ranch, a community of San Diego, and to the east by unincorporated parts of the County of San Diego. The southern border of Santee is comprised of unincorporated San Diego County as well as the City of El Cajon. The City of Santee's location within the region can be seen in **Figure 1.1**.

The City of Santee is bisected by the San Diego River, which functions as both a barrier and an asset for active transportation. The shopping centers are almost exclusively clustered south of the San Diego River in the center of the City, and the industrial uses are predominately located in the southeast quadrant of the City.

The vast majority of Santee's residents who are employed, work outside of the City of Santee. Almost 50 percent of Santee's residents are employed (defined as workers 16 years and over), however of those, 57.2% work more than 10 miles away from their home. Due to this, the focus of the Active Santee Plan is on recreational and utilitarian trips, not the work-commute except in the Town Center area.

The appropriateness of this is further underscored, since unlike many cities in the region, Santee has expansive amounts of open space parks and recreation designated areas. This plan will connect residents to hiking, shopping and schools.

The Plan embodies a "Complete Streets" mindset that is aligned with the State of California's Complete Streets Act, California Assembly Bill 1358, which went into effect on January 1, 2011. The act requires the legislative body of a city or a county to plan for a balanced, multimodal transportation network that meets the needs of all roadway users, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.



Walker Preserve Trail

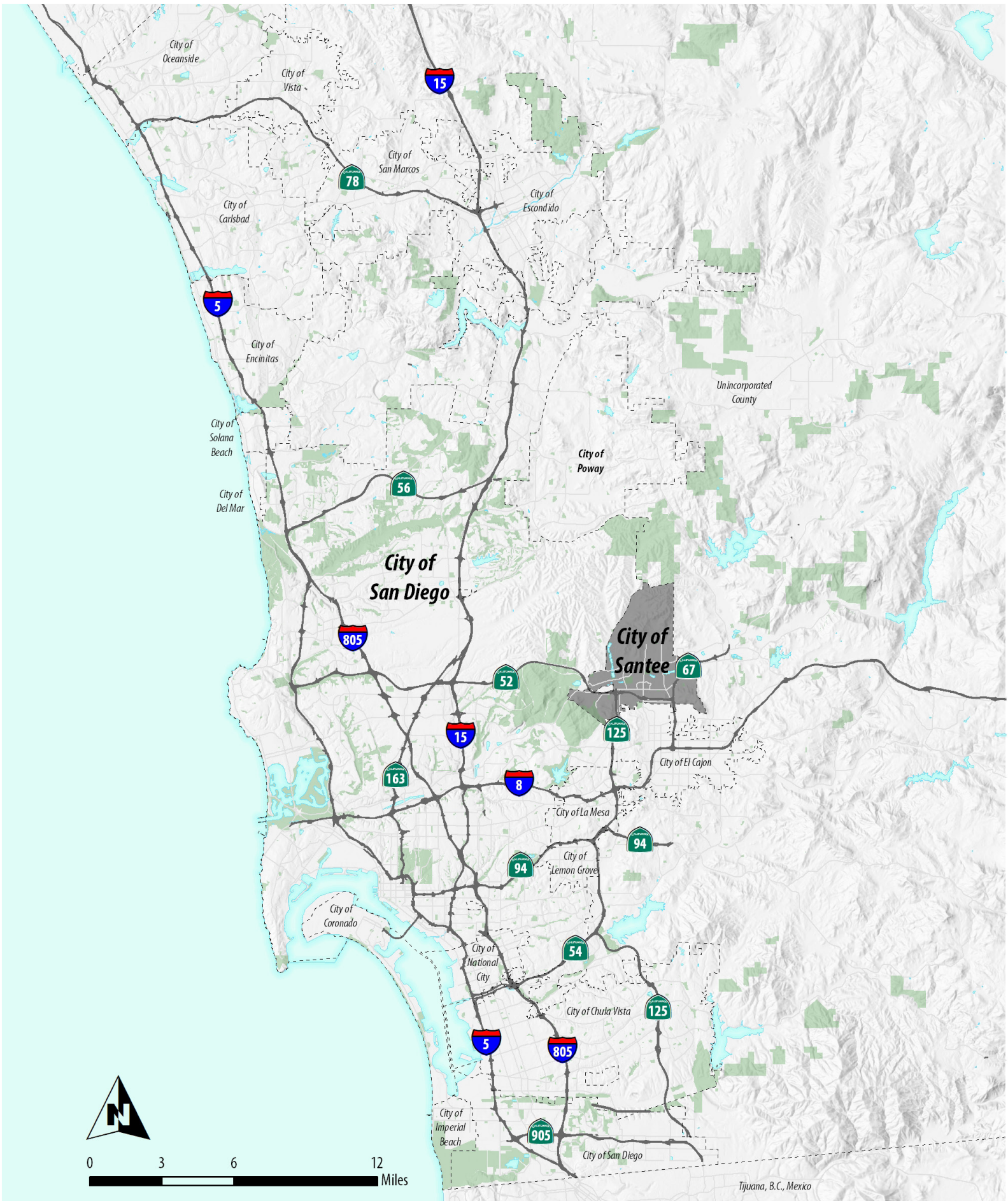


Figure 1.1 City of Santee within the Region

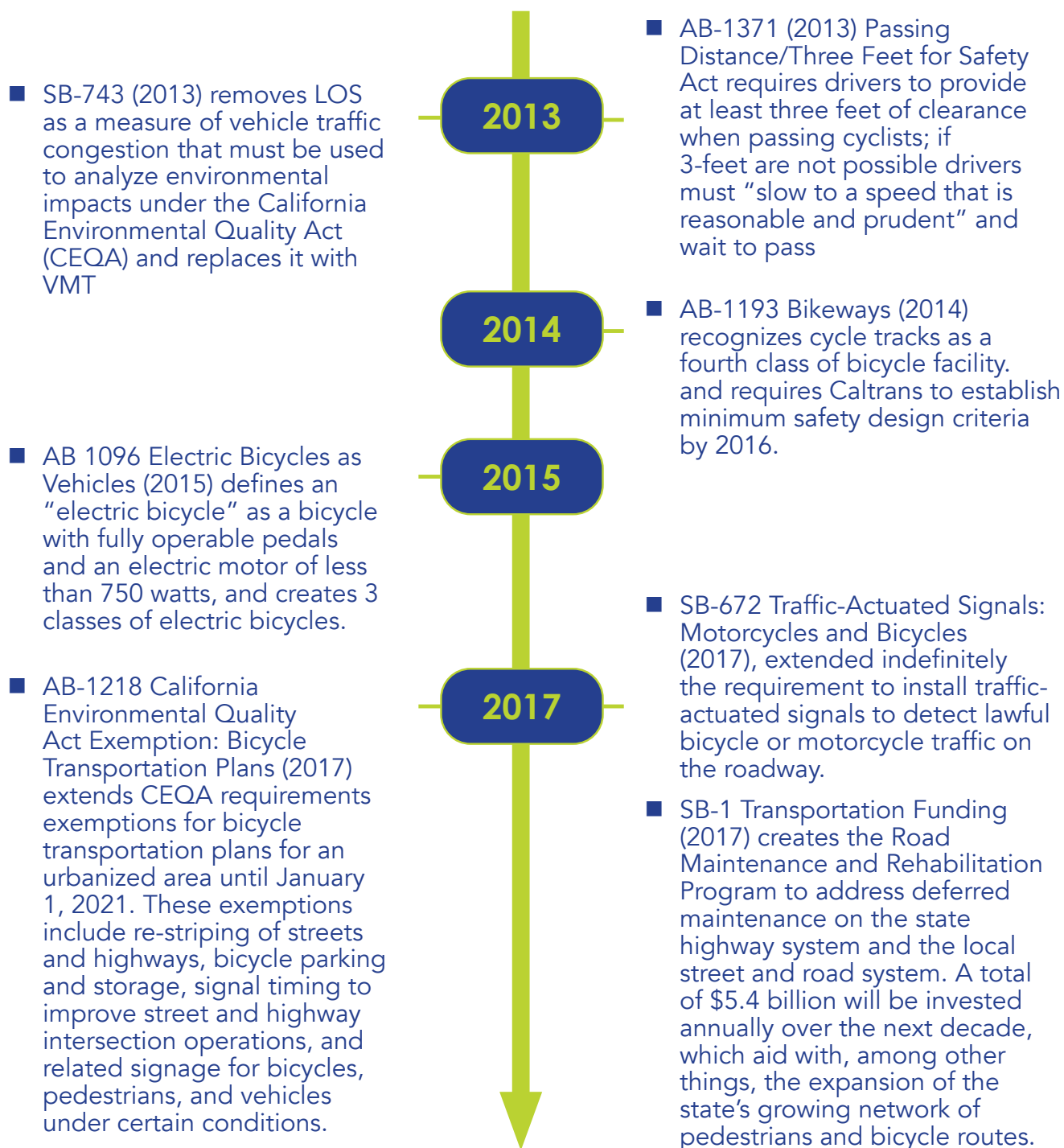
Since the adoption of the Complete Streets Act, the State of California has passed several pieces of legislation making it easier to not only plan for active transportation users, but to implement plans and create safer conditions.

Planning projects such as this document are exempt from CEQA analysis since they are planning and conceptual recommendations per AB-1218 CEQA for Bicycle and Pedestrian Plans (2017). As individual recommendations move forward toward further design and implementation, the City will then need to determine if the improvements may warrant further environmental evaluation.

This Plan meets and complies with the State of California's complete streets plan requirements and is intended to provide a fair assessment of current and future active transportation needs, implementation costs, and funding opportunities for bicycle and pedestrian facilities.



Timeline of Recent State Legislative Actions Supporting Active Transportation

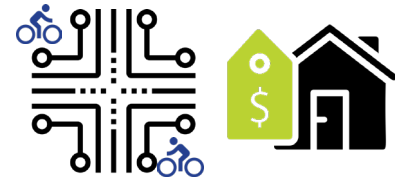


1.2 Benefits of Active Transportation

Recent planning legislation mandates a more balanced, multimodal transportation system with an emphasis on walking and biking. This has been, in part, due to the physical and environmental benefits that walking and biking provide.

Areas with increased levels of bicycling and walking experience improved public health, reduced traffic congestion, reduced emissions, and enhance economic growth. The following points present a snapshot of recent research performed regarding the potential benefits of walking and bicycling.

High bicycling rates tend to have lower crash rates¹



Proximity to a network of high-quality bike facilities is associated with an increase in property values²

For every **\$1** invested in trails



there were **\$2.70** in medical benefits³

Increasing biking & walking from **4 to 24** minutes a day on average would



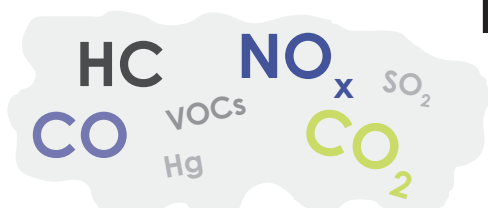
decrease GHGE by **14%**⁴



reduce cardiovascular disease & diabetes by **14%**⁴

The total number of pounds of pollutants emitted per year per car is approximately

12,140.30 lbs/year



1 mile

1 passenger car \approx **0.97 lbs/mile** of pollutants⁵

- 1 Marshall, W. and N. Garrick. "Evidence on Why Bike-Friendly Cities are Safer for all Road Users." Environmental Practice, 13, 1 (2011).
- 2 Liu, J. Shi, W. "Impact of Bike Facilities on Residential Property Prices." Transportation Research Record, 2662.1 (2017): 50-58.
- 3 Scudder-Soucie, B., Schmid, T., Pratt, M., Macera, C., Wang, G., Buchner, D. "A Cost-Benefit Analysis of Physical Activity Using Bike/Pedestrian Trails." 2005.
- 4 Maizlish, N., et. Al. "Health Cobenefits and Transportation-Related Reduction in Greenhouse Gas Emissions in the San Francisco Bay Area." American Journal of Public Health 103.4 (2013): 703-709.
- 5 2020 MTC Regional Campaigns. "2020 Bay Area Bike to Work Day." <https://bayareabiketowork.com/environmental-benefits/> (2020)

1.3 Plan Development Process

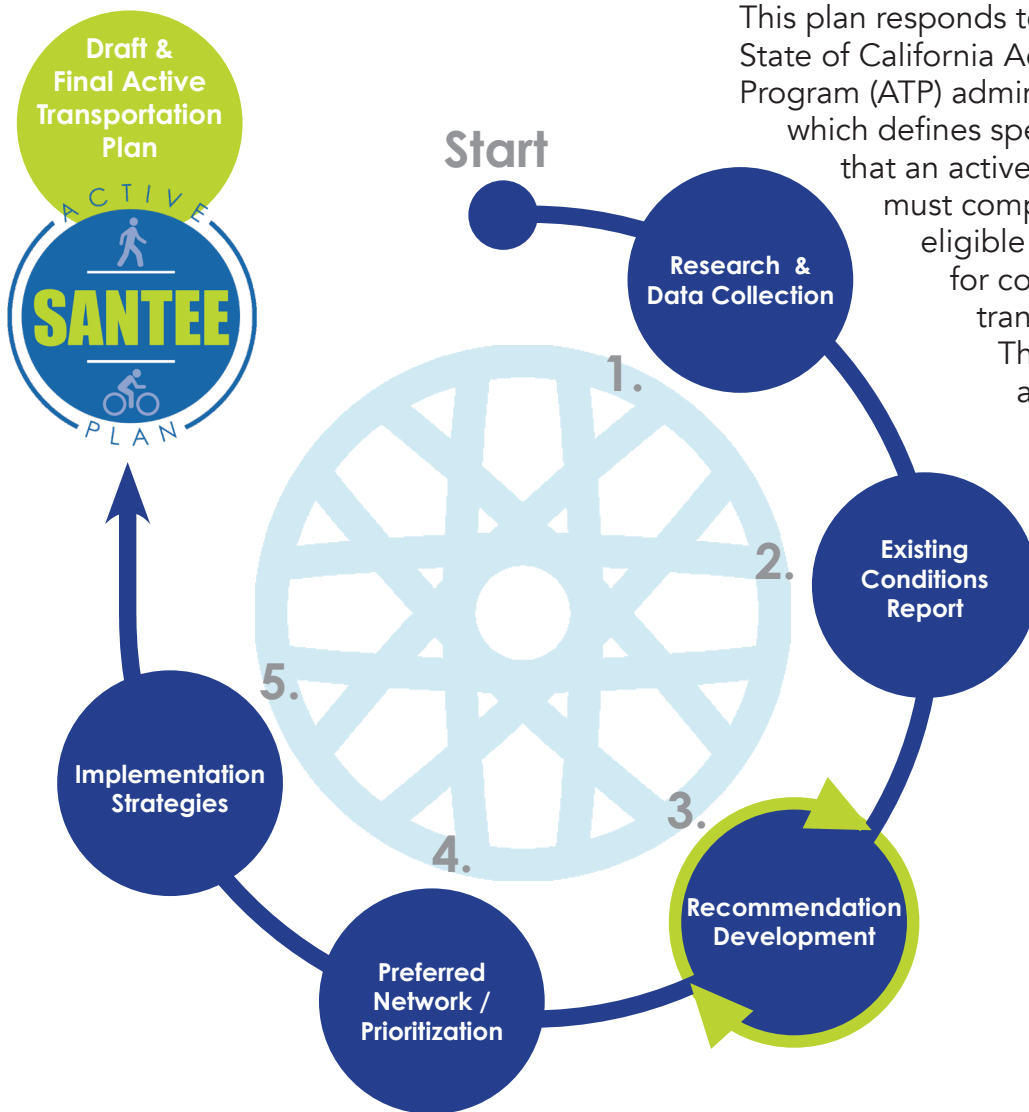
Development of the Active Santee Plan included public outreach, research and data collection, developing recommendations, as well as, refining recommendations based on community and City Staff input and plan development.

This plan is laid out to follow the steps of the planning process and each chapter will discuss the corresponding steps in greater detail.

1.4 How to Use This Plan

In crafting this plan, goals, objectives, policies and recommendations from existing plans were reviewed for relevance in today's context and carried forward where appropriate. This allows the City to stay current in meeting the needs of its residents as Santee has grown and development has taken place over the last decade. The Active Santee Plan will serve to guide City resources related to active transportation improvements for years to come, including investments in infrastructure and supporting programs to consider.

This plan responds to the provisions of the State of California Active Transportation Program (ATP) administered by Caltrans, which defines specific requirements that an active transportation plan must comply with in order to be eligible for ATP grant funds for construction of active transportation facilities. The criteria are provided as **Appendix A**.



1.5 Compatibility with Local and Regional Plans

To ensure that this Plan acts in concert with the foregoing planning efforts undertaken by the City of Santee, as well as, the Region, the existing plans were reviewed, the relevant recommendations incorporated and the new recommendations aligned with the previously set forth goals and policies.

The following documents were reviewed:

- City of Santee Documents
 - General Plan: Mobility Element (2017)
 - Santee Walks & Rolls to School City-wide Safe Routes to School Plan (2015)
 - General Plan: Trails Element (2003)
 - Bicycle Master Plan (2009)
- Other Documents
 - County of San Diego Active Transportation Plan - Draft (2018)
 - Toward an Active California State Bicycle and Pedestrian Plan (2017)
 - SANDAG Regional Bike Plan (2010)

Summaries of each of these documents are provided in **Appendix B**, including the identification of recommendations and policy language relevant to pedestrian and bicycle travel.

1.6 Organization of the Plan

- **Chapter 2 Santee Today** provides information regarding existing conditions, demographics, and the current commuter trends, as well as, the active transportation demand.
- **Chapter 3 Community Engagement** summarizes the outreach process and efforts and discusses what we heard from the community.
- **Chapter 4 Santee Tomorrow** reveals the recommended pedestrian and bicycle networks, as well as, support facilities and programs for people who walk and bike.
- **Chapter 5 Implementation** discusses project prioritization, the resulting priority projects, project costs and potential funding sources.



Chapter 2

Santee Today



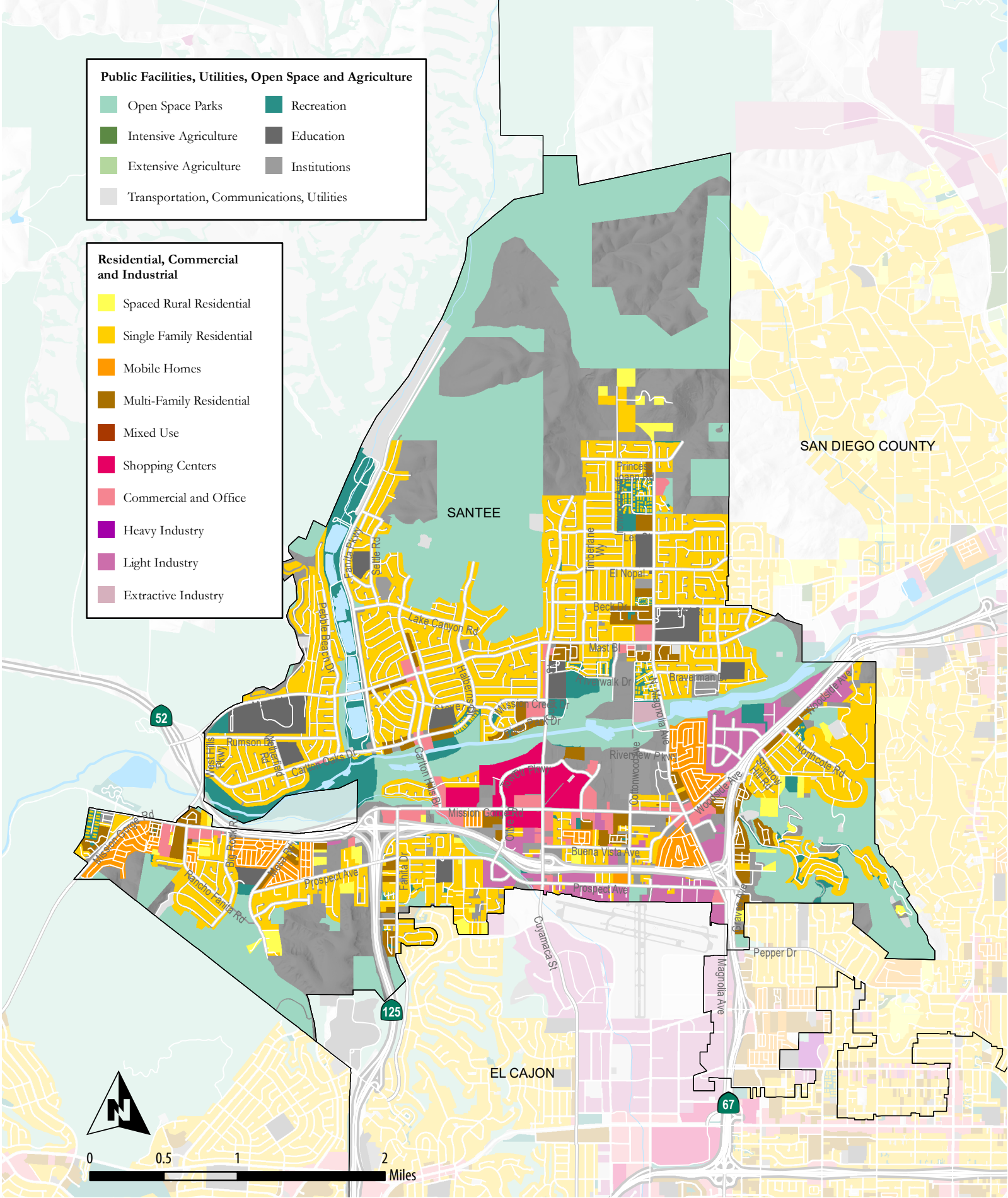
2.1 Location and Land Uses

Santee is located in eastern San Diego County in Southern California, approximately 18 miles east of the Pacific Ocean and 14 miles north-east of downtown San Diego. Santee is bordered to the west and north by Scripps Ranch, a community of San Diego, and to the east by unincorporated parts of the County of San Diego. The southern border of Santee is comprised of unincorporated San Diego County as well as the City of El Cajon.

The City is bisected by the San Diego River and connected to the coast by State Route 52, which runs from the Interstate 5 in La Jolla to State Route 67, connecting Santee to El Cajon. State Route 125 begins in Santee at State Route 52 and runs south to the US-Mexico Border.

The existing land uses in Santee are displayed in **Figure 2.1**. Like most cities in the region, the City is largely comprised of residential land uses. Unlike many cities in the region, Santee has expansive amounts of open space parks and recreation designated areas. The shopping centers are almost exclusively clustered south of the San Diego River in the center of the City, and the industrial uses are predominately located in the southeast quadrant of the City.





SOURCE: SANDAG (2018)

Figure 2.1 Existing Land Uses

2.2 Demographic Summary

In order to understand the commute patterns of residents, it is important to know who lives in the City, where residents are going and how they are getting there. Additionally, a well-considered multimodal mobility network serves the needs of all users, regardless of age, ability and socio-economic class, adding to the importance of understanding who is going where.

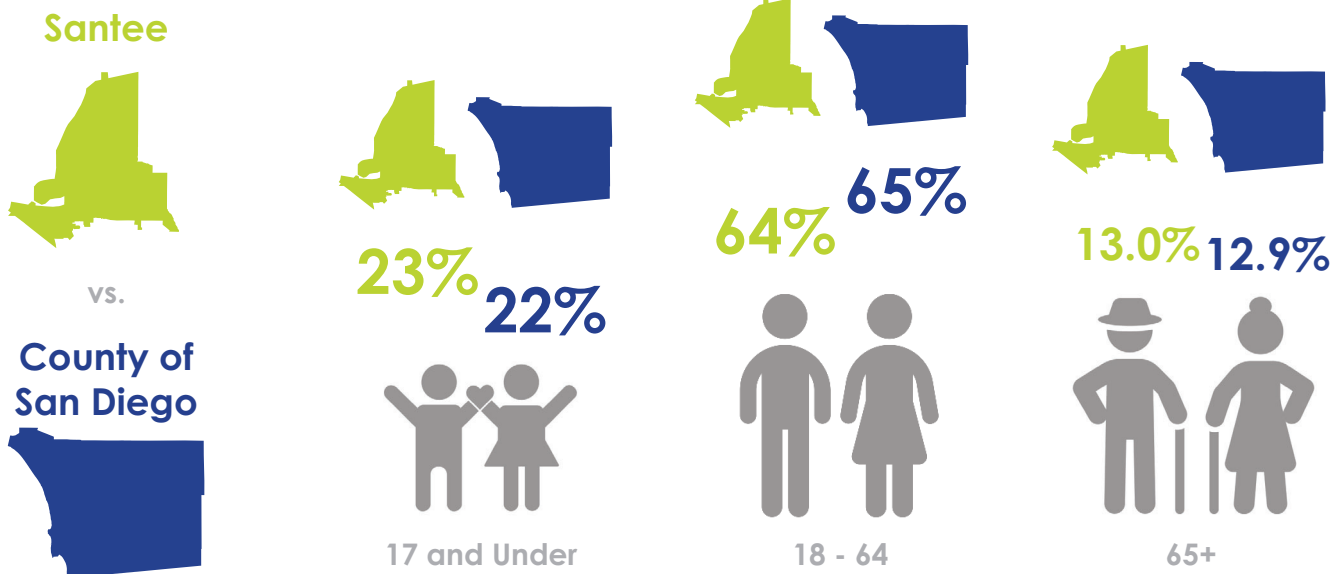
Youth and senior populations have more limited mobility options than the general adult population, making them more reliant on alternative transportation modes and infrastructure, and more vulnerable since they are usually moving through the city without the protection of a car. For this reason, youth and senior populations require additional consideration when planning transportation networks.

Combined the youth and senior populations make up a little more than one-third (36.1%) of the City's residents. **Figure 2.2** summarizes the percent of youth and senior populations for Santee and San Diego County. The City of Santee has slightly higher percentages of youth and seniors, as compared to the County of San Diego; combined 36.1% versus 35.1%.



Santee Street Fair

Figure 2.2 Population by Age Group - City of Santee and San Diego County



2.3 Commuter Profile

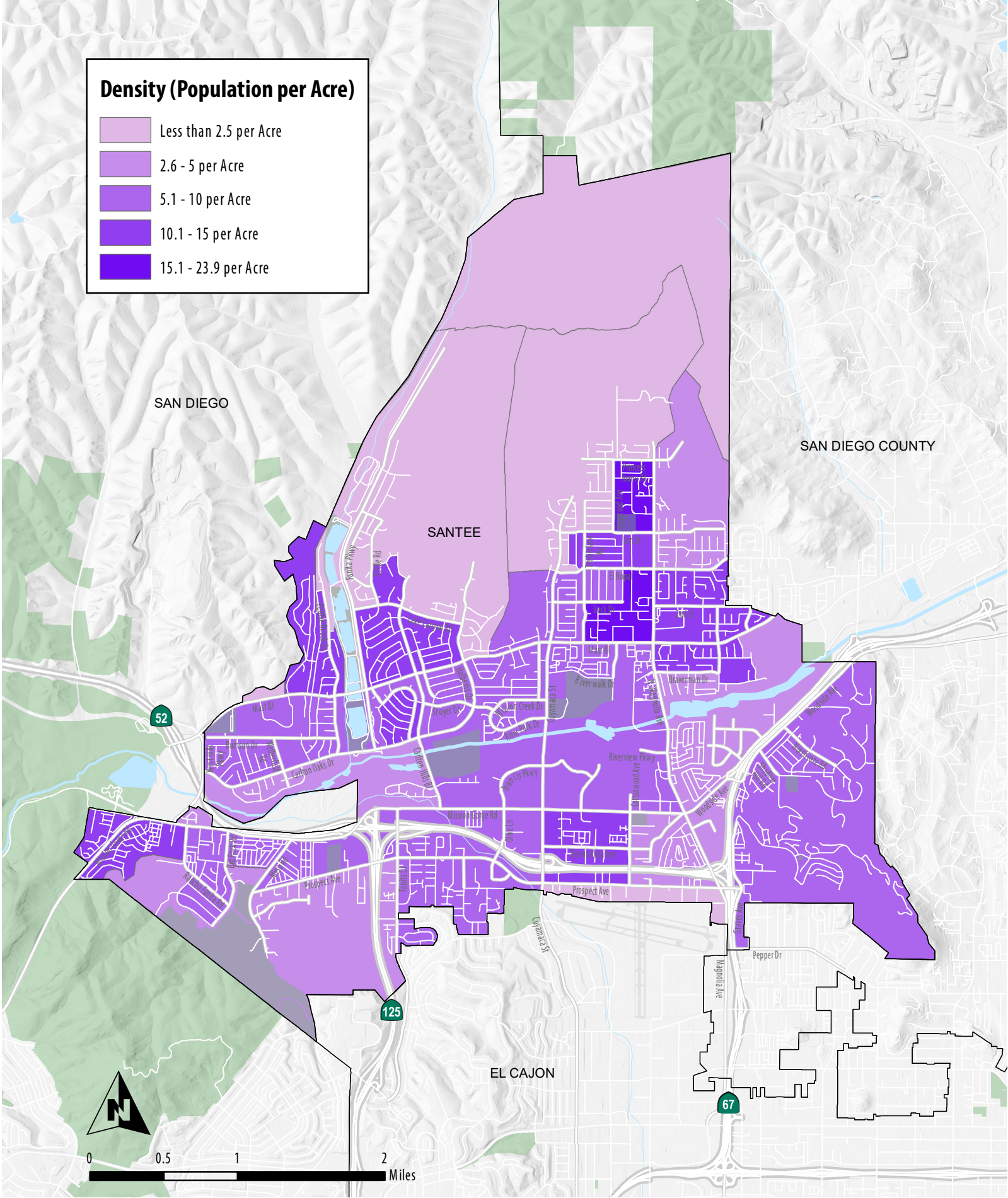
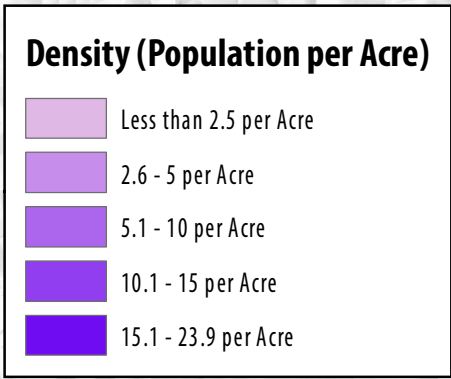
Residential and employment concentrations, or locations where people live and work, are important considerations in the planning process. Walking and bicycling trips frequently start from – or originate at – residences. These trips commonly end at places of employment, or destinations such as parks, schools, retail centers, and civic uses. Determining where higher concentrations of these land uses are located can help build an understanding of travel behavior.

Figure 2.3 displays population density by Census Block Groups. As shown, relatively higher density is concentrated in the areas along Magnolia Avenue, north of the San Diego River. Santana High School is also located in this area, which gives great potential for student walking and bicycling trips. The northernmost Census Block Groups are largely undeveloped, resulting in the lowest population density levels.

Employment density is shown in **Figure 2.4**, displaying greater employment concentrations in the center of the City with abutting areas of higher residential population density. This mix of higher density land uses gives potential for active transportation trips for commute purposes with the provision of supporting infrastructure.

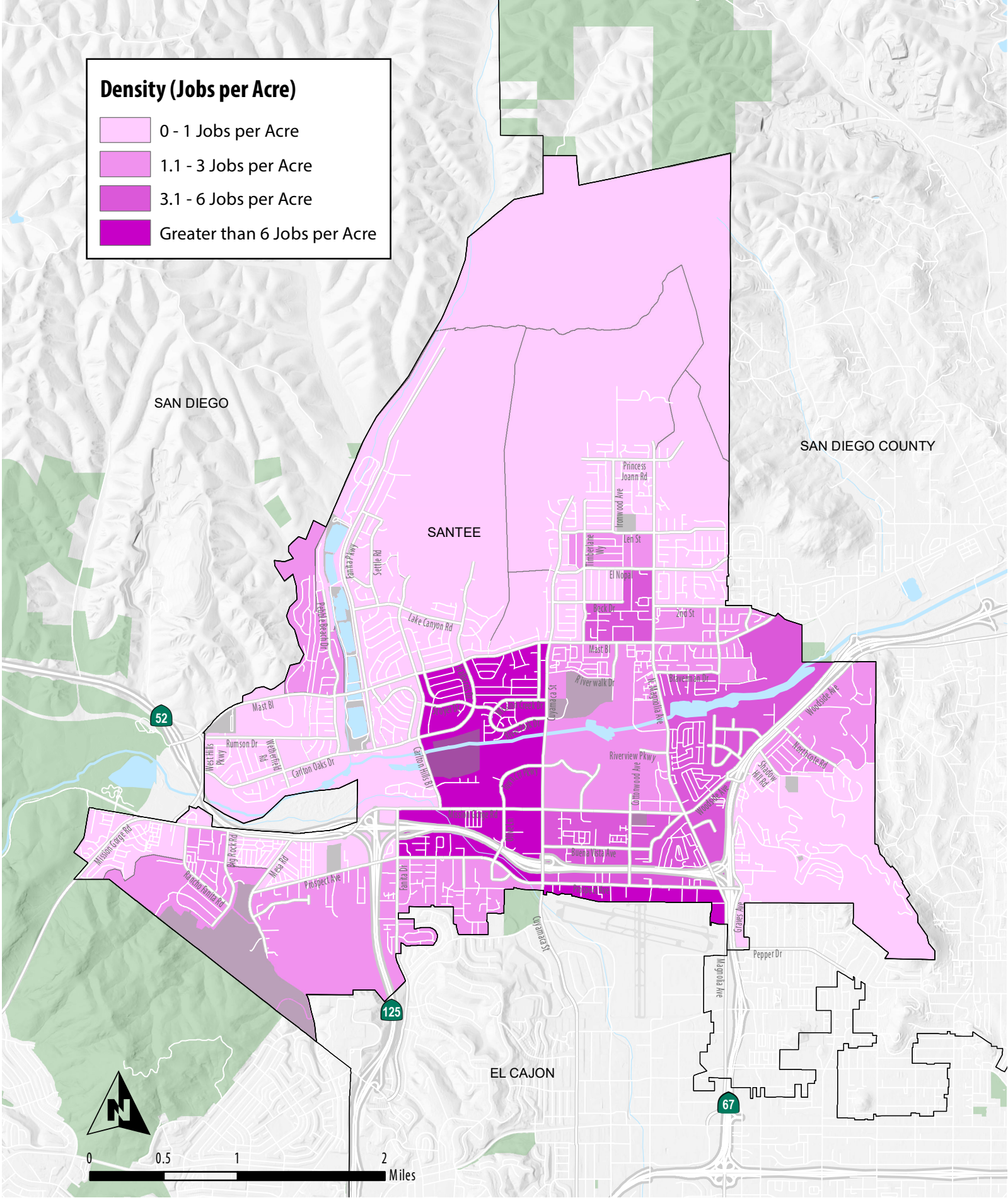
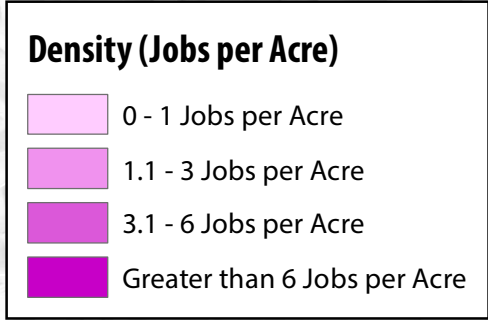
2015 US Census Data estimates only 1,761 (6.9%) of Santee’s working residents of are employed within the City’s boundary, with the remaining 23,668 (93.1%) working residents employed outside of Santee. However, about 43% of those residents employed outside of the City of Santee travel less than 10 miles to their place of employment. These work commute trips have potential for active transportation and/or combining public transportation with walking or bicycling for commute trips due to the relatively short distance between commuter origins (residences in Santee) and destinations (places of employment).





SOURCE: 2017 AMERICAN COMMUNITY SURVEY (5-YEAR ESTIMATE)

Figure 2.3 Population Density by Census Block Group



SOURCE: 2017 AMERICAN COMMUNITY SURVEY (5-YEAR ESTIMATE)

Figure 2.4 Employment Density by Census Block Group

Travel Time to Work

Figure 2.5 compares the City of Santee and San Diego County resident commuter travel times. The City of Santee has slightly higher percentages of workers in categories reflecting commute trips that are 25 minutes or greater, with the exception of those with commutes of "60 or more minutes". The average travel time for working residents in the City of Santee is 26.7 minutes, compared to 25.7 minutes for the County as a whole.

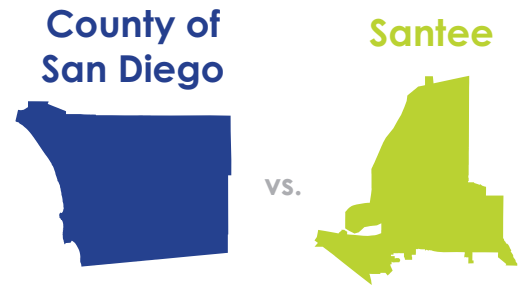


Figure 2.5 Travel Time to Work City of Santee and San Diego County (2013-2017)

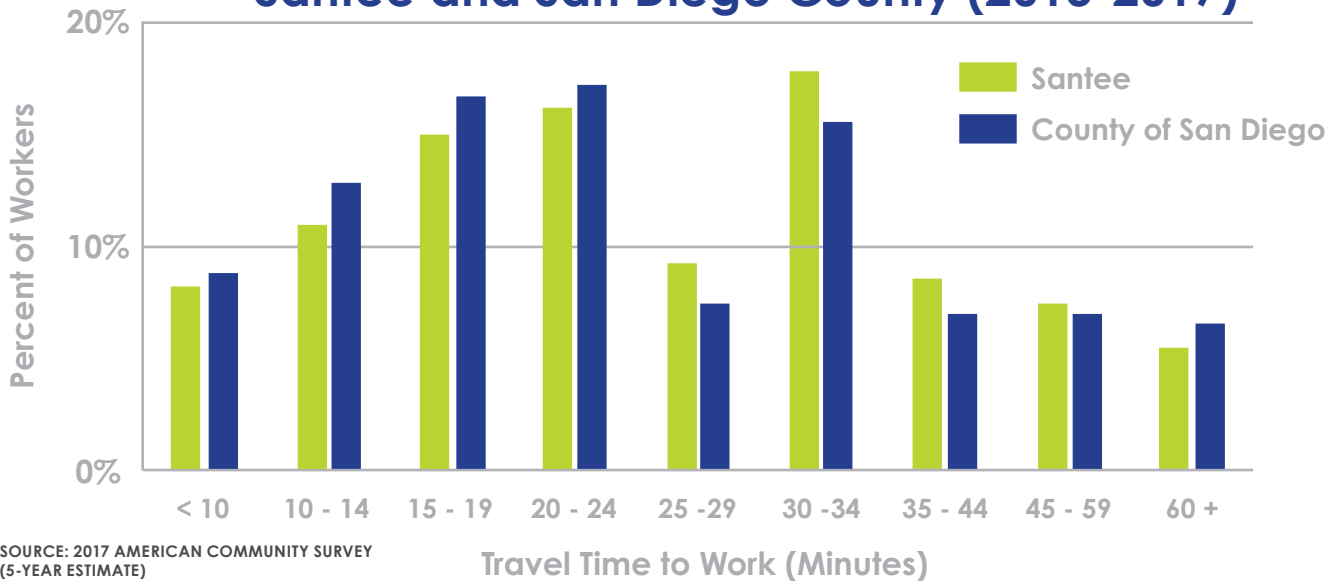


Table 2.1 Means of Transportation to Work (2013-2017)

Means of Transportation	City of Santee	San Diego County
Drove Alone	84.6%	76.0%
Carpooled	7.7%	8.9%
Public Transportation	0.8%	3.1%
Walked	0.6%	2.9%
Bicycle	0.1%	0.7%
Other	1.5%	1.5%
Worked at Home	4.7%	7.0%

SOURCE: 2017 AMERICAN COMMUNITY SURVEY (5-YEAR ESTIMATE)

Means of Transportation to Work

Table 2.1 compares mode of travel to work for City of Santee and San Diego County residents. The City of Santee's drive alone rate is 8.6% higher than the drive alone rate for San Diego County (84.6 vs 76.0%). As shown, the County of San Diego has higher carpooling, public transportation, walking and bicycling rates, as well as working at home rates relative to the City of Santee. Notably when combined, the City of Santee's active transportation commute trip rate, is a little less than a quarter of San Diego County's at 0.70% compared to 3.6%.

2.4 Active Transportation Demand

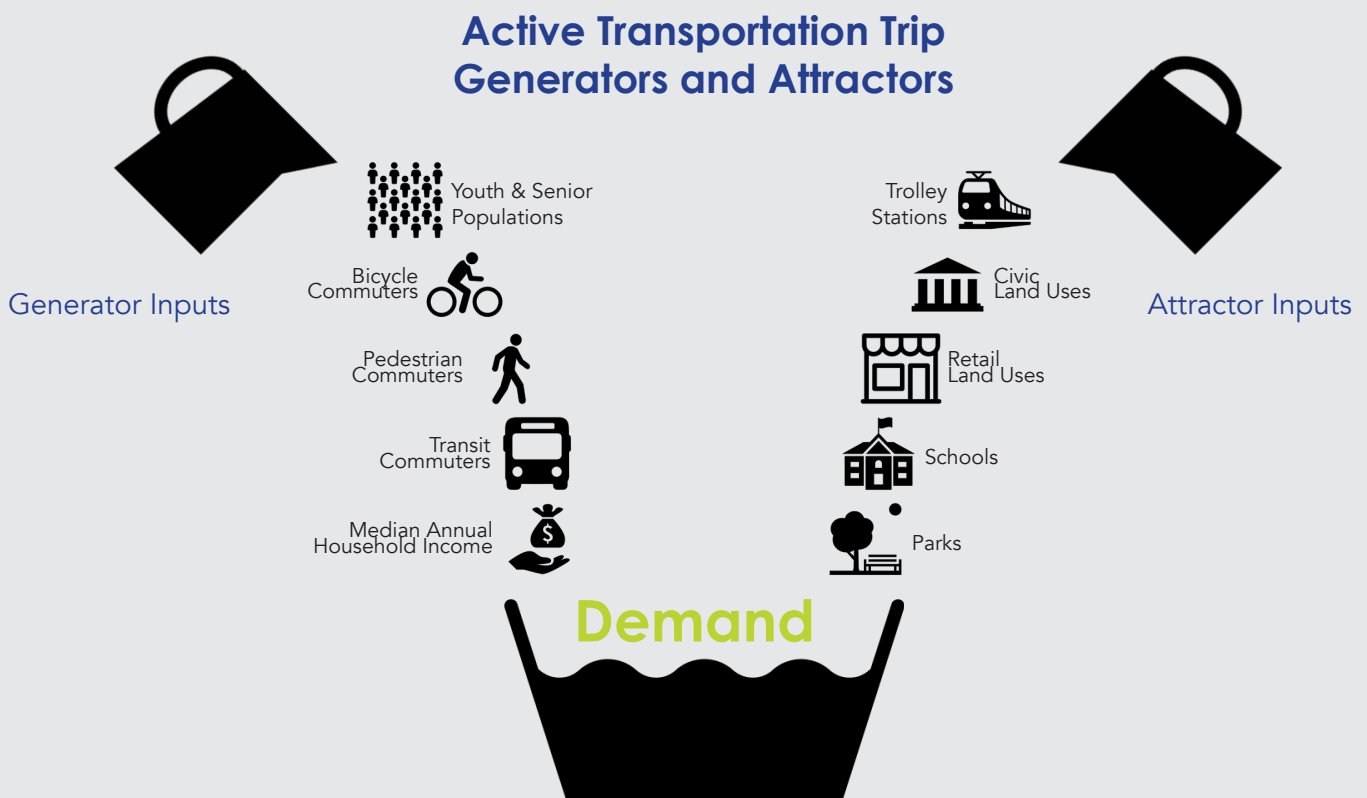
A common analysis technique used to understand latent demand for cycling and walking is through an assessment of population and land use characteristics. This latent demand is depicted in an active transportation propensity model. The propensity model combines walk and bike trip generator inputs – population, employment, zero-vehicle households, pedestrian commuters, and bicycle commuters – with walk and bike trip attractors – schools, retail, parks, recreational spaces, and beaches. When combined, the active transportation generators and attractors provide a foundation for understanding active transportation demand across the City of Santee.

A more detailed description of the model inputs and associated values can be found in the Existing Conditions Report provided in **Appendix B**.

Higher population and employment densities have the potential for greater levels of active transportation trips. Bicycle and pedestrian commute rates, as well as zero-vehicle households, are also contributing factors to trip generation propensity.

The Active Transportation Propensity Model, displayed as **Figure 2.6**, was created by combining the trip generator and trip attractor submodels with equal weighting.

Higher propensity is indicative of areas with increased potential for active transportation due to relatively higher levels of trip attractors and trip generators. It is particularly important to examine the quality of infrastructure in these high propensity areas, as well as to ensure that proposed recommendations provide high levels of quality service in these areas. The greatest propensity was identified in the center of the City of Santee, with a smaller area of high propensity in the northeast corner.



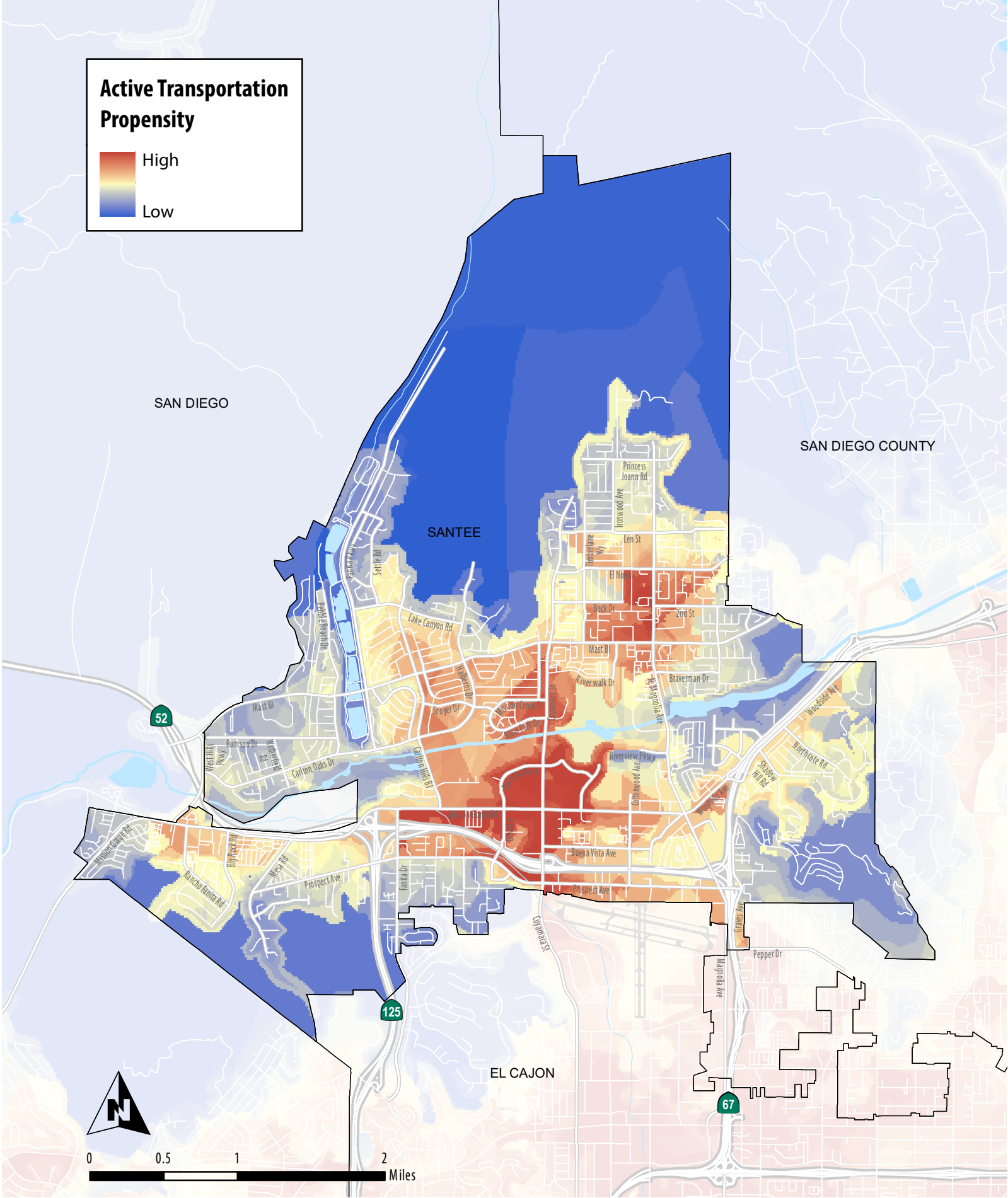
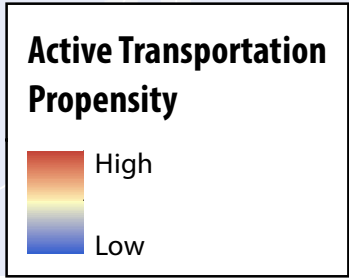


Figure 2.6 Active Transportation Propensity Model

2.5 Existing Networks and Gaps

Networks for People on Foot

The network for people on foot is made up of sidewalks, curb ramps and crosswalks, as well as trails or multi-use paths separated from the roadway. To evaluate the existing pedestrian network, inventories of sidewalks and curb ramps were undertaken.

Figure 2.7 displays the location of missing sidewalks along public roadways. In some instances, where land uses are only present and/or planned along one side of the roadway non-existent sidewalks on the opposing side of the street were not identified as missing, the Sky Ranch neighborhood is an example of this. Locations where the sidewalk was comprised of non-standard materials, such as asphalt, were identified as missing. As can be seen, most of the missing sidewalks are located south of the San Diego River, in older developments. The City of Santee has approximately 237.6 linear miles of public roadway, approximately 35.7 miles (15%) do not have sidewalks today.

Figure 2.8 identifies the locations of missing curb ramps, as well as, curb ramps with missing detectable truncated domes along public roadways citywide. Consistent with the sidewalk inventory, curb ramps along privately maintained roadways were not reviewed as part of this effort.

Missing sidewalks create obvious gaps in the network for people on foot since it forces people out of the most direct path of travel to stay on a sidewalk or it forces people into the roadway which is less safe. Missing curb ramps and curb ramps with missing detectable truncated domes can effectively create “gaps” in the pedestrian network for people traveling in wheelchairs, using mobility assistive devices, as well as, create challenges for people pushing a stroller.



Sidewalk Inventory

- No Sidewalk
- Sidewalk
- Private Road, No Fronting Property¹, or No Sidewalk Planned

¹ Missing sidewalks located adjacent to undeveloped parcels will be constructed as part of the respective future development.

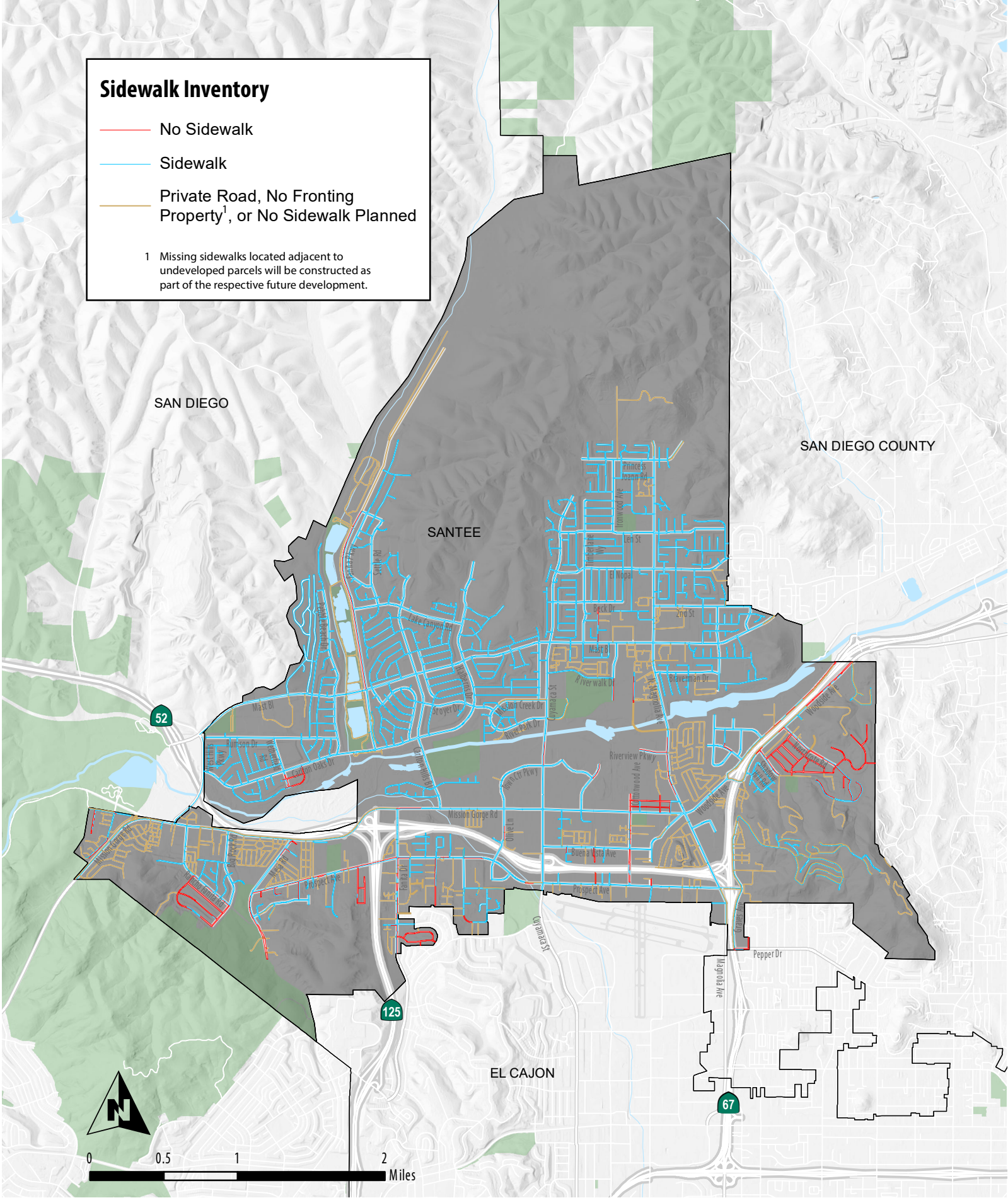


Figure 2.7 Sidewalk Inventory

Curb Ramp Inventory

- Missing Curb Ramp
- Curb Ramp Missing Truncated Dome
- Private Road or No Sidewalk Planned

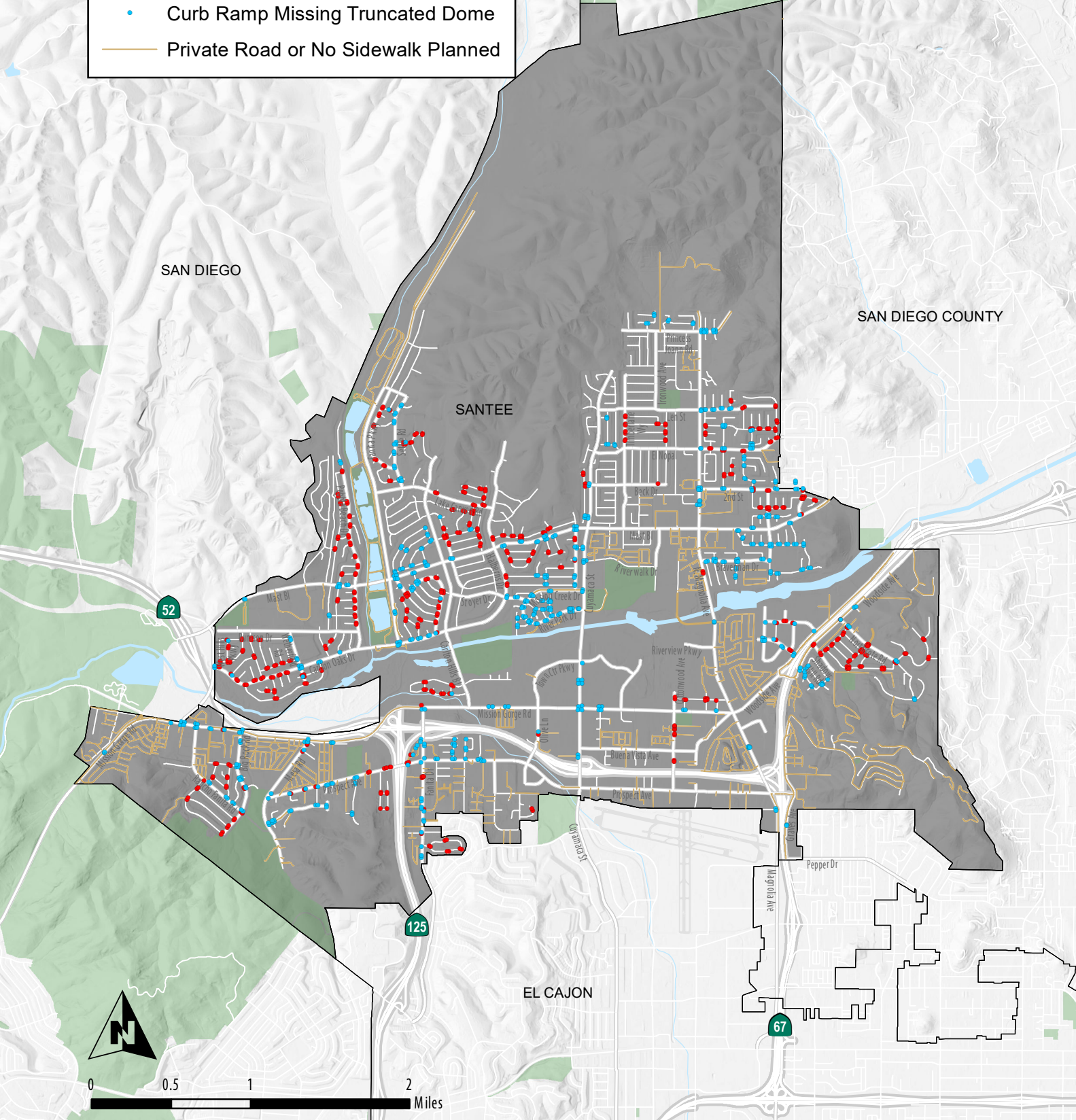


Figure 2.8 Curb Ramp Inventory

Networks for People on Bicycles

Existing bicycle facilities are displayed in **Figure 2.9**. The existing bicycle network in the City of Santee consists of Bike Paths (Class I), Bike Lanes (Class II) and Bike Routes (Class III), as well as paved and unpaved multi-use trails. In total, the existing network is comprised of 49.8 miles of facilities as shown in **Table 2.2**.

The current network consists predominately of bike lanes striped in the roadway, in addition to signed bicycle routes. Bike paths are present along portions of the San Diego River as segments of the San Diego River Trail. Additionally, multi-use paths are located around the Santee Town Center, along Mission Gorge Road and neighborhoods around the center of the City.

The multi-use paths function like Class I facilities in that they are intended for both pedestrian and bicycle travel; however, these do not meet Caltrans' Class I design standards as they lack the required 2' clear buffer on either side, and were therefore listed separately.

More detailed descriptions of each facility type are provided in Chapter 4. Some gaps between existing facilities do exist, specifically, the north-south connection in the eastern portion of Santee is incomplete and crossing the San Diego River along a designated facility is currently only possible in one location.

Additionally, a U.S. Bicycle Route traverses through Santee. The U.S. Bicycle Route System (USBRS) is an active endeavor to develop a national network of bicycle routes connecting urban and rural communities via signed roads and trails. US Bike Route 90, also known as the "Southern Tier Route", starts at the Pacific Ocean in San Diego and ends at the Atlantic Ocean in St. Augustine, Florida. Just over 4-miles of the route run through the City of Santee, along Mast Boulevard, Magnolia Avenue, and El Nopal. Class II bike lanes are provided for the full extent of Bike Route 90's alignment through Santee.

Table 2.2 Bicycle Facility Classification and Existing Mileage

Classification	2019	
	Existing Mileage	Percentage of Total
Class I Bike Path	2.2	4%
Class II Bike Lane	22.6	45%
Class II Buffered Bike Lane	1.2	2%
Class III Bike Route	14.2	28%
Multi-Use Path (Paved)	7.5	15%
Multi-Use Path (unpaved)	2.2	4%
Total Mileage	49.9	100%



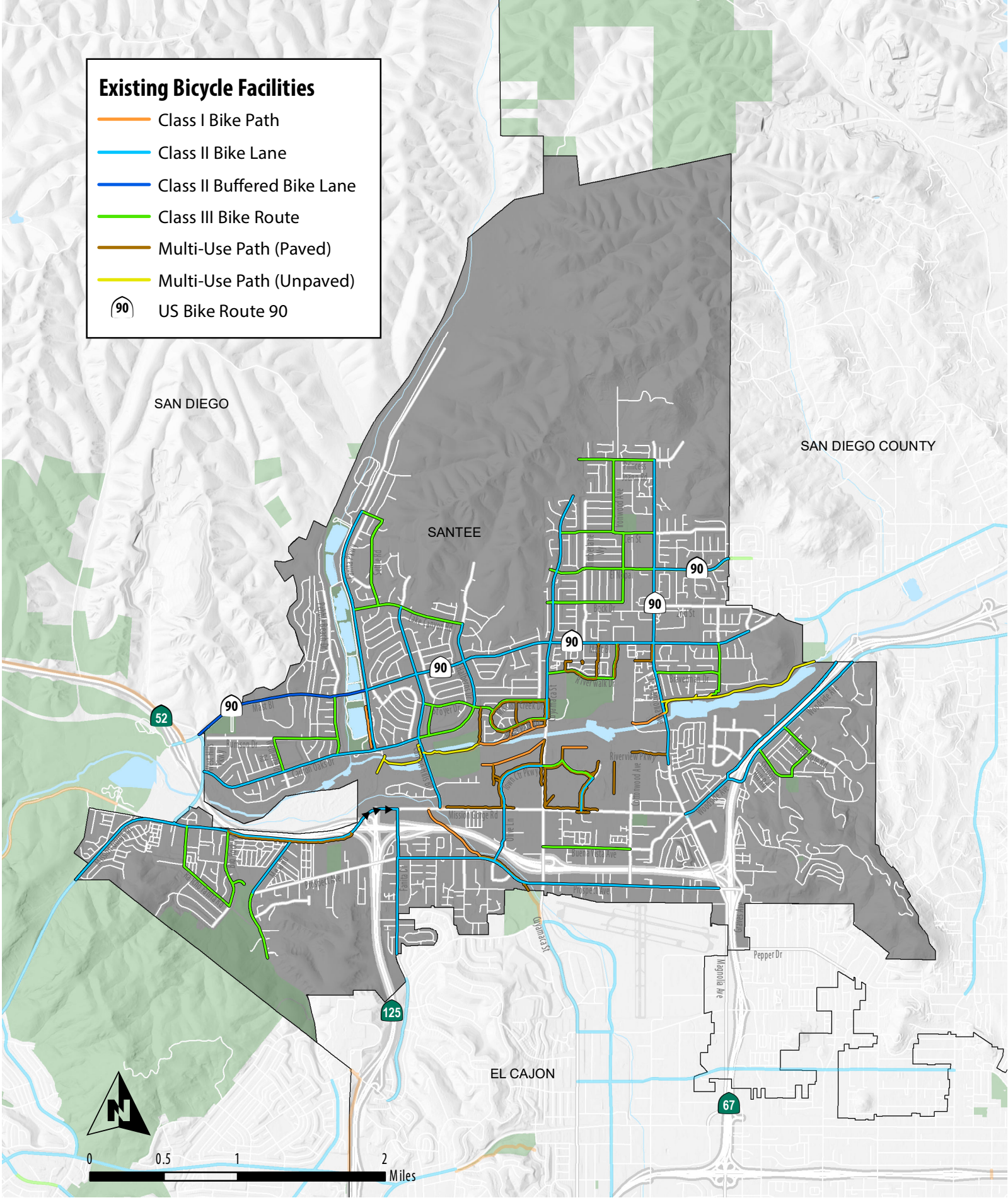


Figure 2.9 Existing Bicycle Network

Busy streets can also act as barriers or additional network gaps through an environment where a cyclist does not feel comfortable riding along or crossing. A cyclist's skill level can dictate which type of facility they prefer and where they will ride. Cyclists have been generally identified as belonging to one of four categories, based upon their comfort, skill level and interest in cycling as described in a report (Dill, J., & McNeil, N. (2013) titled: Four Types of Cyclists: Examination of Typology for Better Understanding of Bicycling Behavior and Potential. Transportation Research Record, 2387(1), 129–138.).

Roadways are rated based on the level of stress they cause to a cyclist taking into consideration a cyclist's physical separation from vehicular traffic, vehicular traffic speeds along the roadway segment, number of travel lanes, and factors related to intersection approaches with dedicated right-turn lanes and unsignalized crossings. Depending on a cyclist's skill level, they may not be willing to ride on or cross roadways perceived to be more stressful.

Figure 2.10 shows the Bicycle Level of Traffic Stress for all bikeable roadways and paths in Santee. LTS 1 or 2 are generally residential streets and collectors, characterized as having one lane in each direction while providing adequate width for cyclists and vehicles, with a low posted speed and low traffic volumes. The Class I bike paths and multi-use paths also received LTS 1 ratings.

The main east-west and north-south connections were scored as LTS 4 due to high traffic volumes, high posted speed limits and the presence of right-turn only lanes, even with the presence of bicycle lanes. In effect, the roadways with LTS 4 can create barriers to less skilled cyclists, thereby reducing their access to the full bicycle network. Improving the comfort of cyclists along connecting arterials, or providing comfortable and convenient alternative routes can improve bicycle network access for some types of cyclists.



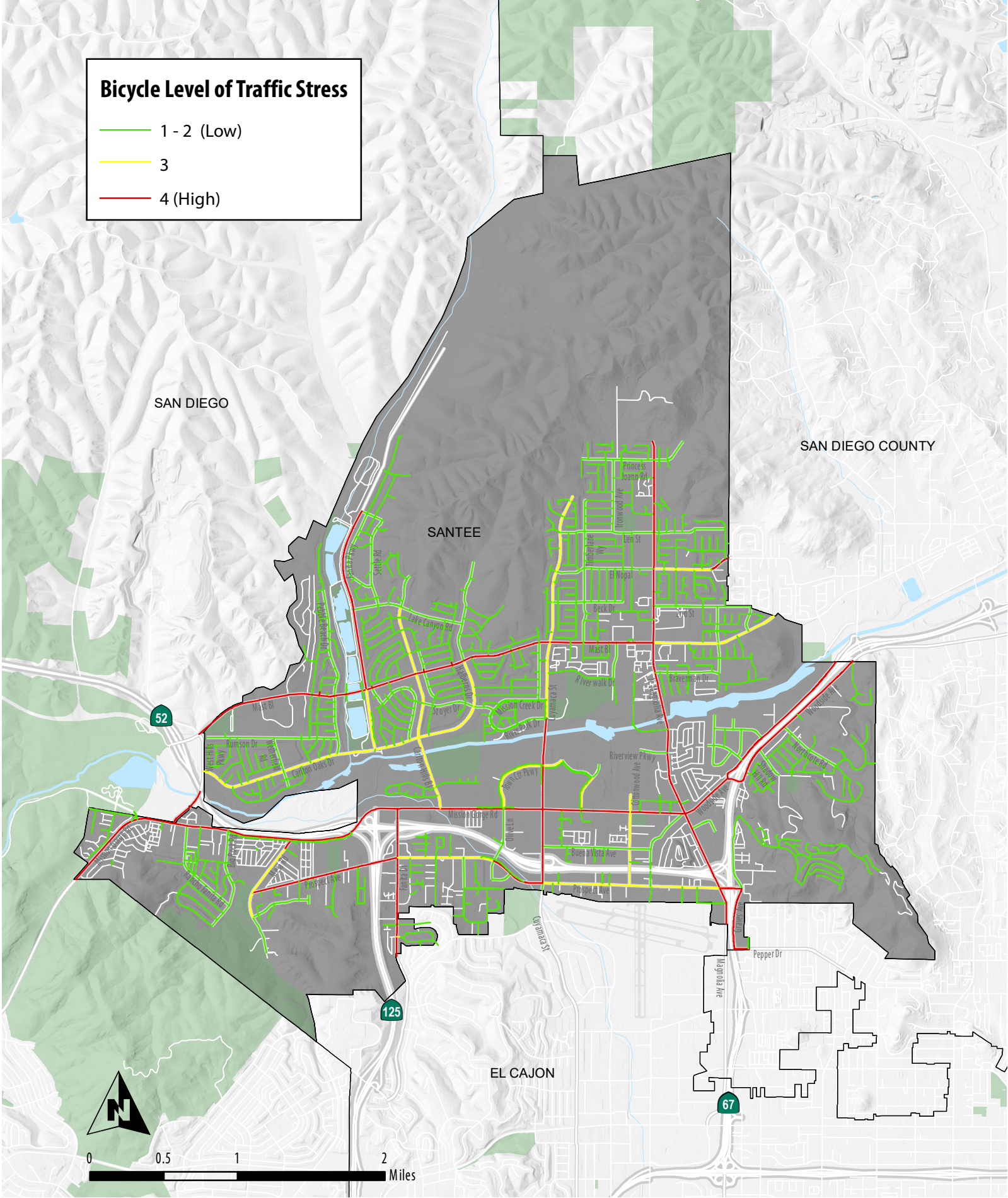


Figure 2.10 Bicycle Level of Traffic Stress



Chapter 3

Community Engagement

Community engagement is a crucial component of any active transportation planning process since it allows residents to share their concerns, as well as their satisfaction, with mobility in their city. This firsthand, local knowledge supplements data and frequently informs the project team of situations they would otherwise be unaware of. This chapter details the multi-pronged approach used to engage the Santee community, followed by a summary of the input heard through each outreach opportunity.

3.1 Engagement Methods

Different engagement methods were used to broaden the reach of the outreach process, to engage different segments of the population, and to make providing input as convenient as possible. The public participation strategy took into consideration the varying schedules and availability of community members to attend regular City meetings. Considering this, various outreach strategies were held over the course of the project, including the convening of a Project Working Group at key project milestones, the creation and maintenance of a project website, the development and distribution of a questionnaire available in-person and online, and pop-up workshops at community events.

Project Working Group Meetings

A Project Working Group (PWG) was established with representatives of various organizations, intended to represent the interests of groups with some role in walking and/or bicycling in the City of Santee. Early in the project, an invitation was extended to different entities requesting their participation throughout the planning process. A total of three meetings were held throughout the project.

Members of the PWG were charged with representing their organizational perspective, identifying their organizations priorities, providing feedback on the Active Santee Plan as it was being developed and to share information with their organizations. The feedback loop – the members of the PWG communicating their organizational interests with the project team and sharing the planning process with their organizations – was essential to the process. The PWG members further increased the public engagement reach of the project by communicating and distributing project information through their vast networks.

The following entities were represented:

- Caltrans District 11
- City of El Cajon
- City of Santee Community Service Department
- City of Santee Fire Department
- County of San Diego
- Metropolitan Transit System (MTS)
- San Diego County Bicycle Coalition
- San Diego County Health and Human Services Agency
- San Diego County Sheriff's Department
- San Diego Mountain Biking Association
- San Diego River Conversancy
- San Diego River Park Foundation
- SANDAG
- Santee Chamber of Commerce
- Santee School District

The first meeting took place as the planning process started. The PWG was asked to identify what criteria should be used to prioritize the projects and programs that would be developed as part of the Plan. The second PWG meeting took place as the existing conditions phase was being wrapped up and the recommendations phase was beginning.

During the second PWG meeting, a robust conversation took place regarding which metrics should be used to rank individual projects. In addition to this, the PWG was asked to brainstorm possible connections to the San Diego River. The third PWG meeting took place after the proposed projects and programs had been ranked. Examples of possible projects were shared with the PWG. Lastly, the PWG members were provided the Draft Active Santee Plan to review and provide comments prior to releasing the document to the greater public for review.

Individual meeting summaries can be found in the **Appendix C**, while key meeting outcomes are identified under the “What We Heard” section.

The City of Santee is developing an Active Transportation Plan – also known as the Active Santee Plan – to evaluate current conditions for people that walk and ride bicycles and guide future improvements.

There are three main purposes of the Active Santee Plan: (1) to establish a community vision for active transportation in Santee, (2) to serve as a toolbox of community approved recommendations and (3) to increase eligibility for a variety of grant funding sources so the prioritized projects and programs can be implemented once money becomes available.

The Active Santee planning process is designed to facilitate public participation. During the initial phase of the plan, identifying existing conditions, the project team attended the Santee Street Fair, two community concerts in Town Center Community Park, had a display at the library and worked with Parks and Recreation to send information to parents of summer campers. At each of the community outreach events, and through the supplemental outreach at the library and through Parks and Recreation, residents were given the opportunity to complete a questionnaire on paper or given a link to complete the questionnaire later via the website. In total, there were 222 completed questionnaires with input on cycling and walking behaviors, level of safety and comfort, and ideas about how to increase personal cycling and walking were received.

The process will culminate with a community workshop where the conclusions and recommendations of the draft plan will be presented and public comment solicited prior to its consideration by the City Council in summer 2020.

Residents are invited to check back at this website often for updates on the planning process, project documents, and proposed recommendations once developed.

The times and locations of future public outreach will be posted here as well.

Project Timeline

This project is scheduled to be completed in Summer 2020

Phase	Timeline
Existing Conditions	Spring 2019
Draft Walking + Biking Recommendations	Summer / Fall 2019
Draft Plan	Fall / Winter 2019
Adoption	Summer 2020

Thank You!

Website

The Active Santee Plan had a designated website – activesantee.com – which informed residents about the planning process, upcoming events, and provided a mechanism for community members to submit comments and questions about the plan. Additionally, the questionnaire was accessible through this project website. The website also had a tab for Project Materials, which allowed members of the public to review draft documents created in support of the project, such as the Existing Conditions Report and the Goals, Objectives, and Policies Memo.

Questionnaire

The planning process included a questionnaire, designed to solicit information which would help the project team identify active transportation travel patterns, problems areas and the priorities of residents. The questionnaire sought to obtain information regarding travel behavior, locations in the City where people felt comfortable/uncomfortable walking and biking, as well as, prioritization criteria for recommended projects in the plan. The responses to the questionnaire informed the existing conditions analysis, as well as the development and prioritization of project recommendations. A detailed summary of the questionnaire responses can be found in the User Needs Assessment Memo in **Appendix D**.

Paper copies of the questionnaire were made available at all of the events the outreach team attended. The questionnaire was also available online if residents preferred taking it electronically.

Cards with the project website URL and a QR Code were handed out at all events and were also available at City facilities. PWG members helped distribute the questionnaire by sending the link to members of their organizations, as well as, posting it to their organizational Facebook pages.

Hard copies of the questionnaire were also sent home to children and youth participating in the City’s summer camp program. Additionally, hard copies and a project fact sheet were made available at the Santee Public Library, which was one of the most successful survey distribution methods, largely due to the great support of the library staff. In total 225 individual survey responses were received.

Pop-Up Outreach Activities

The project team made an effort to attend scheduled community events and host “pop-up” workshops consisting of project fact sheets, questionnaires, large scale maps of the city and transportation infrastructure, and project team members available to discuss the project.

The pop-up events gave the project team the opportunity to interact with residents of the City and hear first-hand any concerns and/or questions community members had about the Active Santee Plan. Events attended included the Santee Street Fair on Saturday May 25, 2019 as well as two summer concerts in the park, the first one on June 20, 2019 and the second one on July 11, 2019. Individual event summaries are provided as **Appendix C**.



The graphic is a promotional flyer for a map survey. It features a blue and green color scheme. At the top left, there is a photograph of a paved path through a park. The main title "Active Santee" is in large white font on a blue background. Below it, the text reads "CITY OF SANTEE PLANNING DEPARTMENT" and "activesanteeplan@gmail.com". A central circular logo contains the words "ACTIVE SANTEE PLAN" around a bicycle and pedestrian icon. To the left, a speech bubble says "MAP SURVEY" above a QR code. Below the QR code is a small image of a map on a laptop screen. At the bottom, it says "Visit ActiveSantee.com or scan the QR Code to provide your feedback."

By going to the community and hosting pop-up outreach activities at various community events, a greater number of community members can be reached and the input tends to be more interactive than traditional, formal city meetings. This method also results in engaging with community members that may otherwise not be interested or available in attending traditional meetings. The events draw from a pool of attendees already present for an event, resulting in greater levels of engagement.



3.2 What We Heard

Project Working Group

PWG Meeting #1

The initial PWG meeting served to introduce members to the project, including the purpose, schedule, and scope of work. Specific questions were asked regarding the grant source of the project (Caltrans Sustainable Planning Grant), the state of the City of Santee's Climate Action Plan (under development at the time), and if the plan will address any needs of community members that use wheelchairs (curb ramps and the locations of truncated domes will be inventoried). The role of the working group was also reviewed.

Additional discussions were held regarding the Existing Conditions Report and the selection of 30 non-motorized count locations. One stakeholder requested the data be shared with them to inform their efforts.

A large part of the meeting also focused on learning about the individual priorities of each representative. This included a discussion of which potential criteria should be used to prioritize future recommendations. As part of this, PWG members were asked to rank various criteria in order of importance, with "Gap Closure" and "Proximity to schools, jobs and attractions" ranking first and second, respectively. The importance of completing the San Diego River Trail was also discussed as a priority for many attendees.

"Gap Closure"

-Most important criteria, ranked by PWG members

PWG Meeting #2

Meeting number two began with a review of the material and input received during the initial meeting, followed by updates on recent project deliverables. The results from the three pop-up events and the questionnaire were discussed, along with the four proposed project goals. Key discussion topics included the preliminary recommendations related to sidewalk infill locations and priorities, proposed bicycle facilities, and a brainstorm on additional connections to the San Diego River Trail.

A lack of sidewalks and bicycle infrastructure crossing SR-52 and SR-67 was identified as an issue that should be reflected in both the sidewalk and bicycle prioritization results. This was specifically identified as a barrier for students. Comments were received related to lower the importance of Circulation Element Roadways as a factor and if cost be included as an input.

Environmental justice and the possibility for giving additional weight to projects that provide multiple benefits was discussed. The outcome of this discussion was to include a CalEnviroScreen score as a prioritization criterion, which would emphasize projects located in more disadvantaged parts of the community.

When reviewing connections to the San Diego River Trail, the neighborhood south of SR-52 and west of SR-125 was identified as currently deficient. Existing and future infrastructure just outside of the City of Santee was discussed as a solution for strengthened connections for this neighborhood. An existing Class II bike lane extends along West Hills Parkway from Mission Gorge Road to Mast Boulevard, while a future Class I path will connect to the bike lane as part of a future development at the Carlton Oaks Country Club.

PWG Meeting #3

The third PWG meeting began with a review of the previous meetings and a focus on the final recommended improvements and revised prioritization criteria and results. The alignment of the multi-use path along Mission Gorge Road was discussed, including the potential for conflicts with bus riders and boarding/alighting operations, especially if a ramp needs to be deployed.

This resulted in the inclusion of statements in the project description to ensure the pathway does not interfere with bus operations, but rather improves access in an area where a sidewalk does not currently exist. Project sheets were also presented for the five highest ranking projects, resulting in a discussion on the use and operations of Pedestrian Hybrid Beacons, or HAWKS.

Overall, the proposed locations near San Diego River Trail access points and the Forrester Creek Trail were well received. The coordination benefits of the PWG were very apparent during a discussion on the use of green conflict paint along Mission Gorge Road at SR-125, which falls largely within Caltrans right-of-way.

The PWG Caltrans representative informed the team that Caltrans is starting to allow different kinds of green paint through intersections and this could be a good candidate location. The discussion resulted in a revision to include dashed striping across the off-ramp of the intersection.

The meeting concluded with a review of the programmatic recommendations intended to support walking and bicycling infrastructure throughout the City.

Lastly, the draft document was provided to the PWG members to review. The comments received from PWG members were incorporated into the draft document made available for public review.



Questionnaire and Pop-Up Outreach

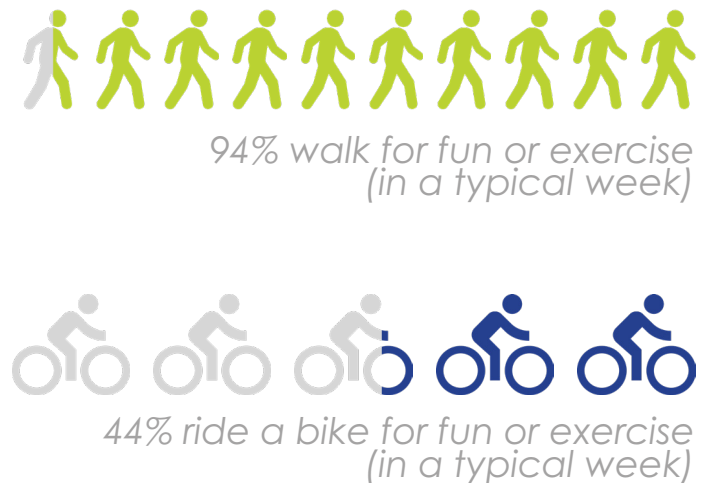
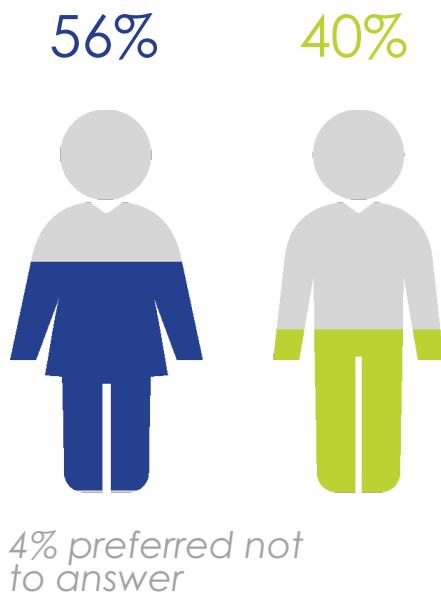
There were two overarching themes which emerged from conversations with members of the general public at the outreach events: speeding cars and network connectivity.

The questionnaire provided valuable information regarding travel patterns, trip purpose and the length of the walk or ride. Additionally, the questionnaire offered the opportunity to respond to open ended questions. The questionnaire asked, "What would make you walk more in the City of Santee?", "What would make you ride your bike more in the City of Santee?", as well as, "Is there anything else you would like to tell us about walking or riding a bike in the City of Santee?".

Through these three feedback opportunities, a few more themes emerged. In response to the walking question, several responses involved fixing

or paving the sidewalks, speeding and driver behavior, safety and issues involving homeless. As well as comments around the concept of "connecting". These were either in reference to connecting parts of the city with each other, paths to each other and/or providing more connection along the San Diego River Trail.

In response to what would make people ride a bicycle more, reoccurring themes involved driver behavior, perceived safety, as well a desire for more bike lanes and more connections/connectivity. In particular, 17.9% of the responses to this question involved the concept that people would ride their bikes more if there was a greater separation between the bikes and cars. This concept was expressed in several ways: "protection from traffic", "barriers between the bicycle lane and traffic", "away from traffic" or "removed from traffic" and "not having to interact with traffic." Respondents also used the terms paths or trails to express this concept.





Chapter 4

Santee Tomorrow



Santee Lakes

Like most cities in the region, Santee is growing and evolving. With this growth comes changes in travel patterns and behaviors resulting in additional transportation and recreational needs. The Active Santee Plan is one of many tools the City has to navigate towards the future. This chapter identifies the Active Santee Plan recommendations intended to further improve mobility for people that walk and ride bicycles for leisure and as a means of transportation.

Santee has a strong history of planning and developing high quality pedestrian and bicycle infrastructure. Examples include the multi-use pathways around the Santee Town Center, Mission Gorge Road, Fanita Parkway, segments of the San Diego River Trail, the Walker Preserve Trail, and the pedestrian and bicycle bridge spanning Cuyamaca Street at Rio Seco School. The Active Santee Plan seeks to continue with this tradition of high-quality infrastructure through enhancements and new connections to these facilities and other parts of the pedestrian and bicycling networks.

The recommendations were informed by the previous project phase findings, including a review of currently planned local and regional improvements, the existing conditions analysis, and the public engagement process. Recommendations consist of goals, objectives, policies and performance indicators, pedestrian and bicycle infrastructure, and a toolbox of supporting programs to consider. Chapter 5 serves to complement the recommendations by providing implementation related guidance.

4.1 Goals, Objectives, Policies and Performance Indicators

Guiding direction for future pedestrian and bicycle activities is provided through goals, objectives, and policies. Four overarching goals were developed, establishing the long-term vision for which the Active Santee Plan seeks to achieve. Objectives provide more specific and measurable direction, while the policies are the City's stated commitment and identified methods that will be used to achieve the desired aspirations.

The language identified throughout this section was largely developed following the existing conditions analysis, a review of currently adopted planning documents, and input received throughout the community engagement activities. The Active Santee Plan is intended to be complementary to previous planning efforts by aligning with and/or incorporating the recommendations and goals and policies set forth. Specifically, the City's adopted Mobility Element and Trails Element of the General Plan and the previous Bicycle Master Plan were referenced as a starting point for the language presented. Many policies and action items from these documents were carried forward into the Active Santee Plan.

Additionally, a series of performance indicators or measures were developed as a means to track the progress of the Active Santee Plan. Indicator sets are listed for each objective and their supporting policies, identifying actions and data to be evaluated.

Goals

1. A balanced, interconnected multimodal transportation network that allows for the efficient and safe movement of all people and goods, and that supports the current and future needs of Santee community members and travel generated by planned land uses.
2. Encourage alternative means of transportation on a regional and community scale for all trip types: work commute, school commute, errands and recreation.
3. Designate the location and the appropriate type of bikeways and paved bicycle trails that would have the greatest potential to serve the commuter and recreational needs of the community of Santee.
4. To create an environment that allows for school aged children to safely walk and ride their bicycles to school on convenient and connected networks.

Objectives, Policies & Performance Indicators

Objective 1.0

Ensure that the existing and future transportation system is accessible, safe, reliable, efficient, integrated, convenient, well connected and multi-modal. The system will accommodate active transportation, and accommodate people of all ages and abilities, including pedestrians, disabled, bicyclists, users of mass transit, motorists, emergency responders, freight providers and adjacent land uses.

Policy 1.1: The City shall provide integrated transportation and land use decisions that enhance smart growth development served by complete streets, which facilitate multimodal transportation opportunities.

Policy 1.2: The City should create a vibrant town center by developing a connected system of multi-modal corridors that encourage walking, biking, and riding transit. A mobility hub should be considered at the existing Santee Trolley Square providing features such as bikeshare, bike parking, carshare, neighborhood electric vehicles, real time traveler information, demand-based shuttle services, wayfinding signage, bicycle and pedestrian improvements, urban design enhancements, etc.

Policy 1.3: The City shall continue the effort of bringing all sidewalks, curb ramps and crossing in compliance with the Americans with Disabilities Act (ADA).

Policy 1.4: Coordinate with regional and local partners to facilitate implementation of the regional bicycle corridors as identified in the San Diego Regional Bike Plan, including the San Diego River Trail, I-8

Corridor Bikeway, Santee-El Cajon Corridor, and the SR-125 Corridor Bikeway.

Policy 1.5: Regional and/or community routes within the City should link up with existing or proposed routes within neighboring jurisdictions.

Performance Indicators:

- In order to assess accessibility and connectivity of the pedestrian and bicycle networks over time, conduct:
 - inventory of missing sidewalks
 - inventory of missing curb ramps
 - inventory of non-ADA compliant curb ramps
 - inventory of the bicycle network
- In order to assess the networks accommodation of users, conduct:
 - pedestrian counts, strategically sited across the city to capture levels of activity in each of the quadrants, on varying facility types (for example, the River Trail and on sidewalks)
 - bicycle counts, strategically sited across the city to capture levels of activity in each of the quadrants, on varying facility types

Objective 2.0

Upgrade and maintain Santee’s transportation corridors to meet the safety needs of all roadway users – including youth and elderly and travelers of varying physical abilities – and to provide a well-connected system throughout the City.

Policy 2.1: The City should review high crash locations, injuries and fatalities by mode on an annual basis and seek feasible solutions.

Policy 2.2: The City shall coordinate with the Sheriff’s department to conduct targeted enforcement events, such as a crosswalk education and enforcement actions or stop sign enforcement actions, to educate motorists, students, pedestrians and cyclists of traffic laws and to share the road.

Policy 2.3: The City’s pedestrian and bicycle networks should connect to trailheads, in particular at such locations as the San Diego River Trail and at parks and open spaces.

Policy 2.4: Near commuter rail stations, provide access paths to these transit centers to encourage walking and cycling.

Policy 2.5: The City shall, in developing a trail system, especially in the San Diego River corridor, coordinate between various projects within the City, as well as with a regional trail system in neighboring jurisdictions.

Performance Indicators:

- To track safety trends over time:
 - Yearly review of high crash locations in the city.
 - Collect and record data from the crosswalk and/or stop sign enforcement actions, including date and time conducted, number of citations issued and code infraction, as well as, the number of warnings issued and on what grounds. Track data over time.

Objective 3.0

Develop, maintain, and support a safe, comprehensive and integrated bikeway system that encourages bicycling.

Policy 3.1: The determination of the appropriate type of paved trail should primarily be based upon safety requirements. There are three classifications:

1. Bicycle paths (Class 1) should be utilized as much as possible for regional and community trails, but not for those designated on small local streets where traffic volume is minimal.
2. Bicycle lanes (Class 2) should be utilized as necessary links to bicycle paths or local routes where paths are not feasible.
3. Bicycle routes (Class 3) should be utilized for necessary links or as interim links prior to the implementation of bicycle lanes or paths. Implementation includes signage.

Policy 3.2: The City shall require new development and redevelopment to provide connections to existing and proposed bicycle routes, where appropriate.

Policy 3.3: Where feasible, design bikeways beyond the minimum required widths.

Policy 3.4: In order to maximize the total mileage of bicycle friendly roads and bikeways throughout the City, a combination of bike lanes and wide curb lanes may be provided on major streets even if it requires some discontinuous segments.

Policy 3.5: The City should keep abreast of bicycle facility innovations and new technologies in other cities and regions, and seek to incorporate these into the bicycle network.

Policy 3.6: New bicycle paths on separate right of ways shall be sought where it can be done safely, with convenience to bicyclists as well as being cost effective.

Policy 3.7: The City shall strive to ensure that bicycle support facilities are provided at appropriate locations throughout the City, such as at public buildings, commercial areas, parks, transit centers, park and ride locations and multifamily developments. The facilities should include but are not limited to convenient and secure bicycle parking.

Policy 3.8: The City shall provide clear bike route information to bicyclists by installing adequate signs or markings along bikeways.

Policy 3.9: Bicycle paths should be incorporated into the design of community land use plans, Capital Improvement Projects, and in parks and open space as specified in the General Plan.

Performance Indicator:

- To track development of the bicycle network:
 - Conduct regular updates to the bikeway system.
 - Evaluate the comprehensiveness of the bicycle network by analyzing the network in relationship to bicycle trip attractors.

Objective 4.0

Promote bicycle safety awareness.

Policy 4.1: The City should facilitate educational programs to teach children and adults safe walking and bicycling behaviors, and educate motorists on sharing the road respectfully and appropriately.

Policy 4.2: The City should encourage employers to implement a comprehensive bicycle awareness program for their employees.

Policy 4.3: The City should encourage bicycle awareness programs for the general public.

Policy 4.4: The City should actively encourage City staff, employees, residents and visitors to use bicycles as often as possible.

Policy 4.5: Provide training opportunities for engineering, planning staff and law enforcement on how to accommodate bicyclists.

Policy 4.6: Designate a sheriff department liaison for the cycling community.

Policy 4.7: Encourage the Sheriff department to use targeted enforcement to encourage motorists and cyclists to share the road.

Performance Indicator:

- Development of a pedestrian and bicycle awareness program.
- Tracking the number of items given away or number of attendees at safety awareness event.

Objective 5.0

Promote bicycle usage.

Policy 5.1: Large non-residential developments should be encouraged to provide showers and lockers, flexible work schedules and other means to encourage and facilitate use of alternative modes of transportation by employees.

Policy 5.2: Bicycle racks should be made available at all new or rehabilitated nonresidential developments.

Policy 5.3: The City shall consider every street in Santee as a street that bicyclists will use.

Policy 5.4: Develop a City-wide bicycle map.

Policy 5.5: As bikeways are implemented, their availability and use should be encouraged through the City's web site, newsletters or the media.

Performance Indicator:

- inventory of the number of non-residential developments which provide showers and lockers and/or bicycle racks.

Objective 6.0

Maintain bicycle facilities.

Policy 6.1: The City shall support the school districts in conducting annual student travel tallies and parent surveys for schools actively participating in SRTS programs.

Policy 6.2: The City shall regularly collaborate with local and regional organizations, to identify educational opportunities, as well as, safety and/or infrastructure improvements.

Policy 6.3: Ensure ongoing efforts that support the Active Transportation Plan in relation to maintenance and monitoring.

Policy 6.4: All new capital improvement projects shall go through a review process to ensure consistency with the Active Transportation Plan.

Policy 6.5: Whenever capital improvement projects are done at intersections, as appropriate, ensure traffic signals are capable of detecting bicyclists.

Policy 6.6: Continue to implement a surface management system to maintain a smooth riding surface. Surfaces should be maintained at least as close to the curb as one foot which may require the use of alternative materials.

Policy 6.7: Continue the maintenance program to sweep streets and designated bikeways on a regular basis.

Policy 6.8: Continue the maintenance program to keep bikeway signage and pavement markings in good condition.

Policy 6.9: The City should take street resurfacing as an opportunity to contemporaneously add bicycle infrastructure.

Policy 6.10: Every effort should be made to retain existing bikeways when a roadway is reconstructed, reconfigured or improved. When designated bikeways are removed, they should be replaced on nearby parallel routes.

Policy 6.11: Auto travel lanes may be replaced by bike lanes where peak hour congestion levels are anticipated to maintain acceptable levels of service.

Performance Indicator:

- To track trends over time:
 - Track resurfacing/restriping of in-road facilities
 - Track maintenance of Class I Bike Paths and Multi-Purpose Paths
 - Inventory bicycle parking at major destinations (parks, schools, civic locations, commercial centers)
 - Count parked bicycles at bicycle racks at above locations

Objective 7.0

Develop and maintain an accessible, safe, complete and convenient pedestrian system that encourages walking.

Policy 7.1: The City should require the incorporation of pedestrian-friendly design concepts where feasible including separated sidewalks and bikeways, landscaped parkways, traffic calming measures, safe intersection designs and access to transit facilities and services into both public and private developments.

Policy 7.2: The City should provide for the connectivity of wide, well-lit sidewalks and environments with safety buffers between pedestrians and vehicular traffic, where feasible.

Policy 7.3: The City should pursue the elimination of physical barriers around public facilities and commercial centers to improve access and mobility of the elderly and disabled in a manner consistent with the Title 24 of the California Code of

Regulations and the federal Americans with Disabilities Act (ADA).

Policy 7.4: The City should identify and implement pedestrian improvements with special emphasis on providing safe access to schools, parks, community and recreation centers, and shopping districts.

Policy 7.5: The City should promote walking as the primary travel mode for the school trip through implementing the citywide Safe Route to School Plan.

Policy 7.6: The City should improve pedestrian safety at intersections and mid-block crossings, where appropriate.

Policy 7.7: On all primary pedestrian corridors, the City shall ensure adequate green time, based on established standards at crosswalks that allow the elderly and disabled to cross City streets on a single green light.

Policy 7.8: The City should provide connected network of safe pedestrian crossings throughout the City.

Policy 7.9: The City should enhance pedestrian visibility by enforcing parking restrictions at intersection approaches, improving street lighting, and minimizing obstructions.

Performance Indicator:

- Adoption of a pedestrian-friendly design guide
- Inventory of street lights which will identify areas with missing or large gaps in the street light network.

Objective 8.0

Increased use of alternative modes of travel to schools to reduce peak hour vehicular trips, save energy, and improve air quality around schools.

Policy 8.1: The City shall implement the Safe Routes to School Plan.

Policy 8.2: The City should improve safety of walking and biking environment around schools to reduce school-related vehicle trips.

Performance Indicator:

- Include prioritized projects from the Safe Routes to School plan, which are located on City of Right-of-Way, in the City's Capital Improvement Program
- Track percentage of students traveling to school on foot or by bicycle over time
 - Student Travel Tallies
 - Parent Surveys

4.2 Improvements for People that Walk

The physical infrastructure for people who walk consists of sidewalk infill locations, installation of missing curb ramps and the enhancement of curb ramps to meet ADA such as including detectable warning strips. Additionally, four enhancements are identified to further improve access to existing multi-use trails, which will benefit both pedestrians and bicyclists.

Sidewalk Infill and Curb Ramps

As stated in Chapter 2, a citywide sidewalk inventory process was undertaken as part of the existing conditions analysis, with the results presented in Figure 2.7. Similarly, the curb ramp inventory results are shown as Figure 2.8. The locations identified as missing sidewalks were then reviewed and grouped together to form sidewalk infill projects based on location proximity, while also taking project size into consideration. The resulting sidewalk infill projects are depicted in **Figure 4.1**. Different colors were used to demonstrate the individual project groupings.

As these projects are undertaken, adjacent or nearby missing curb ramps will be included (previously shown in Figure 2.8). Curb ramps requiring detectable warning strips or other modifications may also be included, as feasible. Exact project extents and components may be adjusted at the individual project-level to reflect available funds and project scopes.

*Mission Gorge Road
at Magnolia Avenue*



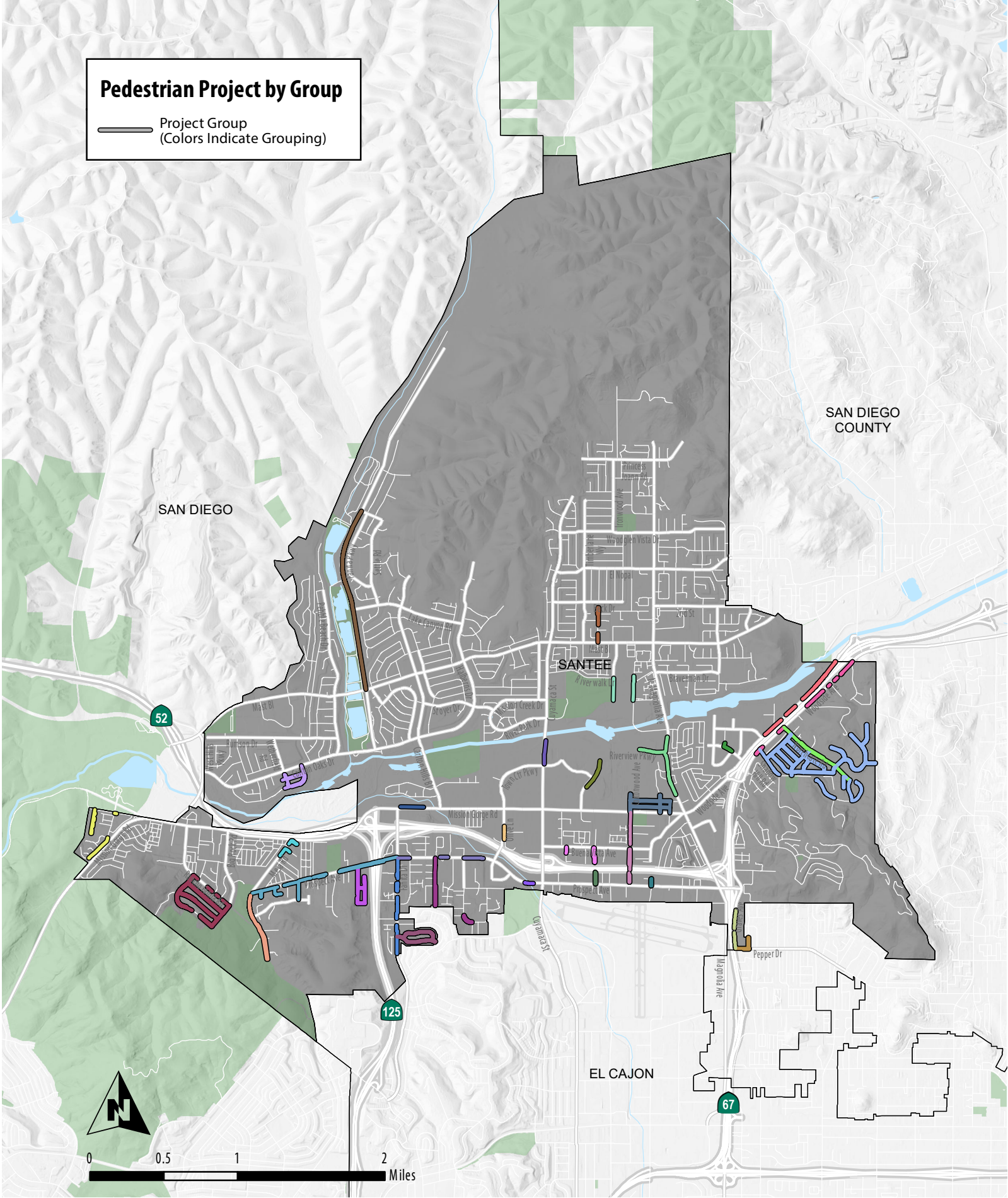


Figure 4.1 Sidewalk Infill Locations

4.3 Improvements for People on Bicycles

The bicycle infrastructure recommendations include a bicycle network, bike parking guidance, a pilot location for green conflict paint, and the retrofitting existing traffic signals to incorporate bicycle signal detection. A new bicycle and pedestrian bridge crossing the San Diego River is also planned just east of Cuyamaca Street, connecting Trolley Square to Town Center Park. Additionally, the trail access enhancements described under the previous section are intended to improve safety and mobility of not only people who walk, but those who bike as well.

Bicycle Facilities

Consistent with the goals and objectives set forth in this chapter, the recommended bicycle facilities are intended to create a complete network of varying classifications that can serve commuter and recreational needs. The facilities were selected to be context sensitive while considering built environment realities, resulting in a connected network that is intended to serve the needs of users of varying skills, ages, and abilities.

Figure 4.2 displays the planned bicycle network. The recommended bicycle facilities consist of three formal bikeway classifications recognized by Caltrans: Class I Bike Paths, Class II Bike Lanes (buffered and non-buffered), Class III Bike Routes. Paved multi-use paths – similar to those surrounding the Town Center – are also recommended, which are similar to Class I Bike Paths, yet do not entirely adhere to Caltrans’ design standards. A review of each facility type is provided.

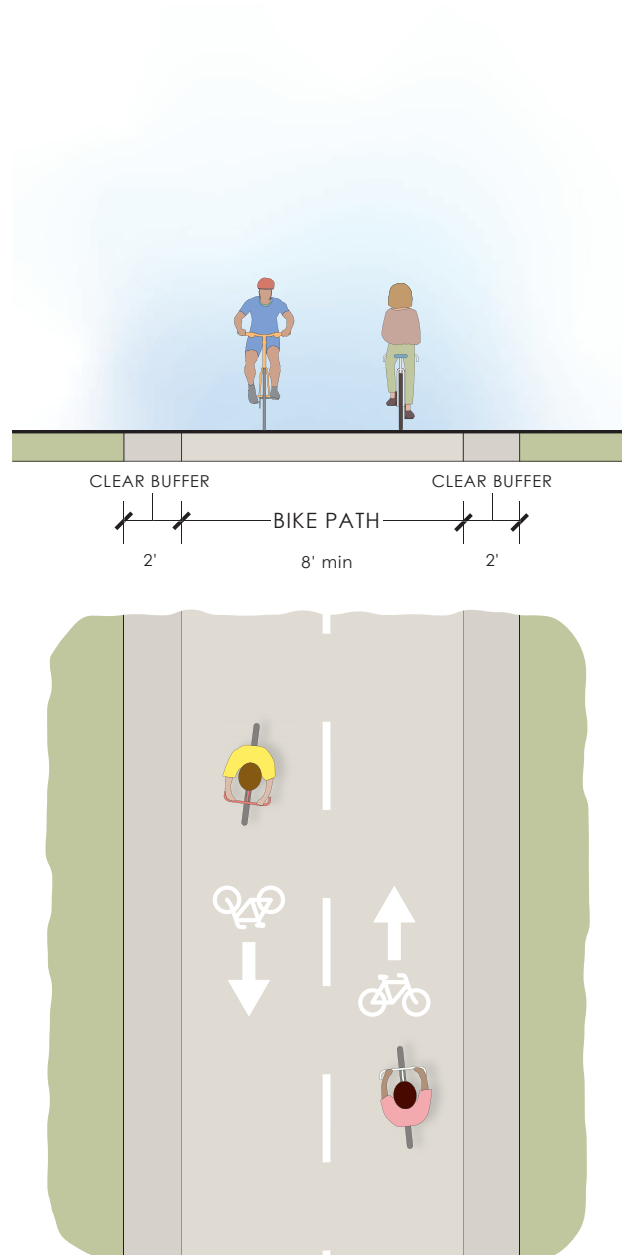
Table 4.1 summarizes the existing and planned centerline mileage of each bicycle facility category. As shown, total network mileage is planned to increase by over 16-miles. The greatest increases are among Class I bike paths, Class II bike lanes, and paved multi-use paths.



Bike Route

Table 4.1 Bicycle Network Mileage

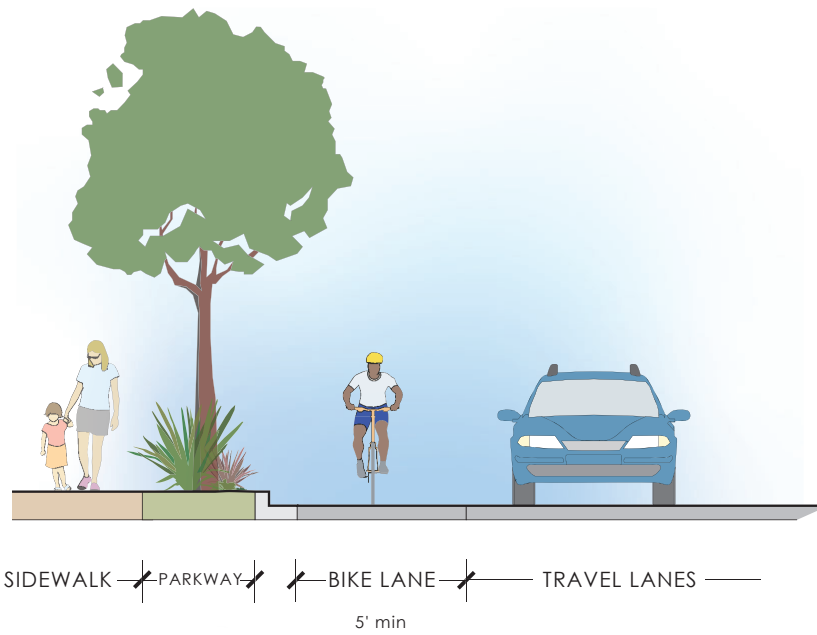
Classification	Existing Facilities (miles)	Planned Network (miles)	Change
Class I Bike Path	2.2	7.0	+4.8
Class II Bike Lane	22.6	27.5	+4.9
Class II Buffered Bike Lane	1.2	1.9	+0.7
Class III Bike Route	14.2	15.6	+1.4
Multi-Use Path (Paved)	7.5	12.2	+4.7
Multi-Use Path (unpaved)	2.2	2.2	--
Total Mileage	49.9	66.4	+16.5



Class I Bike Path

Also referred to as a shared-use path, Class I facilities provide a completely separated right-of-way designed for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Bike paths can provide connections where roadways are non-existent or unable to support bicycle travel.

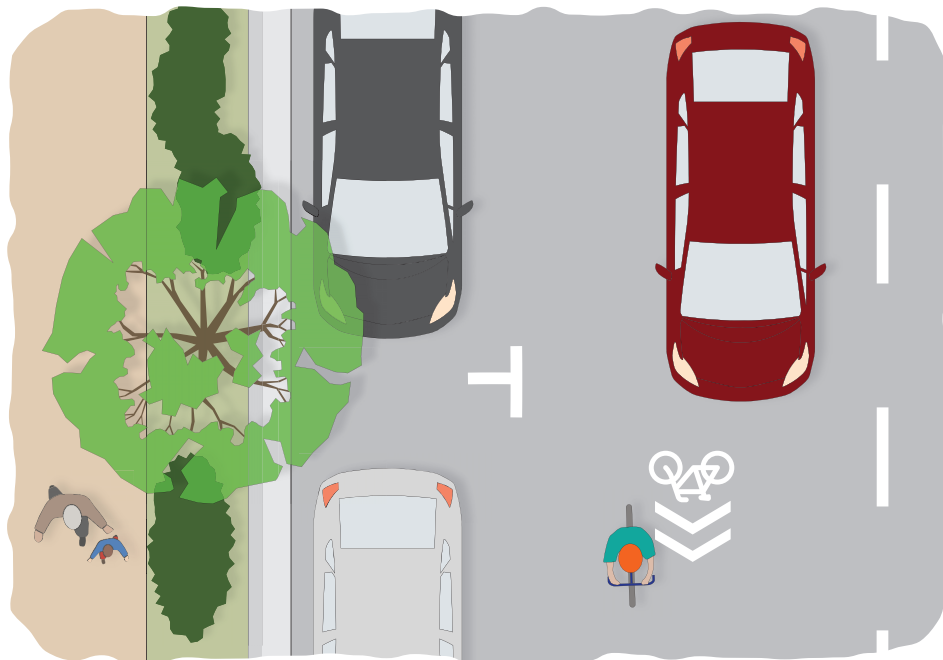
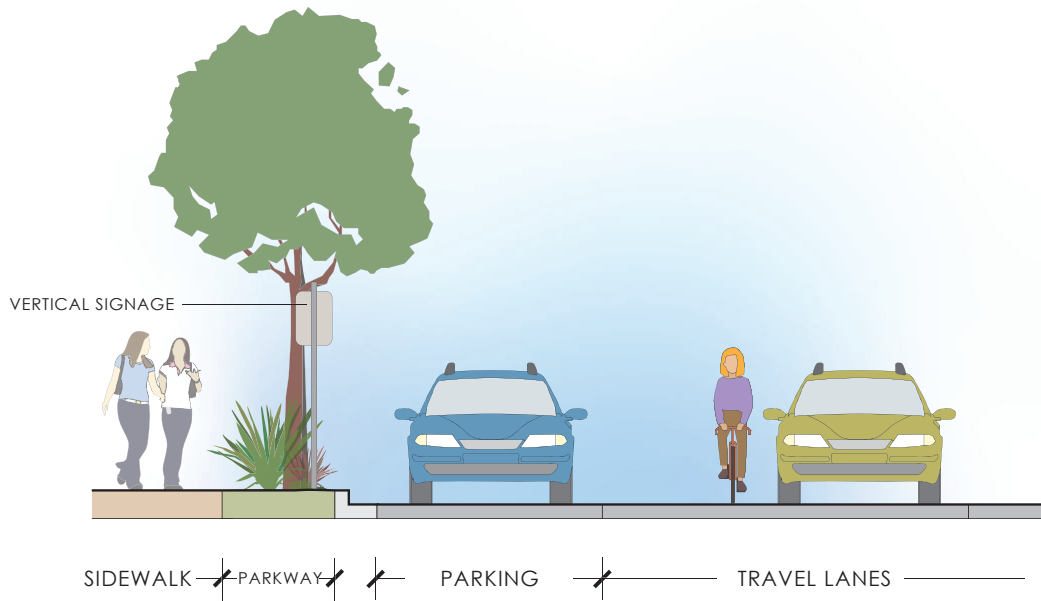
The minimum paved width for a two-way bike path is considered to be 8-feet (10-feet preferred), with a 2-foot wide graded area adjacent to each side of the pavement.



Class II Bike Lane

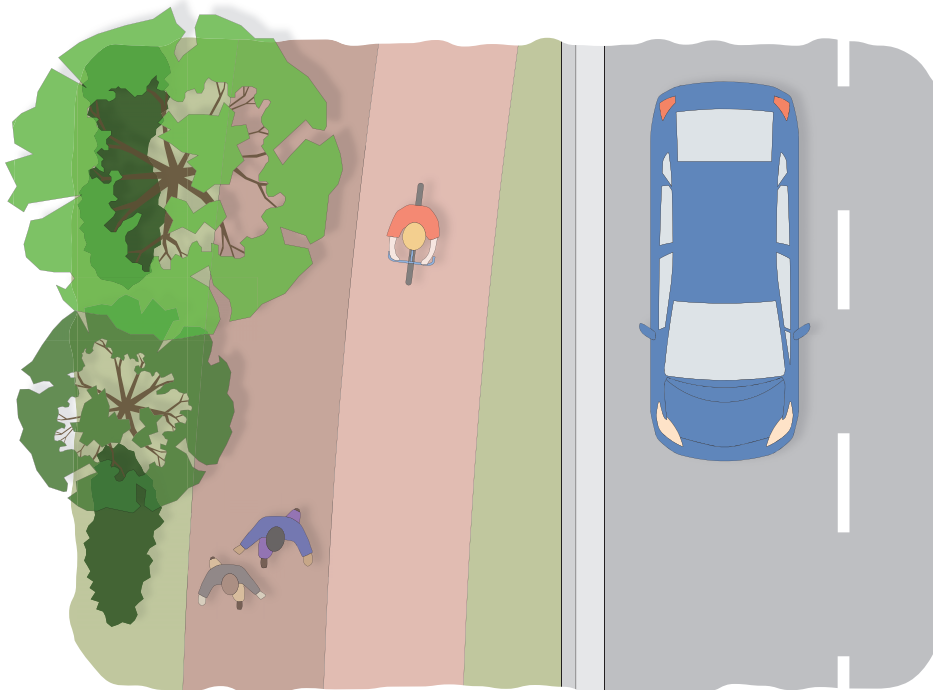
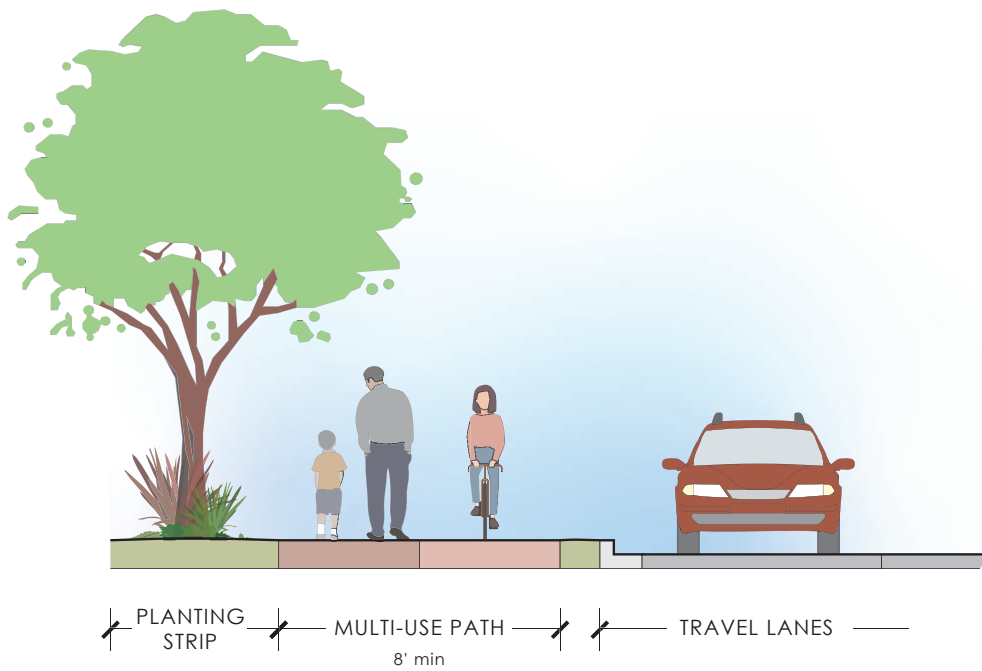
Provides a striped lane designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited. Bike lanes are one-way facilities located on either side of a roadway. Pedestrian and motorist crossflows are permitted.

The minimum bike lane width is considered to be 5-feet when adjacent to on-street parking, or 6-feet when posted speeds are greater than 40 miles per hour. Bike lanes can also have striped buffer areas 1.5-feet in width or greater to provide additional separation from vehicles.



Class III Bike Route

Provides shared use of traffic lanes with cyclists and motor vehicles, identified by signage and/or street markings such as "sharrows". Bike routes are best suited for low-speed, low-volume roadways. Bike routes provide network continuity or designate preferred routes through corridors with high demand.



Multi-Use Paths

Although not a formal Caltrans bicycle classification, multi-use paths are facilities dedicated for the exclusive use by people riding bikes and walking. Similar to Class I bike paths, multi-use paths offer alternative connections that are physically separated from motor vehicles.

Within Santee, these facilities are recommended to be 10- to 12-feet in width, with smaller widths of 8-feet acceptable in the most constrained locations. The facilities differ from Class I bike paths in that they do not provide a 2-foot wide buffer on each side.

Planned Bicycle Facilities

- Class I Bike Path
- Class II Bike Lane
- Class II Buffered Bike Lane
- Class III Bike Route
- Multi-Use Path (Paved)
- Multi-Use Path (Unpaved)

Existing Bicycle Facilities

- Class I Bike Path
- Class II Bike Lane
- Class II Buffered Bike Lane
- Class III Bike Route
- Multi-Use Path (Paved)
- Multi-Use Path (Unpaved)
- 90 US Bike Route 90

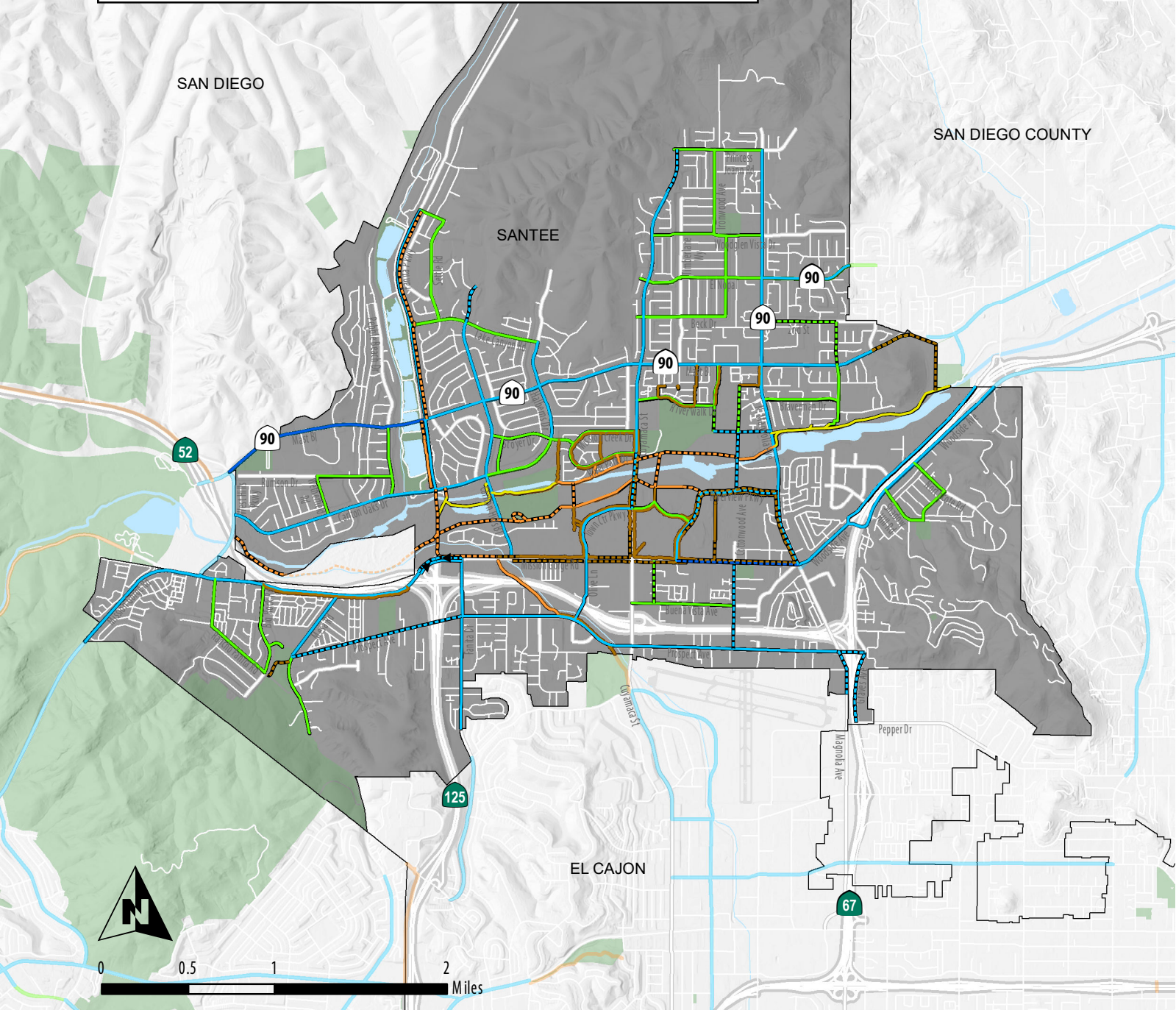


Figure 4.2 Planned Bicycle Network

Bicycle Parking

Providing safe and secure bicycle parking helps encourage individuals to bicycle. People may be more inclined to ride their bicycle if they know that their bicycle will be safe once they reach their destination.

Different needs are served by short-term and long-term bicycle parking. Short-term parking is bicycle parking that will be used for approximately two hours or less. This type of bicycle parking should be characterized by convenience and ease, and consist of standard bicycle racks that people are able to secure their bicycle by using a personal lock.

Long-term parking is parking that will be used for longer than two hours, and typically a user of this type of parking will place a higher value on security and shelter from weather. Long-term bicycle parking in Santee and the San Diego region typically consists of a bicycle locker which the bicycle is placed into and secured with a key, key card, or access code.

Locations of Existing Bicycle Parking

The Santee Town Center Transit Station has long-term bicycle parking in the form of 20 bicycle lockers. A few schools which also offer secure, enclosed bicycle parking, as well. Short-term bicycle parking (bicycle racks) can be found throughout the City of Santee at a variety of locations, such as:

- City Hall
- Santee Library
- Schools
- Parks
- The Marketplace at Santee
- Santee Town Center
- Santana Village Center
- Walmart
- Barnes & Noble
- Khol's
- Chick-fil-A
- In-N-Out Burger
- Costco
- Hometown Buffet
- The Home Depot
- Chuze Fitness
- Buffalo Wild Wings
- 99 Cent Store



Carlton Oaks Plaza (Library)

City of Santee Municipal Code

The City of Santee's Municipal Code requires new commercial and office uses to provide adequate and conveniently located bicycle parking. If a project anticipates visitors, racks need to be visibly located within 200-feet of the visitors' entrance and accommodate five percent of visitor motorized vehicle parking capacity. The Code requires buildings with more than 10 tenant-occupants to provide secure bicycle parking for five percent of motorized vehicle parking capacity.

Bicycle Parking Design Guidelines

Short-term and long-term bicycle parking serve different needs and therefore need to be sited and designed in different ways. Short-term parking should be close to the entrance of the destination, visible, well-lit and intuitive to use for the first-time user. The bicycle rack should support the bicycle in two places and prevent the wheel from tipping over, as well as, allowing the frame and one or both the wheels to be secured.

In selecting bicycle racks the following criteria should be taken into consideration:

- Supports the bicycle in an upright position
- Rack is intuitive to use even for first time users
- Accommodates a variety of bicycles and attachments
- Allows for the locking of the frame and at least one wheel
- Provides security
- Will last in the intended location (materials are weather proof, tamper-resistant mounting hardware, etc.)

Long-term parking should ensure security and weather protection. Security is the overriding consideration since employees, public-transit users and residents leave their bicycles unattended for long periods of time. Long-term parking can take on a number of different forms, such as a secure enclosure in a parking garage or bicycle lockers.



Green Conflict Paint

Colored pavement within a bicycle lane increases the visibility of the facility, identifies areas of conflict and reinforces priority to bicyclists in conflict areas. Colored pavement can be utilized as a corridor treatment along the length of a bicycle lane. Conflict paint can also be applied as a spot treatment at locations with potential for motor vehicle-bicycles conflicts. It can also be used to enhance intersection crossings, helping to guide bicyclists through an intersection and raise driver awareness to anticipate people on bicycles.

Paint treatments can also be used to create bike boxes at the front of intersection approaches before the limit line, giving priority idling spaces for bicyclists. This treatment can provide bicyclists a dedicated space at intersections in instances where a bike lane needs to be dropped on the approach to provide space for a right-turn only lane.

The increased visibility has also resulted in increased safer behaviors. Studies have shown a higher percentage of motorists yield to bicyclists and used a right-turn signal before changing lanes at locations which used green paint. Additionally, studies have shown that an increased number of bicyclists scanned for nearby vehicles after green paint installation.

Green paint can also be applied along local street approach and departure legs at freeway on-/off-ramp locations. These locations often exhibit some of the highest vehicular intersection volumes within a city, which can result in uncomfortable or undesirable bicycling conditions. The paint serves to emphasize visibility of the bike lane and to remind drivers to anticipate people on bikes when entering and exiting the freeway.



Dashed conflict paint used to emphasize the bike lane at a right-turn only lane



Bike Lane Conflict Paint on approach Leg of local street at freeway on-/off-ramp



Bike Lane Conflict Paint on departure leg of local street at freeway on-/off-ramp

A review of bicycle-involved collisions and the planned bicycle network informed the development of a pilot location for application of green paint. The driver and bicyclist movements preceding each collision, party-at-fault, collision cause, and violation codes were reviewed to better understand the interactions leading to each collision. In addition to bicycle collision data, bicycle count data was reviewed to determine the amount of bicycle activity at these intersections. Based on the review, consideration for green paint use is recommended at the Mission Gorge Road & SR-125 intersection.

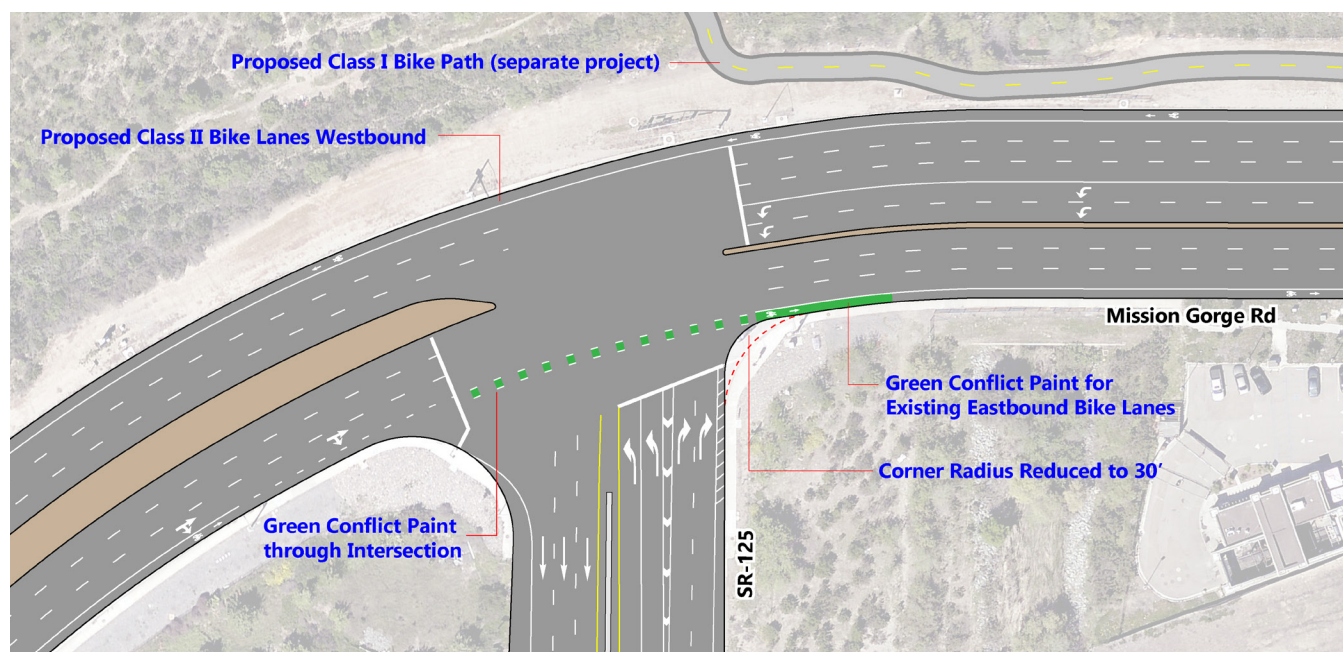
Conflict paint is planned on eastbound Mission Gorge Road (shown below). Dashed green conflict paint should be applied within the intersection footprint to aid in guiding people riding bicycles across the intersection and bring the attention of drivers exiting SR-125 to the presence of the bicycle lane. Additionally, conflict paint is planned on the intersection departure leg to serve as an additional visual cue that reminds drivers to anticipate people

on bikes while turning from SR-125 onto eastbound Mission Gorge Road.

Additional consideration should be made to reduce the southeast intersection corner radius – either through paint or physical modifications – to encourage slower vehicle speeds while turning from SR-125 onto eastbound Mission Gorge Road. If implemented and deemed successful, the City should consider further applications of green conflict paint on arterial intersection approaches and departure legs with bike lanes.

Bicycle Signal Detection

Sensors are commonly used to detect activity at traffic signals and initiate signal cycle progression. There are a variety of sensors that can be configured to detect bicycles, enabling a person on a bicycle to “trigger” a green light instead of waiting for a motor vehicle to actuate the traffic signal. Four types of bicycle signal detection are commonly used: loop, video, push-button, and microwave. The City of Santee uses video detection.



Mission Gorge Road/SR 125 Intersection

In 2007, California enacted a law which required all new and upgraded traffic signal sensors to detect bicycles (and motorcycles). In 2009, California's Manual on Uniform Traffic Control Devices (MUTCD) was revised to define performance standards for bicycle detection (CA MUTCD Section 4D.105).

Benefits

The benefits of bicycle detection are numerous to people on bikes. Bicycle detection increases safety by reducing delay at lights and thereby discouraging red light running. Bicycle detection improves efficiency of bicycle travel, increases convenience, and helps establish bicycling as a legitimate mode of transportation on streets. Bicycle detection can also be used to prolong the green phase in order to provide adequate time for people on bikes to clear the intersection.

Design Guidance

The National Association of City Transportation Officials (NACTO) offers design guidance for the application of bicycle detection. The guidance recommends the use of signs and/or pavement markings at signal detection locations where a bike facility is not present as a means to inform cyclists of the signal detection feature and to indicate where they need to be positioned in the roadway to activate the signal.

Bicycle Signal Detection Inventory

Figure 4.3 provides an inventory of traffic signals within the City of Santee, distinguishing between locations that have bike detection, do not have detection, or have in select directions. The inventory is displayed along with the existing and planned bicycle facilities.

Of the 61 traffic signals located within the City of Santee under Santee's control, 45 have full bicycle detection, three have detection in the north-south directions, two have detection in the east-west directions. Eleven signals have loops installed with the capability to detect bicycles, however, the detection only functions within the vehicle lane due to the loop positioning. Future video detection or the provision of loops within the bike lanes will benefit bicycle mobility and encourage safe behaviors at these intersections.

Eight of the 11 signals with limited loop detection are located within the public right-of-way, including:

- Mission Gorge Road / Father Junipero Serra Trail
- Mission Gorge Road / Big Rock Road
- Mission Gorge Road / Mesa Road
- Carlton Oaks Drive / Wethersfield Road
- Carlton Oaks Drive / Fanita Parkway
- Magnolia Avenue / Woodglen Vista Drive / Len Street
- Magnolia Avenue / Alexander Way
- Woodside Avenue / Davidann Road / SR-67 EB On-Ramp

The remaining three signals with limited loop detection are located within private commercial developments and were therefore excluded from the recommendations.

Locations with limited bicycle detection include:

- Magnolia Avenue / El Nopal (north-south)
- Magnolia Avenue / 2nd Street (north-south)
- Magnolia Avenue / Carefree Drive (north-south)
- Ellsworth Lane / Prospect Avenue (east-west)
- Atlas View Drive / Prospect Avenue (east-west)

Concurrent with future signal hardware modifications, each signal identified should be upgraded to provide bicycle detection in all directions from where a bicycle may legally approach.

With the exception of the signals at the Magnolia Avenue / Alexander Way intersection and the Post Office Driveway, all signals lacking full detection are located along existing bicycle facilities.

The signal at the Fanita Parkway / Carlton Oaks Drive intersection also has a planned multi-use path that will extend south of the intersection. Bicycle detection should be implemented at this location either prior to, or concurrent with the multi-use path installation.



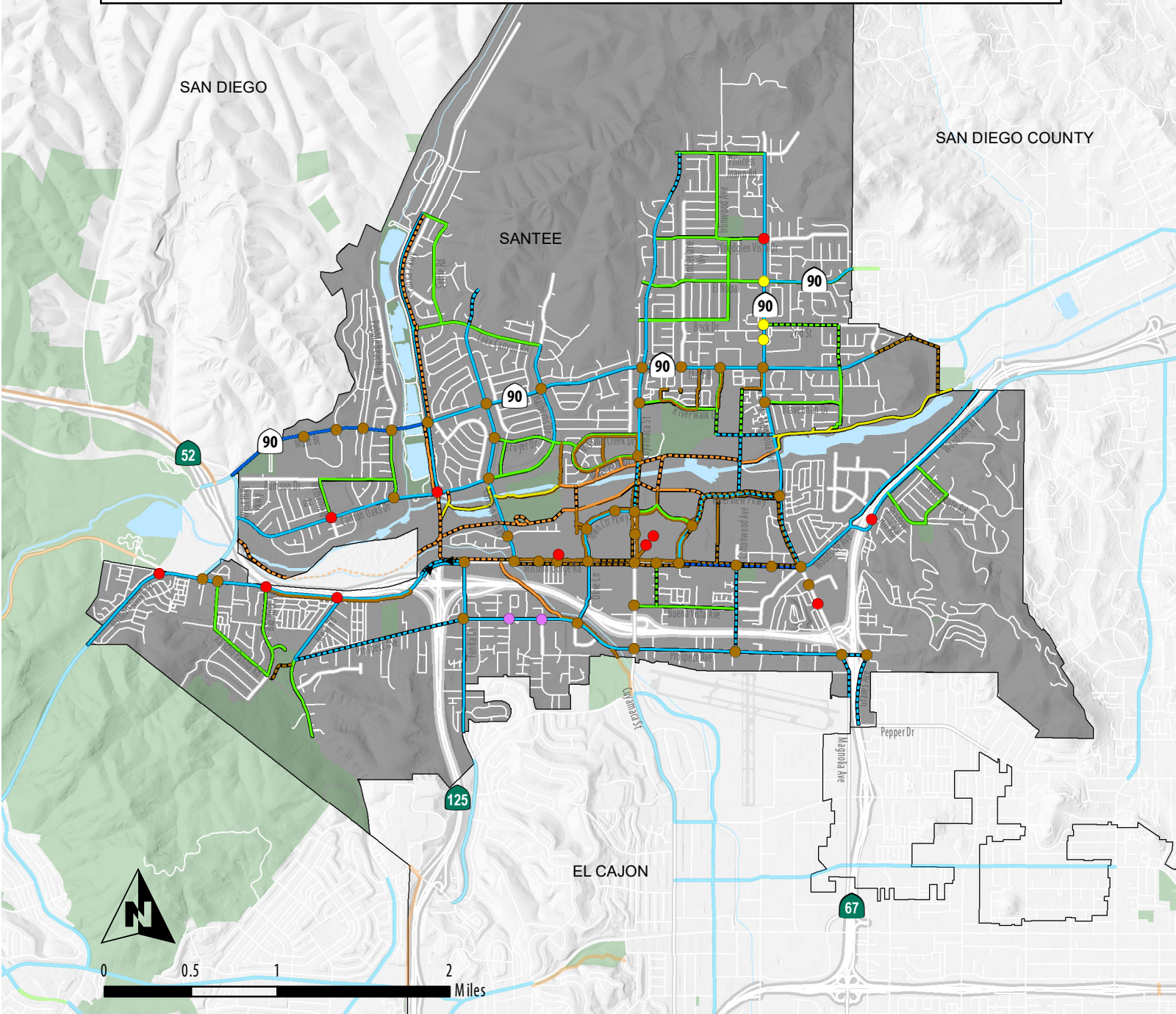
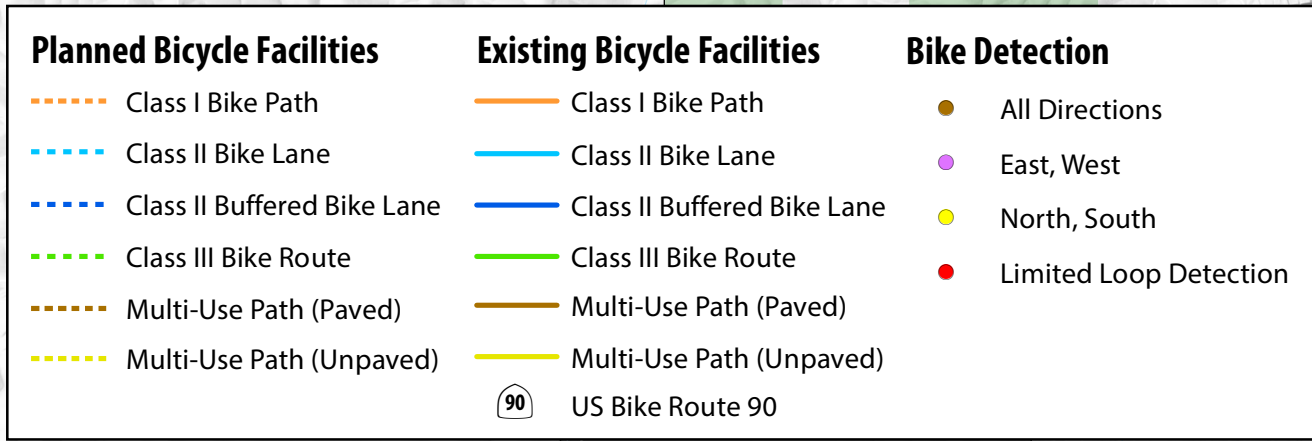


Figure 4.3 Bicycle Detection

4.4 Trail Access Enhancements

The San Diego River Trail and Forrester Creek Trail are unique community assets, offering comfortable pedestrian and bicycle options for recreation and transportation trips alike. These paths encounter minimal roadway crossings and are largely separated from vehicle travel lanes. Enhancements consisting of controlled crossings and supporting features are proposed at four locations to facilitate safe roadway crossings and improve pedestrian and bicycle access to the trails.

The locations are displayed in **Figure 4.4** along with the existing and planned Class I Bike Paths and multi-use trails. The trail access enhancement locations include: San Diego River Trail (south of river) at Cuyamaca Street), San Diego River Trail (north of river) at Magnolia Avenue, Forrester Creek Trail at Mission Gorge Road (west of Carlton Hills Boulevard), and Forrester Creek Trail at Prospect Avenue (west of Cuyamaca Street). The existing conditions and recommended improvements for each planned access enhancement location is described in greater detail.

Hybrid Beacon

Hybrid beacons, also known as **H**igh intensity **A**ctivated **C**rosswalks (HAWK), serve to assist pedestrians and/or bicyclists crossing a roadway while controlling vehicular traffic. These devices can be installed at locations where full traffic signals are not suitable, such as mid-block locations or where a trail intersects with a roadway. In addition to providing safety benefits to active transportation users, hybrid beacons remain dark unless activated by a person walking or riding a bike, which limits any unnecessary delay to drivers.

San Diego River Trail (south of river) at Cuyamaca Street

An existing segment of the San Diego River Trail south of the river currently spans to the west of Cuyamaca Street with a future trail planned to the east of Cuyamaca Street. The location where the two facilities will meet at Cuyamaca Street consists of a wide, 5-lane roadway, while the nearest controlled crossing is at Town Center Parkway, over 700' to the south.

As part of the trail expansion to the east, a hybrid beacon with a high visibility marked crosswalk, crossing signage, accessible curb ramps, audible and visual countdown signal heads and advance stop bars are recommended to provide a direct pedestrian and bicycle trail connection across Cuyamaca Street. The existing median along Cuyamaca Street south of the crossing location should be extended northwards to serve as a pedestrian refuge. The extended median can also serve as an additional location to position enhanced signage alerting drivers to the crossing location.



San Diego River Trail hybrid beacon crossing in the City of San Diego

Pending potential development of the parcel located just northeast of the Cuyamaca Street and Town Center Parkway intersection, a full traffic signal may be implemented in place of the hybrid beacon. The traffic signal should incorporate the recommended hybrid beacon features, with the exception of the pedestrian refuge.

Walker Preserve Trail to San Diego River Trail at Magnolia Avenue

The Walker Preserve Trail stretches eastwards from Magnolia Avenue to the eastern City boundary, while a future segment of the San Diego River Trail is planned to the west of Magnolia Avenue. An undercrossing will connect the two segments, however, access to the trails from the west side of Magnolia Avenue is not provided.

As the parcel to the west of Magnolia Avenue is developed a new traffic signal will be installed. This signal will provide a controlled crossing that can be utilized by people walking and riding bicycles, creating a connection that is accessible from both sides of Magnolia Avenue. The traffic signal should incorporate a high visibility marked crosswalk, accessible curb ramps, audible and visual countdown signal heads and advance stop bars.

Forrester Creek Trail at Prospect Avenue

A hybrid beacon is recommended across Prospect Avenue at the Forrester Creek Trail, just west of Cuyamaca Street. This controlled crossing will improve safety and mobility for pedestrians and bicyclists between two existing segments of the Forrester Creek Trail. The crossing will also benefit bicyclists using the existing bike lanes that run along both sides of Prospect Avenue, improving the connection between the bike lanes and trail segments to the north and south.

The hybrid beacon crossing should consist of a high visibility marked crosswalk, accessible curb ramps, audible and visual countdown signal heads and advance stop bars. A pedestrian refuge or raised median should also be considered at this location to further improve safety and serve as a traffic calming measure.

Forrester Creek Trail at Mission Gorge Road

The Forrester Creek Trail’s northern terminus is located at Mission Gorge Road, to the west of Carlton Hills Boulevard. The trail’s terminus places trail users on the south side of Mission Gorge Road, while a planned Class I path is planned along the north side of Mission Gorge Road. A hybrid beacon is proposed to facilitate the crossing of Mission Gorge Road, and connect the existing Forrester Creek Trail to the planned Class I path. The hybrid beacon crossing should consist of a high visibility marked crosswalk, accessible curb ramps, audible and visual countdown signal heads and advance stop bars. Wayfinding signage should also be considered to inform users of the connections on each side of the crossing.



Forrester Creek Trail

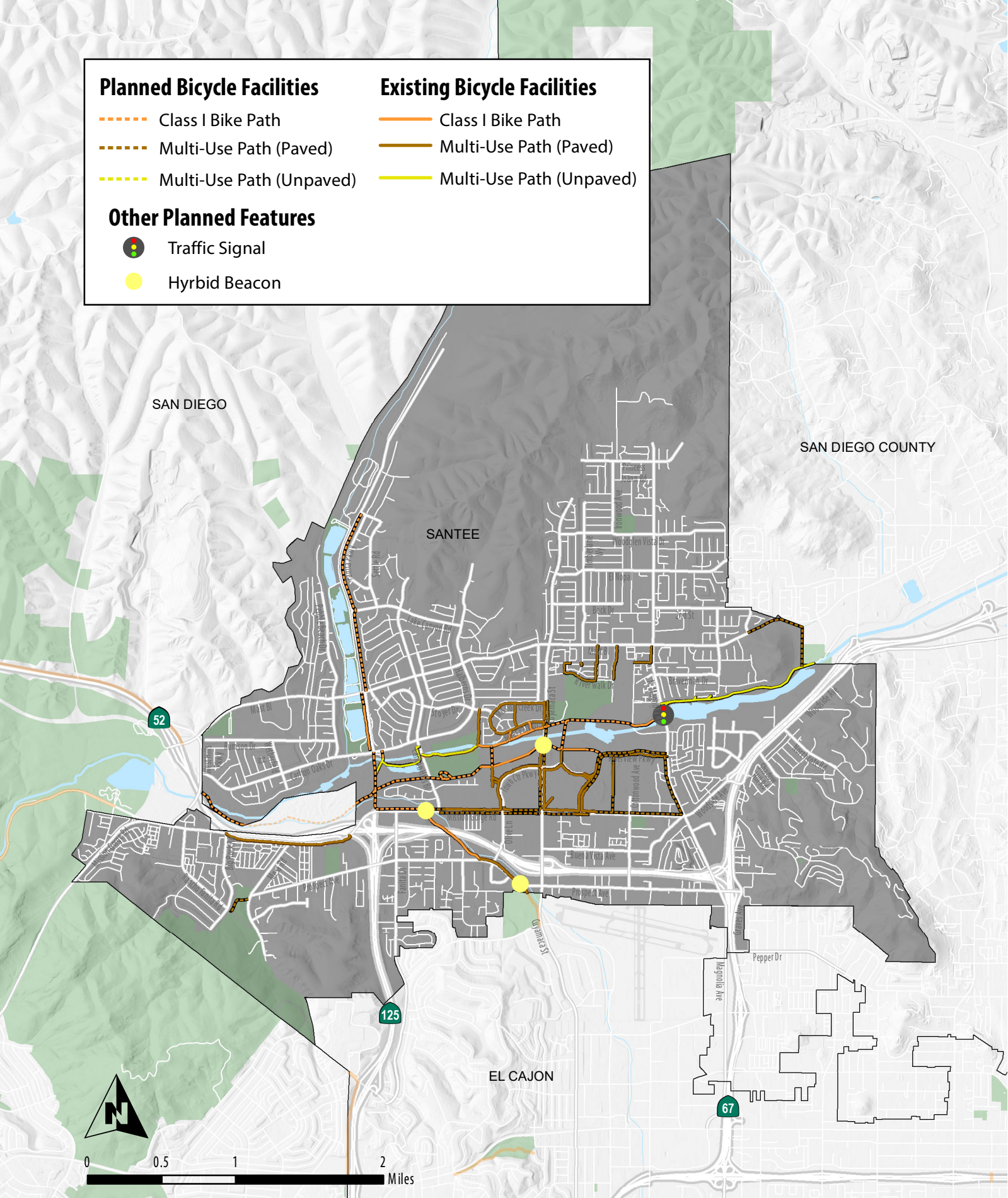


Figure 4.4 Trail Access Enhancement Locations

4.5 Supporting Programs

Active transportation planning follows the “Five E’s” framework of Engineering, Education, Encouragement, Enforcement, and Evaluation. Engineering is covered in the previous section on projects. The remaining four (Education, Encouragement, Enforcement and Evaluation) are typically provided through supporting programs which supplement engineering improvements to help ensure that the active transportation environment is safe, respectful, and comprehensive.

Funding for these efforts can be secured using local funds, grant programs, or diverting a small percentage of the City’s share of the regional, SANDAG-administered TransNet sales tax allocation to produce materials, hire vendors, or train existing staff for programs or products to encourage and support active transportation.

The following supporting programs are intended to serve as a toolkit for Santee to consider as funding sources are identified.

Education Programs

Education programs enable bicyclists, pedestrians, and motorists alike to understand how to travel safely in the roadway environment and interact with one another according to the law. Education programs are available in an array of formats, from long-term courses with detailed instruction, to single sessions focusing on a specific topic. Curricula should be appropriate to the target audience and to the format of instructions.

The purpose of the following education programs is to teach participants the “rules of the road” and basic safe bicycling and walking skills. Equipping residents with this knowledge and these skills can help reduce collisions.



Table 4.2 Example Safety Messages

Safety Message Text and Recipients	Target Audience
Targeted at People Biking	
Ride predictably - Wrong way riding is dangerous	General bicycling population
Ride predictably - Bicycles must follow rules of the road (obey traffic signals and stop signs)	General bicycling population
If riding on sidewalk, enter crosswalk at walking speed (and on correct side of road) to avoid collisions with turning vehicles	Older youth/young adults
Targeted at People Walking	
Look before crossing (even when you have the walk signal)	Youth
Cross at the corner	General population, youth, and visitors
Targeted at People Driving	
Look in your blind spot (for bikes) before turning or opening your car door	Visitors and residents
Yield to pedestrians in crosswalks (marked and unmarked)	Visitors and residents
"Slow down for our kids" or similar	Visitors and residents
"Speed Kills" campaign	Visitors and residents

Safety Messaging Campaigns

Safety messaging campaigns are an effective way to build awareness of people walking and biking and to encourage safe driving behavior. The subject matter and the channels of communication can be adjusted depending on the target audience and the budget. Changeable Message Signs (CMS), safety banners, existing billboards or even yard signs can be used.

The signs raise awareness of pressing safety issues and can be sited at strategic locations throughout the City. Advertising on bus shelters and benches can also be an interesting part of safety campaigns to expand the reach of messaging.

Campaigns may use community events, schools, press conferences and sponsorships to educate the community about safe driving. **Table 4.2** lists example safety messages for safety message campaign.

Another program to consider is to develop a Shared Lane Marking or "sharrow" education campaign. Since this plan proposes a number of Class III shared lanes, the focus of the campaign could be on education regarding what a sharrow means for cyclists and for motorists, and how people on bicycles should use sharrows.

In conjunction with the Sharrow Education Campaign, there could be an education campaign on the “Three Feet for Safety Act” (CVC 21760). The “Three Feet for Safety Act” requires drivers to maintain a minimum 3-foot buffer when passing cyclists and when sharing the road with a bike. Included in this educational campaign could be information on why a motorist should give a person on a bicycle a 3-foot buffer, under what circumstances the law applies, and the penalties to drivers for violating the law.

Supplemental Education Campaigns

In addition to the above-mentioned education programs, project implementation may necessitate concurrent educational campaigns to inform community members how to properly use the new facilities, as well as, of the goals and benefits of the projects. The following educational strategies should be considered:

Project Website

To provide an overview of and updates on implementation of major projects and their related goals, design features, schedule of approval, design and construction, or impacts to the neighborhood.

Billboards/Bus Shelters

Working with MTS or utilizing billboards to feature simple, large print ads to promote pedestrian and bicycle safety and/or explain new design treatments in the public right of way (i.e. flashing pedestrian beacons).

Social Media

To promote and provide updates on projects via major social media outlets, such as Facebook, Flickr, Instagram.

Staff /Agency Training

To provide City staff and enforcement staff with training on new design treatments in the right-of-way.

Safe Routes to School

Safe Routes to School programs are programs which offer a variety of educational programs to students regarding safe active transportation behaviors and skills, as well as, recommended infrastructure improvements in the walkshed surrounding schools. The City of Santee has an adopted Safe Routes to School Plan. The City of Santee should continue to work with schools within its boundaries on implementing the programs and recommended





Bike-to-Work Day

infrastructure improvements. Additionally, the programmatic offerings should be expanded to all schools.

Adult Bicycle Education

Most bicyclists do not receive comprehensive instructions on safe and effective bicycling techniques, laws, or bicycle maintenance. Bike skills training courses are an excellent way to improve cyclists' confidence and safety.

Through SANDAG's iCommute program, employers can take advantage of these programs without charge. The classes available include bicycle safety checks, a bike class, and a Bike and Learn Together class which teaches on-road and commuting skills.

Alternately, the City can partner with

local bicycle groups and other non-profit community-based organizations, such as the San Diego Bicycle Coalition, to offer League of American Bicyclists bicycle skills courses, incorporating them into recreation center or active transportation programs.

Encouragement Programs

Throughout the year, the City should continue to look for opportunities to promote walking and bicycling at local and regional events, such as the following:

Bike to Work Day/Month

The City should continue to promote and participate in Bike-to-Work-Day/Month, a regional event sponsored by SANDAG and regional agencies during the month of May. This is a good opportunity to raise the visibility of cycling in the City, give away safety equipment, and partner with

local community groups and businesses to promote bicycling as a form of transportation.

Bicycle Parking Program

Providing safe and secure bicycle parking helps encourage individuals to bicycle. The City should develop a Bicycle Parking Program by regularly, if not annually, inventorying existing racks, identifying areas that need more bike parking, and upgrading facilities when necessary around commercial areas. The data should be maintained in a database for ease of mapping, asset management, and otherwise monitoring to gauge effectiveness.

Bike Valet

The City should work with local organizations to sponsor bike valets at community events with high visibility in the City, such as the Summer Concert Series, farmer's markets, or annual community events.

Open Streets Program/Event

The City should explore opportunities to host an open streets event. Open street events are free events in which the City closes down certain designated sections of roadways to cars for a set number of hours and opens the streets up to people on bicycles, scooters, roller skates, skateboards, wheel chairs and of course feet. The purpose is to allow residents to discover active transportation in a safe environment while fostering civic pride and stimulating economic development (if the event is activated with vendors or takes place along commercial retail).

Pop-Up Neighborhood Event

During the design development phase of certain projects, the City could host "pop-up" events, such as those facilitated during the creation of this Plan, with temporary in-street installations at the site of proposed improvements. These events allow community members to try out, touch, and see the potential improvements in their



future location. The event helps residents understand the benefits of unusual or nontraditional neighborhood treatments, such as traffic diverters or unique pavement markings and signage.

Enforcement Programs

Motorists, pedestrians, and bicyclists alike are sometimes unaware of each other's rights as they travel city streets. Enforcement programs target unsafe pedestrian, bicyclist and motorist behaviors and enforce laws that reduce collisions and conflicts. Enforcement fosters education and mutual respect between roadway users and improves safety. Educating the public through enforcement policies will supplement the physical improvements made in the City. As resources permit, the City should coordinate with the Sheriff's department to conduct enforcement efforts related to:

- Pedestrian Crossing Behavior
- Motorist Behavior
- Safe Walking, Riding, and Driving in School Zones
- Riding Against Traffic
- Failure to Yield at Crosswalks

Evaluation Programs

Evaluation programs help the City to measure how well it is meeting the goals of this Plan and related plans that address the need to increase bicycle ridership. Evaluation is a key component of any engineering or programmatic investment. An Active Transportation Monitoring Plan was developed in support of this Active Transportation Plan as a means to track key active transportation variables to enable the evaluation of activity levels, behaviors, responses to investment and safety. The monitoring plan is further described within Chapter 5 Implementation.





Chapter 5

Implementation

The process of implementing the planned projects is dependent on a variety of factors that may include the availability of funds, agency and departmental coordination, property redevelopment, and right-of-way acquisition to name a few. To support the implementation process, this Chapter provides information related to project prioritization, priority project sheets, cost estimates, and grant funding sources to consider pursuing. This information is intended to aid City staff in the allocation of resources and to help determine which projects should be pursued. Topics for consideration following project implementation are also covered, including a discussion on facility maintenance and performance monitoring.

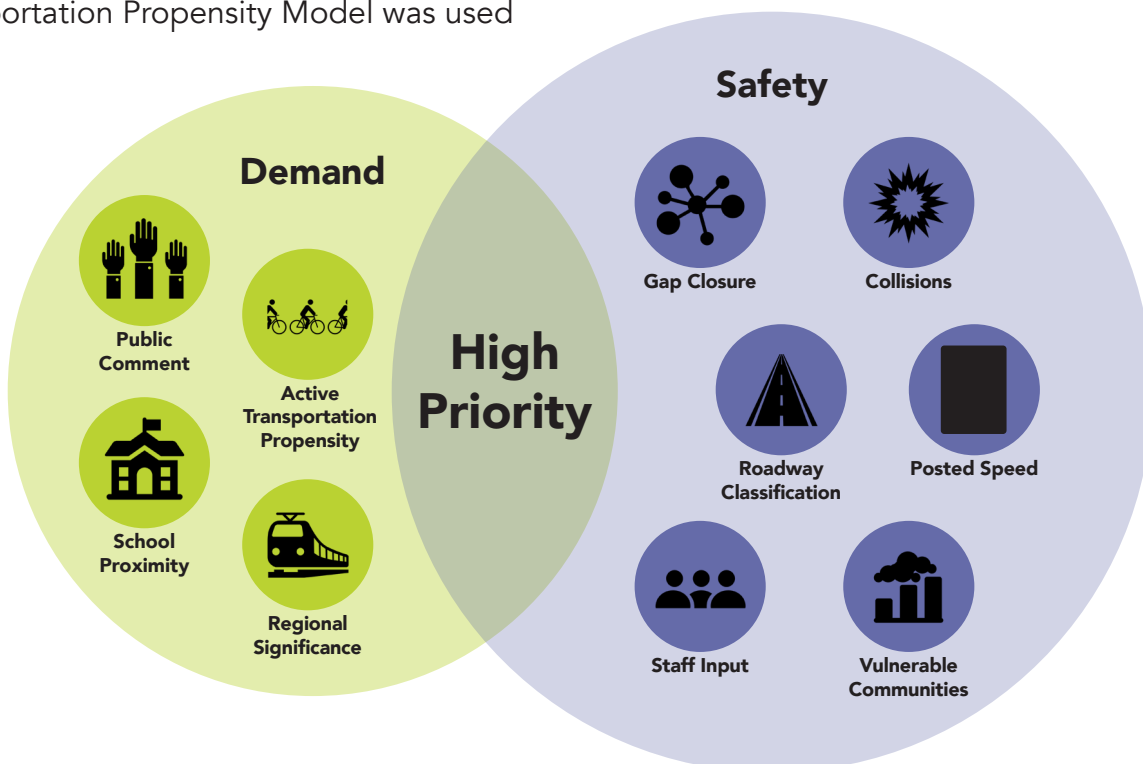
5.1 Prioritization Process

A prioritization process was developed as a means to objectively rank which pedestrian and bicycle infrastructure projects are likely to have the greatest benefit to the City’s active transportation system. To achieve this, the process involved selecting inputs related to user safety and demand. Relating to demand, an Active Transportation Propensity Model was used

to identify areas with greater potential for active transportation trips. School proximity, public comments, and regional significance were also included. The project was awarded regional significance points if it fell along the SANDAG’s regional bicycle network, connected to the Santee Town Center, or connected to an adjacent jurisdiction.

Health and safety inputs included collision frequency and severity, posted speed limits, roadway classification, and projects that fill existing gaps in the active transportation networks. Finally, staff input and metrics identifying communities most vulnerable to pollution effects (CalEnviroScreen) were also used.

Appendix E identifies each of the demand- and safety-related inputs, with values associated with different levels of each criteria. Pedestrian and bicycle infrastructure projects were prioritized separately, however, using the same criteria. The hybrid beacons proposed to enhance trail access were each evaluated as part of the bicycle network.



5.2 Prioritization Results

The prioritization results for the sidewalk infill groupings and bicycle projects and hybrid beacons are presented within this section. The results are intended to serve as a reference guide when evaluating and selecting individual projects. However, the prioritization results do not necessarily reflect the order of implementation nor does it guarantee projects will be built. For example, some projects may be dependent on the completion of other improvements. In other instances, unforeseen circumstances that may be revealed at the individual project level may further impact project sequence.

The prioritization results for the sidewalk infill groupings are presented in **Figure 5.1**, while the full list of prioritization results, including the assigned point values for each category by project, are provided in **Table 5.1**. The table also includes planning level cost estimates for each project. The cost estimates were developed by applying unit cost assumptions to each improvement type (linear feet of sidewalk with curb and gutter, linear feet of sidewalk without curb and gutter, new curb ramps, and curb ramp retrofits to ADA standard) and multiplying by the respective quantity. Additional cost estimate development documentation is provided in **Appendix F**.

The prioritization results are intended to be used as a guide for selecting projects; however, additional considerations will ultimately be factored into the determination of which projects receive funding or to for which grants would be sought.

In some instances, projects were awarded the same score as one another, resulting in multiple projects with the same rank – including four projects ranked as number 10. The table identifies the project extents for each grouping, the linear feet of sidewalk to be constructed and curb ramp quantities.

Curbs and gutters generally need to be constructed with the infill sidewalk location; however, in some cases, just a sidewalk is needed. These differences are noted in the table, although actual requirements may vary at the project level. Similarly, locations where a full curb ramp is required is distinguished from those where a detectable warning pad surface is required. However, additional Americans with Disabilities Act requirements may be determined at the project level, necessitating full curb ramp replacement (e.g., curb ramp slope, cross-slope, width, etc.).



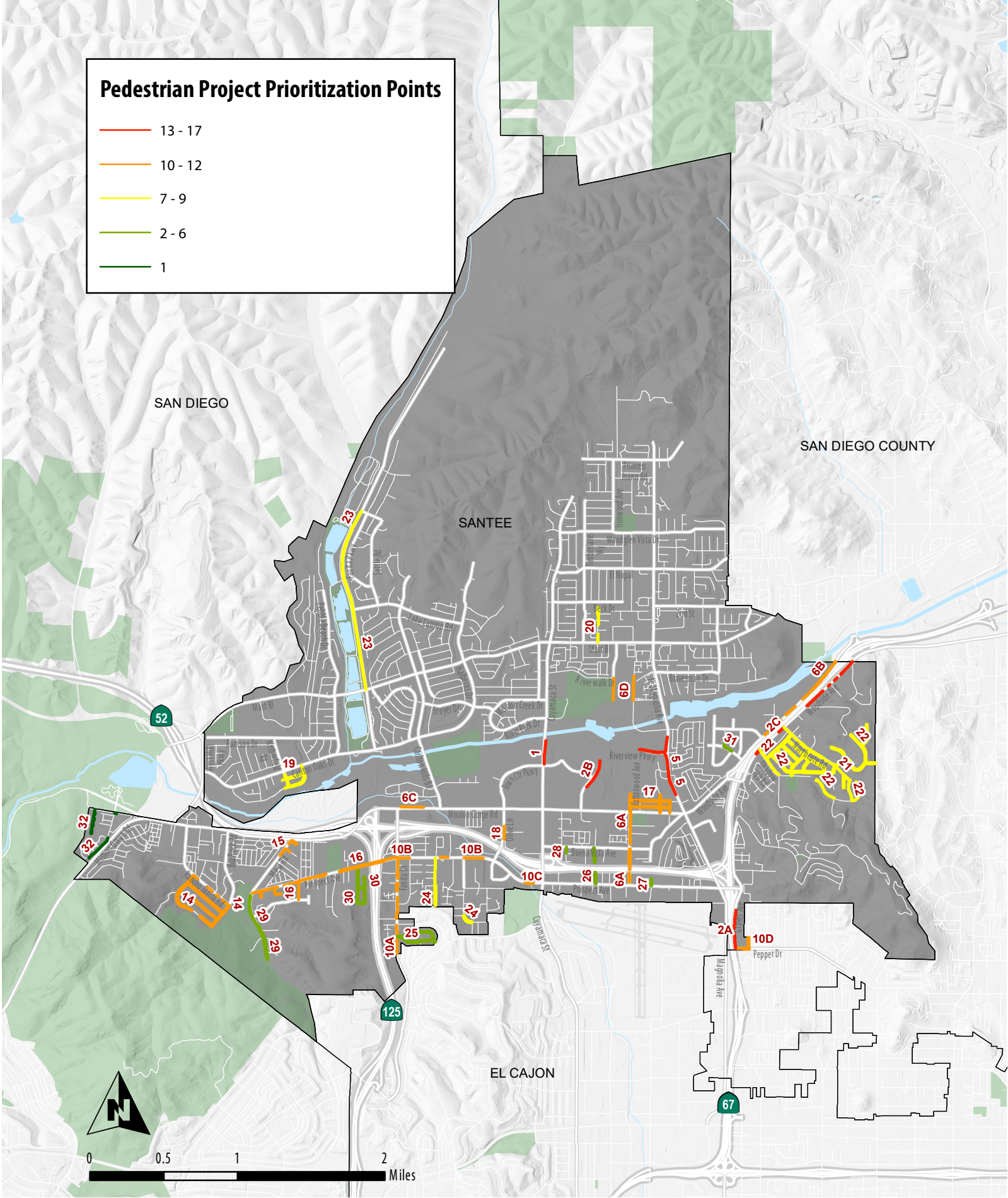


Figure 5.1 Sidewalk Infill Prioritization Results

Table 5.1 Sidewalk Infill Grouping Prioritization Results

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
1	Cuyamaca St (east side)	Town Center Pkwy to River Trail bridge (overpass)	847				17	\$862,239.58
2A	Graves Ave (east side)	Pepper Dr to ~750ft south of Prospect Ave	1,373			2	14	\$316,973.50
2B	Riverview Pkwy (east side)	Town Center Pkwy to North end	572				14	\$582,291.67
	Riverview Pkwy (SE side)	Town Center Pkwy to ~400ft south of Town Center Pkwy		388				\$394,981.06
2C	Woodside Ave (east side)	67-Fwy to Northcote Rd	559			3	14	\$154,045.50
	Woodside Ave (east side)	Northcote Rd to Woodside Terrace	2,178		3			\$589,101.00
5	Magnolia Ave (west side)	Cottonwood Ave to Park Ave	2,032				13	\$473,994.00
	Riverview Pkwy (north side)	Magnolia Ave to West end (culdesac)		987				\$125,842.50
6A	Cottonwood Ave (both sides)	Prospect Ave to 52-Fwy	597				12	\$167,611.50
	Cottonwood Ave (both sides)	Fwy-52 to Mission Gorge Rd	2,328		8			\$762,076.00
6B	N Woodside Ave (north side)	Wheatlands Ave to N City Boundary	3,230				12	\$840,735.00
6C	Mission Gorge Rd (north side)	Fanita Dr to ~500ft west of Carlton Hills Blvd		1,211			12	\$1,232,788.83
6D	Park Center Dr (east side)	Riverwalk Dr to South end (culdesac)	804				12	\$184,518.00
	Cottonwood Ave (west side)	Annie Ln to Claudia Ave	870					\$199,665.00

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
10A	Fanita Dr (east side)	Prospect Ave to S City Boundary	2,276		3	3	11	\$637,347.00
	Fanita Dr (west side)	Prospect Ave to S City Boundary	953		3	8		\$460,793.50
10B	Prospect Ave (south side)	Atlas View Dr to Agent St	683				11	\$225,598.50
	Prospect Ave (south side)	Fanita Dr to Double M Rd		425				\$92,437.50
	Propsect Ave (north side)	Granite House Ln to ~100 ft east of Ellsworth Ln	373					\$93,253.50
10C	Prospect Ave (south side)	Existing Class I east of Pathway St to ~250ft west of Cuyamaca St	297				11	\$68,161.50
10D	Pepper Dr (both sides)	Graves Ave to Teton Dr	690				11	\$158,355.00
	Teton Dr (both sides)	Pepper Dr to Andes Rd (City Boundary)		788				\$108,120.00
14	Rancho Fanita Dr (south side)	Organdy Ln to Big Rock Rd		831			10	\$174,802.50
	Linene Dr (both sides)	Organdy Ln to Big Rock Rd		3,265				\$798,787.50
	Poplin Dr (both sides)	Organdy Ln to Big Rock Rd		3,236				\$802,740.00
	Shantung Dr (both sides)	Organdy Ln to Big Rock Rd		2,693	2			\$622,157.50
	Organdy Ln (both sides)	Poplin Dr to Rancho Fanita Dr		1,626	4			\$359,465.00
	Big Rock Rd (both sides)	Shantung Dr to Rancho Fanita Dr		1,879	9			\$438,472.50
15	Cherub Ct (both sides)	Mesa Rd to East end (culdesac)		612			10	\$100,980.00
	Graham Terrace / Mesa Rd (both sides)	SE corner of Mesa Rd and Graham Terrace	504		2			\$187,918.00

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
16	Prospect Ave (both sides)	Mesa Rd to S Slope St	61	1,300	5	3	10	\$328,754.50
	Val Vista Dr (both sides)	Prospect Ave to South end (culdesac)	432					\$160,344.00
	Courtney Ln (NE side)	Prospect Ave to South end (culdesac)		451				\$72,802.50
	S Slope St (west side)	Prospect Ave to Mesa Heights Rd		630				\$103,275.00
	Prospect Ave (north side)	S Slope St to Holden Rd	903					\$230,188.50
	Prospect Ave (south side)	Anlee Dr to Holden Rd	205					\$69,997.50
	Prospect Ave (north side)	Dove Hill Dr to Fanita Dr		1,879	8			\$337,322.50
	Prospect Ave (south side)	Clifford Heights Rd to Glen Oaks Way		1,415				\$249,262.50
17	Park Ave (both sides)	Cottonwood Ave to 1st St	2,735		9		10	\$887,782.50
	3rd St (both sides)	Cottonwood Ave to 1st St	2,690					\$701,505.00
	Cottonwood Ave (both sides)	Mission Gorge Rd to North end	1,186					\$287,487.00
	Edgemoor Dr (both sides)	Mission Gorge Rd to North end	1,112					\$301,104.00
	1st St (west side)	Mission Gorge Rd to Park Ave	360					\$97,920.00
18	Olive Ln (east side)	Maccool Ln	443		1	1	10	\$134,903.50

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
19	Inverness Rd (both sides)	Wethersfield Rd to Carlton Oaks Dr		2,126	4	2	9	\$478,635.00
	Dunkwoodie Rd (both sides)	Iverness Rd to West end (culdesac)		1,389				\$268,897.50
	Wethersfield Rd (both sides)	Carlton Oaks Dr to Inverness Rd		680	3	3		\$125,205.00
20	Conejo Rd (both sides)	Mast Blvd to North end (culdesac)	1,127				9	\$350,446.50
21	Northcote Rd (south side)	Huntingride Cir to Woodside Ave		1,164	3		8	\$283,560.00
	Northcote Rd (both sides)	Blackhorse Dr to Huntingride Cir		2,260	5	2		\$543,320.00
	Northcote Rd (north side)	Huntingride Cir to ~200ft east of Via Teresa	398					\$114,291.00
22	Canyon Park Dr (NW side)	Northcote Rd to North end (culdesac)	2,534		2	1	8	\$792,438.00
	Canyon Park Dr (SE side)	Northcote Rd to North end (culdesac)	2,569		4	1		\$773,270.50
	Canyon Park Terrace (both sides)	Canyon Park Dr to West end (culdesac)	1,434					\$466,803.00
	Fonteyn Ct (both sides)	Canyon Park Dr to East end (culdesac)	714					\$186,813.00
	High Rise Way (both sides)	Canyon Park Dr to North end (culdesac)	1,658					\$518,211.00

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
22	Blackhorse Dr (west side)	Northcote Rd to Diamondback Dr		768			8	\$143,820.00
	Diamondback Dr (north side)	Blackhorse Dr to North end (culdesac)		907		2		\$178,712.50
	Koonce Rd (both sides)	Northcote Rd to South end (culdesac)		948				\$166,770.00
	Diamondback Dr (north side)	Blackhorse Dr to West end (culdesac)		967				\$192,142.50
	Heatherdal St (both sides)	Meadow Terrace Dr to Lea Terrace Dr		1,645	4			\$423,087.50
	Fairlawn St (both sides)	Meadow Terrace Dr to Lea Terrace Dr		1,627	4			\$443,742.50
	Bloomdale St (both sides)	Meadow Terrace Dr to Lea Terrace Dr		1,632	4			\$444,380.00
	Bird St (both sides)	Meadow Terrace Dr to Lea Terrace Dr		1,939	4			\$514,122.50
	Shadow Hill Rd (east side)	Woodside Ave to Ruocco Dr		1,146	4			\$275,315.00
	Meadow Terrace Dr (both sides)	Northcote Rd to Shadow Hill Rd		2,396				\$473,790.00
	Lea Terrace Dr (both sides)	Northcote Rd to Shadow Hill Rd		2,119				\$331,372.50
	Larkridge St / Robinridge Way (both sides)	Lea Terrace Dr to Northcote Rd		3,355	8			\$862,112.50
	Shadow Hill Way (both sides)	Larkridge St to Heatherdale St		938				\$180,795.00
Heatherdale St (both sides)	Lea Terrace Dr to Larkridge St		1,923	2		\$447,482.50		

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
23	Fanita Pkwy (west side)	Mast Blvd to Lake Canyon Rd	2,902				8	\$666,009.00
	Fanita Pkwy (west side)	Lake Canyon Rd to Campground (Penmar Rd)	3,024					\$694,008.00
	Fanita Pkwy (west side)	Campground (Penmar Rd) to Ganley Rd	665					\$152,617.50
24	Ellsworth Ln (west side)	Prospect Ave to Padre Ln		897			7	\$206,167.50
	Ellsworth Ln (both sides)	Padre Ln to South end (culdesac)		1,402				\$247,605.00
	Atlas View Dr (both sides)	Starcrest Dr to Desiree Ln	823					\$257,728.50
25	Fanita Rancho Rd (both sides)	Fanita Dr to Farrington Dr		3,089	6		6	\$694,747.50
	Todos Santos Dr (both sides)	Fanita Rancho Rd (west to east)		2,700	2			\$638,350.00
26	Louis Ln (both sides)	Prospect Ave to North end	805				6	\$238,297.50
27	Railroad Ave (both sides)	Prospect Ave to North end	517				6	\$133,951.50
28	Lind Vern Ct (both sides)	Buena Vista Ave to South end (culdesac)		1,072			6	\$274,380.00
	Summercrest Ln (west side)	Buena Vista Ave to Summertree Ln		220				\$35,700.00
29	Mesa Rd (west side)	Prospect Ave to Ramhaven Ln	1,369				5	\$314,185.50
	Mesa Rd (east side)	Mesa Heights Rd to Ramhaven Ln	256		1			\$83,402.00
	Mesa Rd (both sides)	Ramhaven Ln to South end (trail head)	2,111		1			\$532,074.50

Notes: LF = Linear Feet C & G = Curb and Gutter

Rank	Segment	Extent	LF + C & G	LF no C & G	New Ramp	Ramp Retrofit	Score	Cost Estimate
30	Placid View Dr (both sides)	Prospect Ave to Carmir Dr		2,407	2		5	\$478,592.50
	Bandon Way (both sides)	Place View Dr to Dobyns Dr		449				\$87,847.50
	Carmir Dr (both sides)	Place View Dr to Dobyns Dr		502				\$109,905.00
	Dobyns Dr (both sides)	Carmir Dr to North end (culdesac)		1,884	2			\$465,460.00
31	Hartley Rd (NE side)	Stevens Rd to Isaac St		469	1		4	\$99,747.50
32	Wahl St (both sides)	Simeon Dr to South end (culdesac)		1,262			1	\$222,105.00
	Simeon Dr (south side)	Bushy Hill Dr to East end		100	1			\$22,100.00
	Bushy Hill Dr (south side)	Mission San Carlos Dr to Old Mission Ct		998				\$127,245.00
Total			54,199	70,996	124	31	N/A	\$32,940,663.64

Notes: LF = Linear Feet C & G = Curb and Gutter

Figure 5.2 displays the prioritization results for the planned bicycle facilities, including the three hybrid beacons. The complete list of bicycle project prioritization results and the respective scoring inputs are included in **Table 5.2**. In some instances, projects were awarded the same score as one another, resulting in multiple projects with the same rank – including three projects ranked as number 9. The table also includes planning level cost estimates for each bicycle facility and hybrid beacon. The cost estimates were developed by applying unit cost assumptions for each facility type (Class I path, Class II bike lane and buffered bike lane, Class III bike route, and hybrid beacon) and multiplying by the respective quantity.

Some planned bicycle facilities were excluded from the prioritization process, considering these projects are along future roadways yet to be built or will be constructed by property owners as the adjacent properties are developed. While excluded from the prioritization, these links are important nonetheless. **Table 5.3** identifies these facilities and the rationale for excluding from the prioritization process.

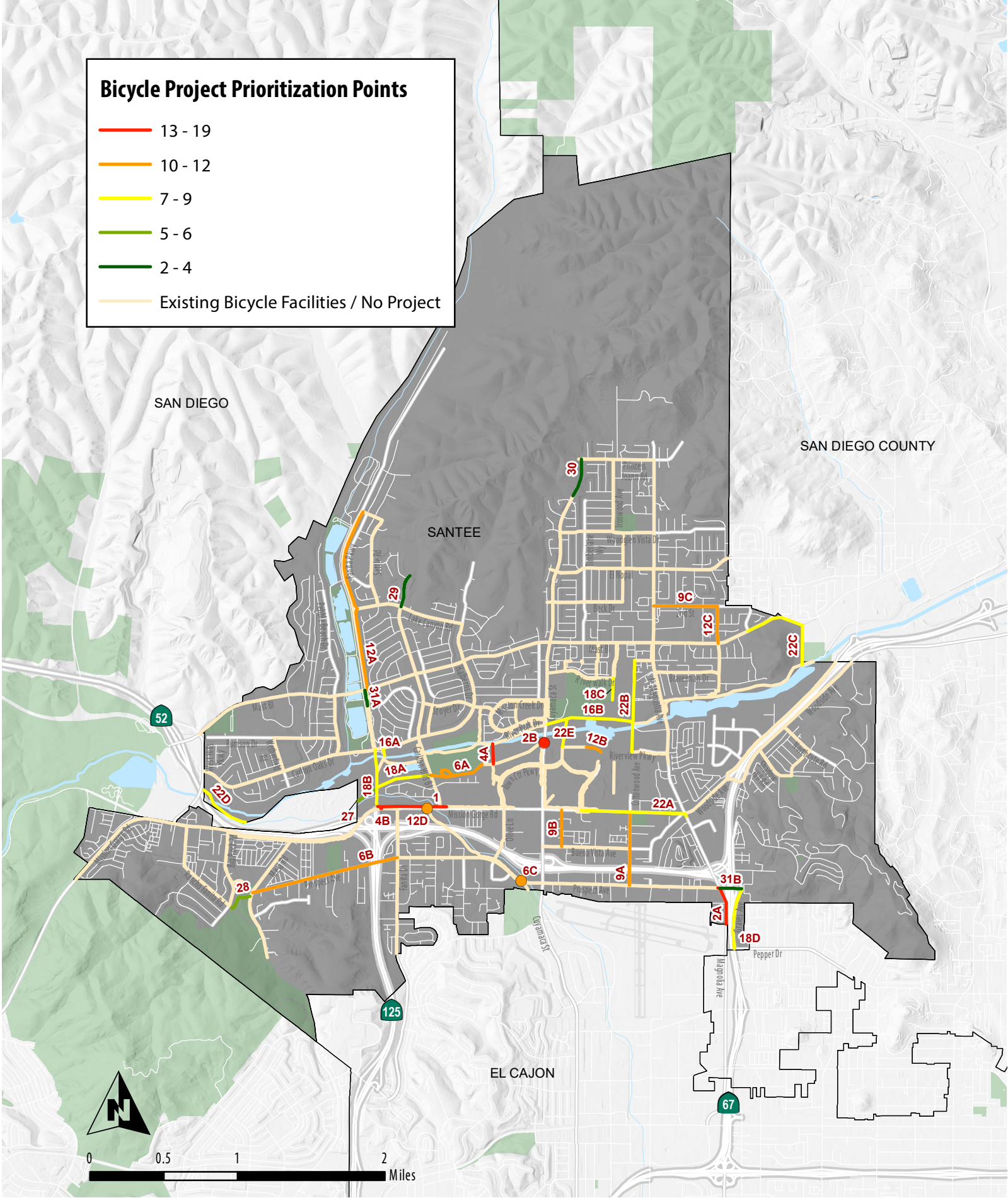


Figure 5.2 Bicycle Project Prioritization Results

Table 5.2 Bicycle Project Prioritization Results

Rank	Segment	Extent	Facility	Miles	Score	Cost Estimate
1	Mission Gorge Rd (north side)	SR-125 / Existing Multi-Use Path to Carlton Hills Blvd	Class I Path	0.5	19	\$2,687,500
2A	Magnolia Ave	Prospect Ave to S City Boundary	Class II Bike Lane	0.3	16	\$95,762
2B	San Diego River Trail (south of river) at Cuyamaca Street	N/A	Hybrid Beacon	N/A	16	\$292,500
4A	River Trail Crossing	North side of Walmart to River Rock Ct	Class I Path	0.1	13	\$806,250
4B	Mission Gorge Rd	SR-52 to SR-125	Green Conflict Paint & Class II Bike Lane (WB Only)	0.3	13	\$44,647
6A	River Trail (south) Segment 8	Carlton Hills Blvd to Willowgrove Pl	Class I Path	0.5	12	\$2,687,500
6B	Prospect Ave	Mesa Rd to Fanita Dr	Class II Bike Lane	1.0	12	\$63,640
6C	Forrester Creek Trail at Prospect Avenue	N/A	Hybrid Beacon	N/A	12	\$585,000
9A	Cottonwood Ave	Mission Gorge Rd to Prospect Ave	Class II Bike Lane	0.5	11	\$31,820
9B	Mission Greens Rd	Mission Gorge Rd to Buena Vista Ave	Class III Bike Route	0.2	11	\$3,822
9C	2 nd St	Magnolia Ave to Jeremy St	Class III Bike Route	0.4	11	\$5,382
12A	Fanita Pkwy / Sycamore Canyon Rd	Mast Blvd to Ganley Rd	Class I Path	1.9	10	\$10,212,500
12B	River Trail (south) Segment 10	Existing Class I north of Town Center Roundabout to Planned Town Center Pkwy Class I	Class I Path	0.1	10	\$537,500
12C	Jeremy St	Mast Blvd to 2 nd St	Class III Bike Route	0.3	10	\$9,984
12D	Forrester Creek Trail at Mission Gorge Road	N/A	Hybrid Beacon	N/A	10	\$585,000

Rank	Segment	Extent	Facility	Miles	Score	Cost Estimate
16A	River Trail (north) Segment 2 - connection	Carlton Oaks Dr / Camino Del Verde to River Trail	Class I Path	0.1	9	\$537,500
16B	River Trail (north) Segment 3	Cuyamaca St to Cottonwood Ave	Class I Path	0.6	9	\$3,225,000
18A	River Trail (south) Segment 7	Fanita Pkwy to Carlton Hills Blvd	Class I Path	0.4	8	\$2,725,000
18B	River Trail / Fanita Pkwy	Carlton Oaks Dr / Camino Del Verde to Mission Gorge Rd	Class I Path	0.5	8	\$2,687,500
18C	Park Center Dr	Riverwalk Dr to Park Center Dr	Class III Bike Route	0.1	8	\$3,198
18D	Graves Ave	Prospect Ave to Pepper Dr	Class II Bike Lane	0.4	8	\$25,456
22A	Mission Gorge Rd	Riverview Pkwy to Magnolia Ave	Class II Buffered Bike Lane	0.7	7	\$402,327
22B	Cottonwood Ave	Palm Glen Dr to Claudia Ave / Park Center Dr extension	Class III Bike Route	0.3	7	\$8,346
22C	Mast Blvd	Los Ranchitos Rd to River Trail	Class I Path	0.7	7	\$3,762,500
22D	River Trail (south) Segment 5	West Hills Pkwy to 0.4 Miles east of West Hills Pkwy	Class I Path	0.4	7	\$2,610,000
22E	Bike/ped bridge crossing San Diego River	Town Center to Town Center Park	Class I Path	0.2	7	\$3,010,000
27	River Trail (south) Segment 6	W City Boundary to Fanita Pkwy	Class I Path	0.2	6	\$1,075,000
28	Mesa Rd / Rancho Fanita Dr Connector	Rancho Fanita Dr to Mesa Rd	Class I Path	0.2	5	\$1,075,000
29	Carlton Hills Blvd	Lake Canyon Rd to Swanton Dr	Class II Bike Lane	0.2	4	\$12,728

Rank	Segment	Extent	Facility	Miles	Score	Cost Estimate
30	Cuyamaca St	Princess Joann Rd to Chaparral Dr	Class II Bike Lane	0.3	3	\$19,092
31A	Fanita Pkwy (west side)	Mast Blvd to Existing Class I (500' to the South)	Class I Path	0.1	2	\$537,500
31B	Prospect Ave	Magnolia Ave to Graves Ave	Class II Bike Lane	0.1	2	\$6,364
Total				10.7	N/A	\$40,371,318



Bicycle “Sharrows”

Table 5.3 Bicycle Projects Excluded from Prioritization

Segment	Extent	Facility	Miles
To be Constructed as part of Future Road			
Riverview Pkwy (SE side)	Town Center Pkwy to Cottonwood Ave	Multi-Use Path	0.4
Riverview Pkwy	Town Center Pkwy to Magnolia Ave	Class II Bike Lane	0.4
Park Center Dr	Park Center Dr to Magnolia Ave	Class II Bike Lane	0.3
Cottonwood Ave	Palm Glen Dr to Claudia Ave / Park Center Dr extension	Class III Bike Route	0.4
To be Constructed with Adjacent Property Development			
Cuyamaca St	River Park Dr to Town Center Pkwy	Multi-Use Path	0.3
Cuyamaca St	River Park Dr to Town Center Pkwy	Class II Bike Lane	0.3
Magnolia Ave	Riverview Pkwy to Mission Gorge Rd	Class II Bike Lane	0.4
Magnolia Ave (west side)	Riverview Pkwy to Mission Gorge Rd	Multi-Use Path	0.4
Mission Gorge Rd (north side)	Olive Ln to Cuyamaca St	Multi-Use Path	0.2
Mission Gorge Rd (south side)	Olive Ln to Cuyamaca St	Multi-Use Path	0.3
Cuyamaca St (west side)	Town Center Pkwy to Mission Gorge Rd	Multi-Use Path	0.1
Mission Gorge Rd (north side)	Riverview Pkwy to Cottonwood Ave	Multi-Use Path	0.2
Mission Gorge Rd (south side)	Cuyamaca St to Riverview Pkwy	Multi-Use Path	0.2
Mission Gorge Rd (south side)	Carlton Hills Blvd to Olive Ln	Multi-Use Path	0.4
River Trail (south)	Cuyamaca St to Town Center Pkwy	Multi-Use Path	0.1
Riverview Pkwy (NW side)	Town Center Pkwy to Magnolia Ave	Class I Bike Path	0.5
Las Calinas Channel	Riverview Pkwy to Existing M-U Trail	Multi-Use Path	0.05
Las Calinas Channel	Existing M-U Trail to Mission Gorge Rd	Multi-Use Path	0.1
Total			5.1

5.3 Priority Project Sheets

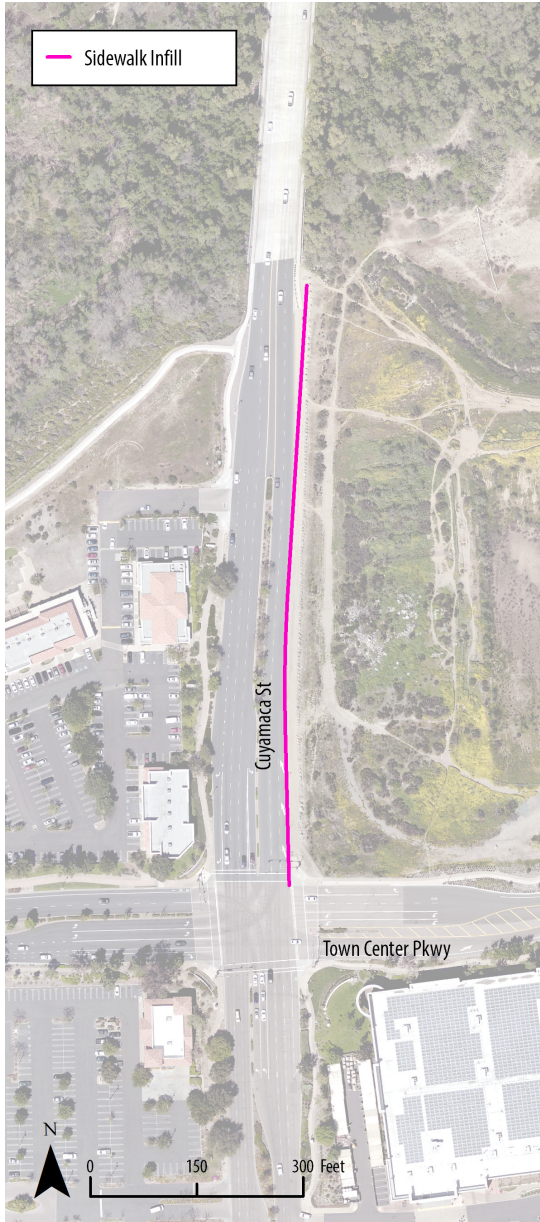
Project sheets were developed for the top-ranking sidewalk infill and bicycle projects. Sidewalk infill sheets consist of a map of the area depicting the project extent, recommended features and cost estimates. Bicycle project sheets display the project extent, a conceptual graphic, and narrative describing the project area and implementation considerations, and cost estimates. Within the bicycle project sheets, two hybrid beacon project sheets were developed as they ranked amongst the top 10 projects. The cost estimate assumptions for each priority project are further detailed in **Appendix F**.



An aerial photograph of a city street intersection, overlaid with a green tint. The scene shows a multi-lane road with a landscaped median featuring trees and shrubs. On the left side of the road, there is a gas station with several pumps and a small building. Further back, there are various commercial buildings, including a large one with a sign that appears to say 'McDonald's'. A person is visible walking on a sidewalk near a sign. In the foreground, a white van with 'STAND' written on its side is parked. The overall image has a green color scheme.

Top Ranked Sidewalk Infill Sheets

INFILL SIDEWALK NO.1 CUYAMACA STREET



A multi-use path is planned along this segment and may be implemented in place or in addition to the sidewalk.

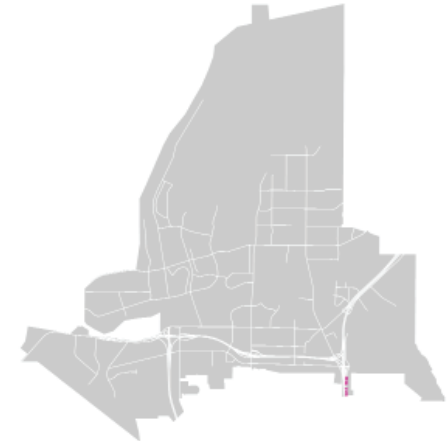


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Cuyamaca Street (east side)	847	-	-	-	-
Cost Estimate Total					\$862,240

INFILL SIDEWALK NO.2 GRAVES AVENUE



Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

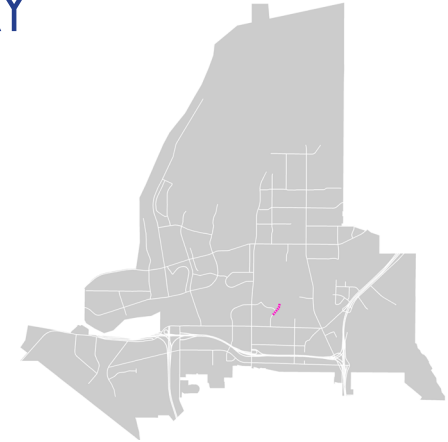


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Graves Avenue (east side)	1,373	-	-	-	2
Cost Estimate Total					\$316,974

INFILL SIDEWALK NO.3 RIVERVIEW PARKWAY

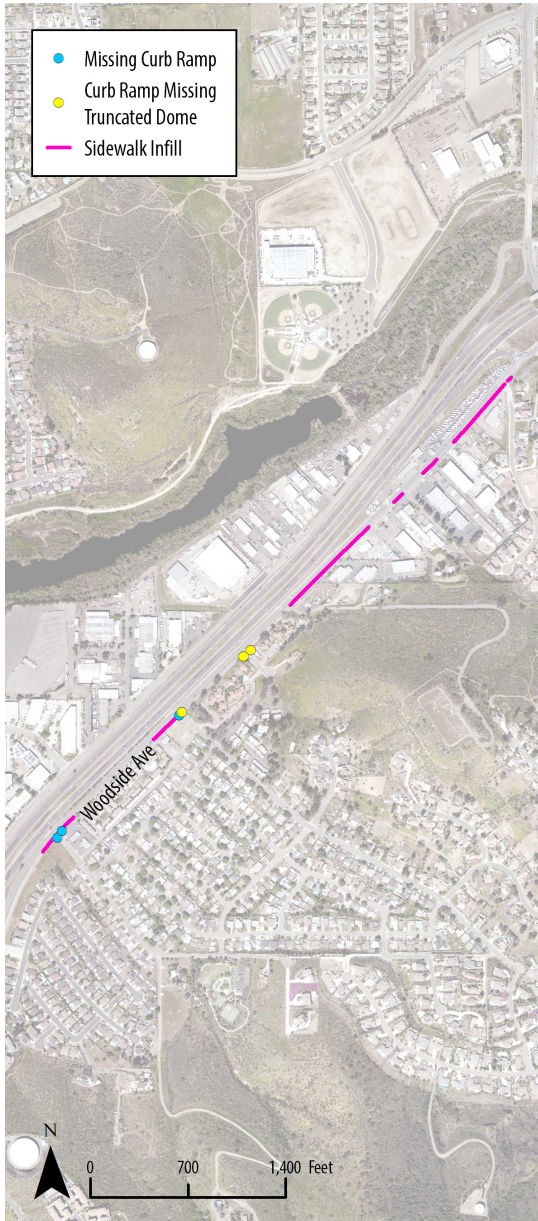


A multi-use path is planned along this segment and may be implemented in place or in addition to the sidewalk. Note, the following table and graphics summarize the missing sidewalk locations within the respective grouping. Actual project extents will be dependent on available financial resources.

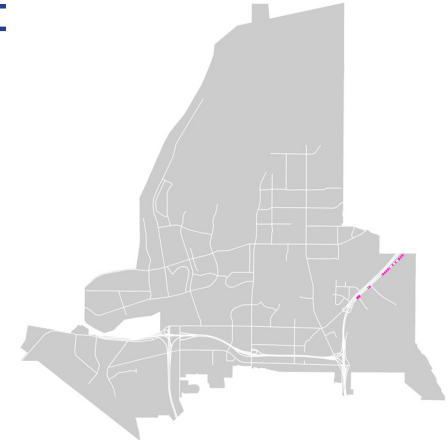


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Riverview Pkwy (east side) north of Town Center Pkwy	572	-	-	-	-
Riverview Pkwy (SE side) south of Town Center Pkwy	-	388	-	-	-
Cost Estimate Total					\$977,273

INFILL SIDEWALK NO.4 WOODSIDE AVENUE

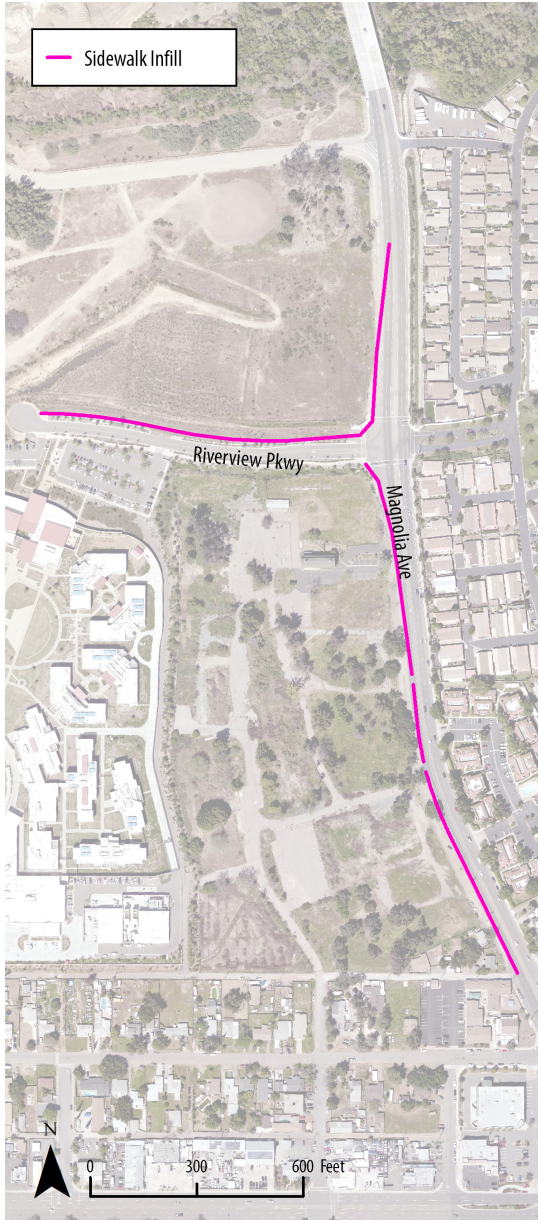


Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

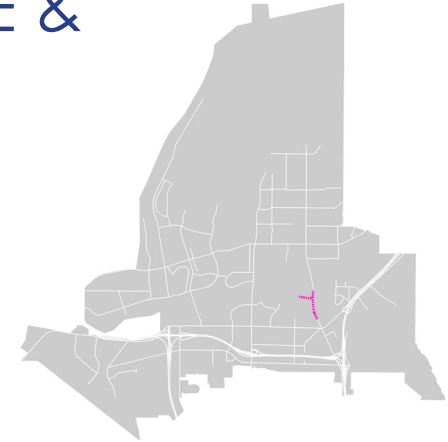


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Woodside Avenue (east side) north of Northcote Rd	559	-	3	-	3
Woodside Avenue (east side) south of Northcote Rd	2,178	-	8	3	-
Cost Estimate Total				\$743,147	

INFILL SIDEWALK NO.5 MAGNOLIA AVENUE & RIVERVIEW PARKWAY

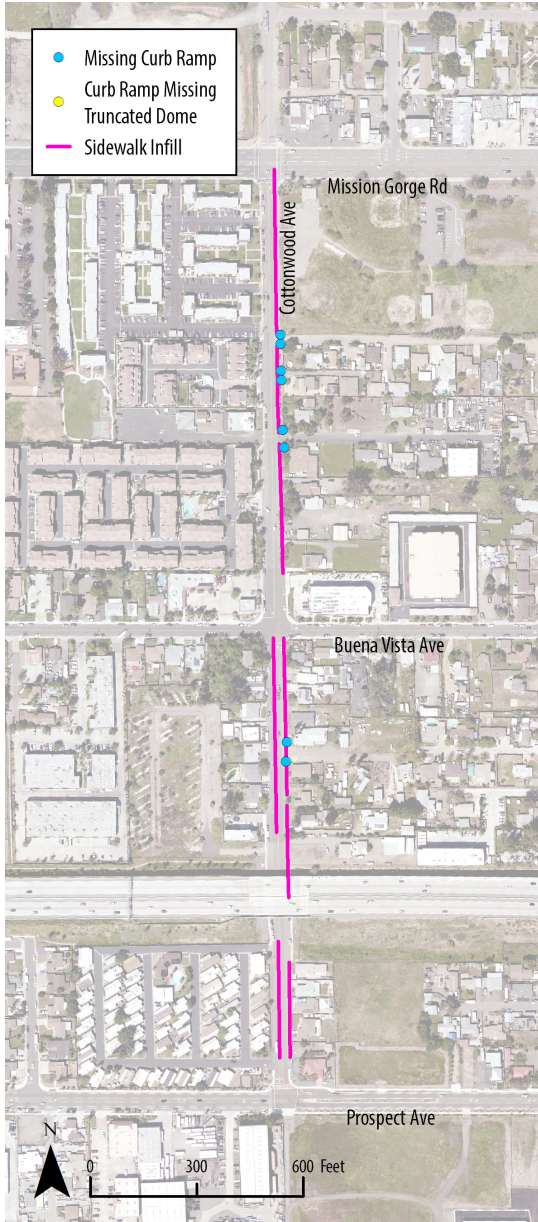


Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

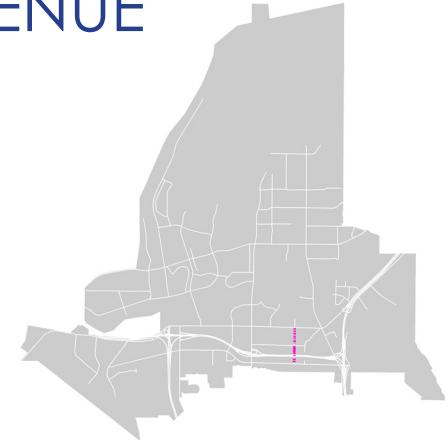


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Magnolia Avenue (west side)	2,032	-	1	-	-
Riverview Pkwy (north side)	-	987	-	-	-
Cost Estimate Total					\$599,837

INFILL SIDEWALK NO.6 COTTONWOOD AVENUE



Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

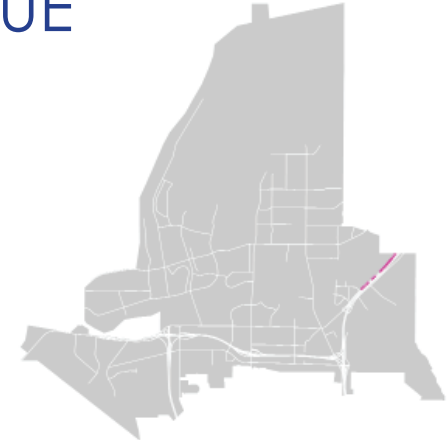


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Cottonwood Avenue (both sides) south of Fwy-52	597	-	4	-	-
Cottonwood Avenue (both sides) north of Fwy-52	2,328	-	20	8	-
Cost Estimate Total					\$929,688

INFILL SIDEWALK NO.7 N WOODSIDE AVENUE

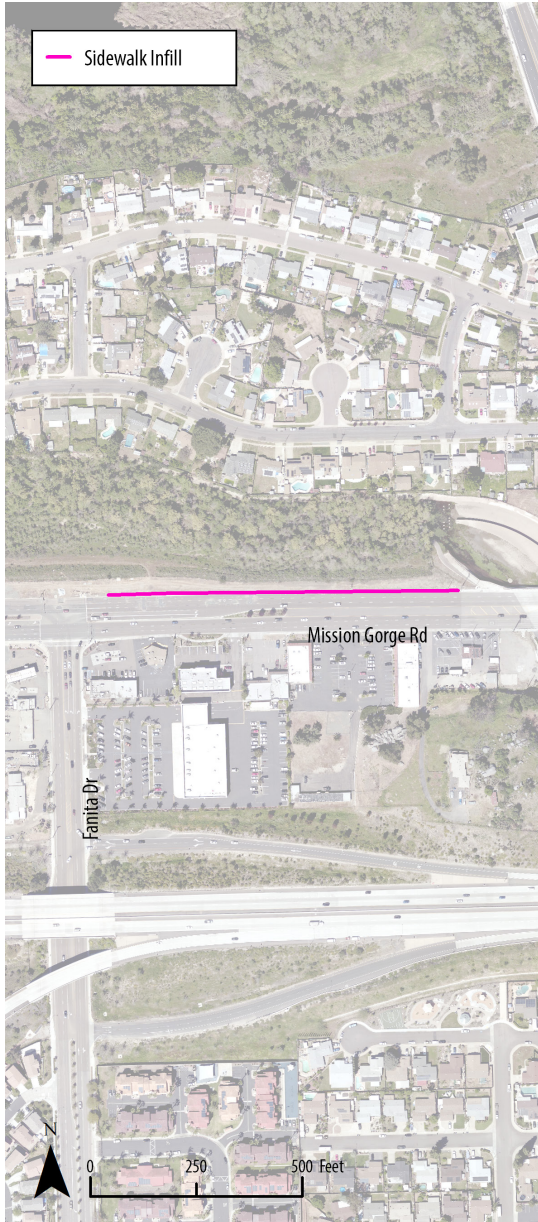


Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

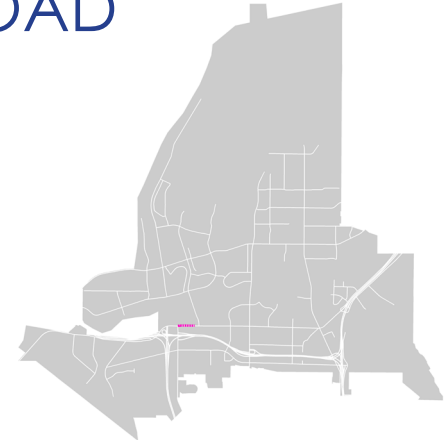


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
N Woodside Avenue (north side)	3,230	-	13	-	-
Cost Estimate Total					\$840,735

INFILL SIDEWALK NO.8 MISSION GORGE ROAD

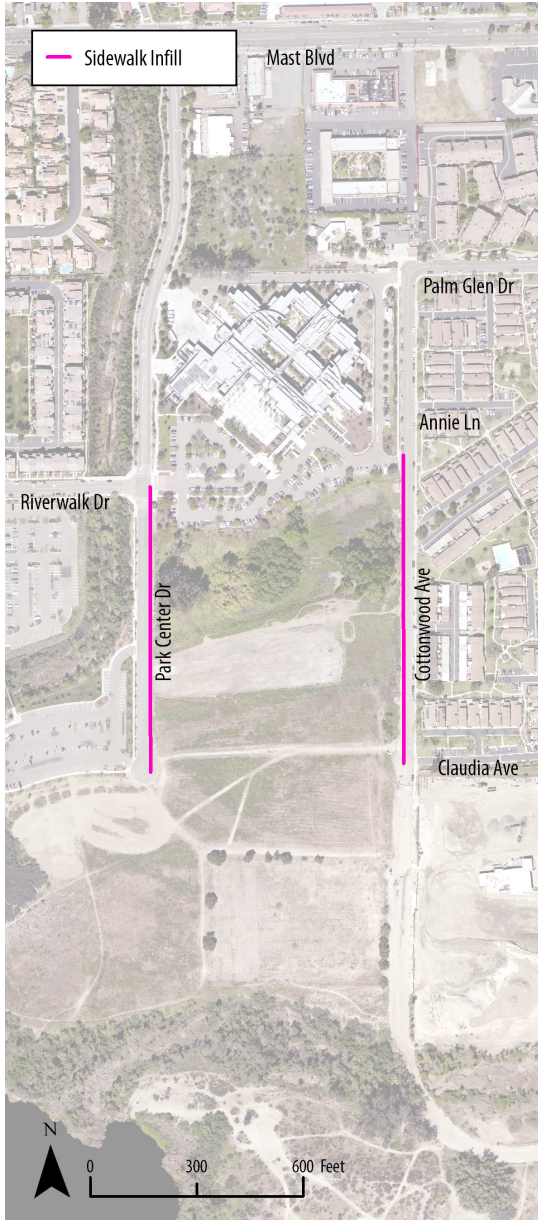


A Class I path is planned along this segment and may be implemented in place or in addition to the sidewalk.



Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Mission Gorge Road (north side)	-	1,211	-	-	-
Cost Estimate Total					\$1,232,789

INFILL SIDEWALK NO.9 PARK CENTER DRIVE & COTTONWOOD AVENUE

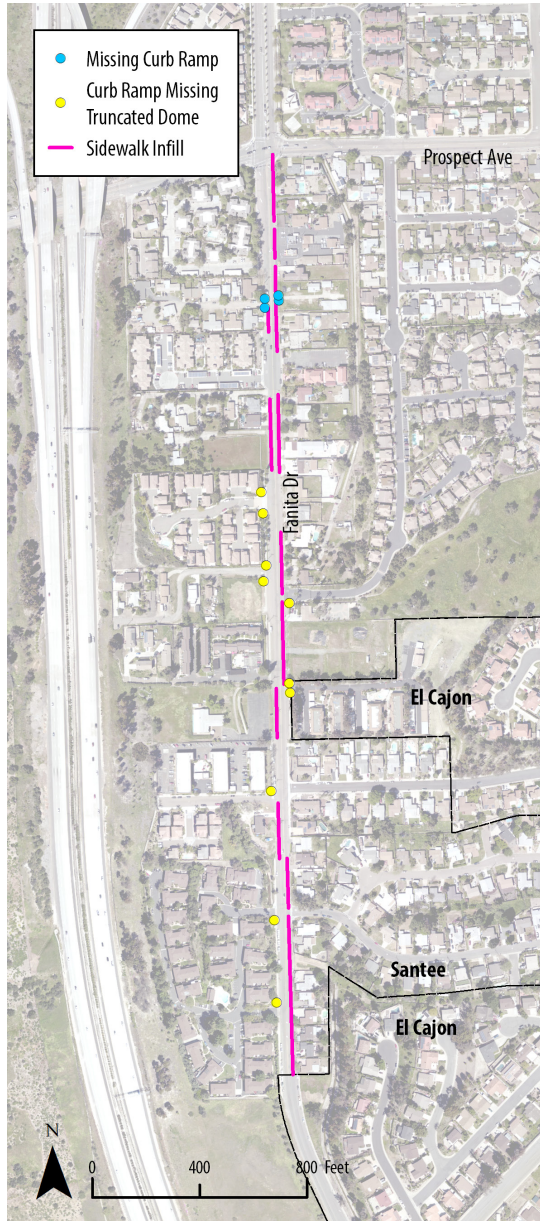


Note, the following table and graphics summarize the missing sidewalk locations within the respective grouping. Actual project extents will be dependent on available financial resources.

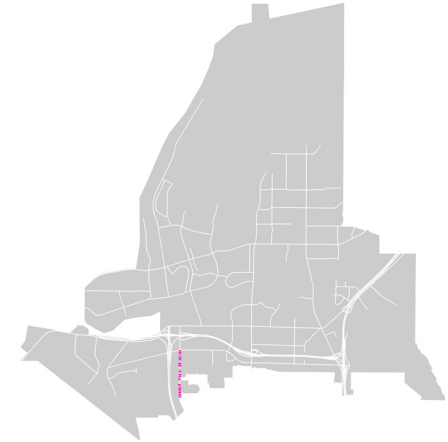


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Park Center Drive (east side)	804	-	-	-	-
Cottonwood Avenue (west side)	870	-	-	-	-
Cost Estimate Total					\$384,183

INFILL SIDEWALK NO.10 FANITA DRIVE



Note, the following table and graphics summarize the missing sidewalk and curb ramp locations within the respective grouping. Actual project extents will be dependent on available financial resources.

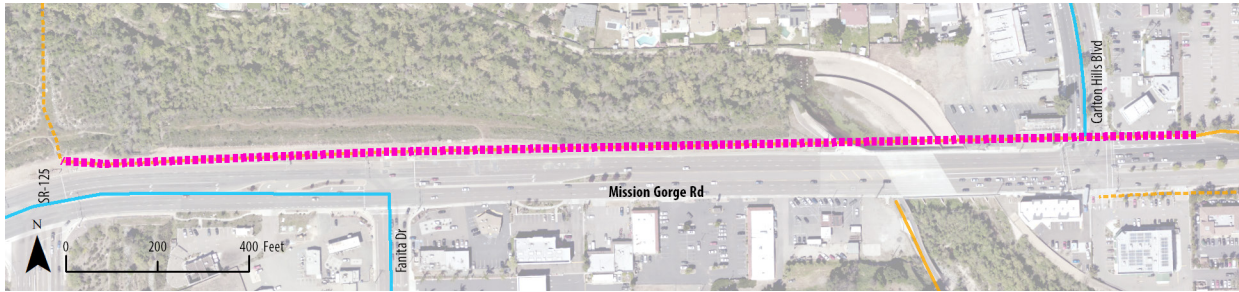


Segment	Linear Feet Sidewalk + Curb & Gutter	Linear Feet Sidewalk (No Curb & Gutter)	Driveway Quantity	New Curb Ramp Quantity	Curb ramp Retrofit Quantity
Fanita Drive (east side)	2,276	-	11	3	3
Fanita Drive (west side)	953	-	27	3	8
Cost Estimate Total				\$1,098,141	

An aerial photograph of a city street intersection, overlaid with a semi-transparent green filter. The scene includes a gas station with several pumps, a McDonald's restaurant, and various commercial buildings. A person is riding a bicycle across the intersection. The text "Top Ranked Bicycle Project Sheets" is prominently displayed in the center in a bold, blue font.

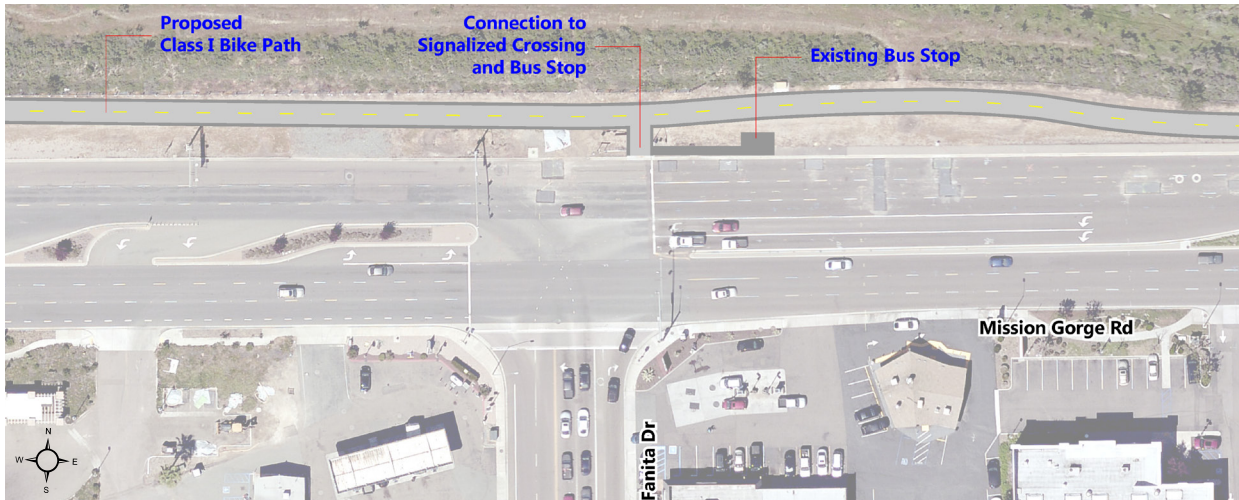
Top Ranked Bicycle Project Sheets

MISSION GORGE ROAD CLASS I BIKE PATH



A Class I path allowing for pedestrian and bicycle travel is planned along the north side of Mission Gorge Road, connecting to a future San Diego River Trail segment on the west end, and an existing path and bike lanes to the east at Carlton Hills Boulevard. Where feasible, the path should be 10' in width with an additional 2' clear buffer on either side. The path can generally be implemented within the existing cleared land just north of Mission Gorge Road. The narrow bridge crossing of Forrester Creek poses a constraint. An interim improvement may be necessary, such as permitting bicyclists to ride along the north side of the bridge sidewalk, or posting signage instructing bicyclists to dismount along the bridge portion. Final design should facilitate seamless access to and from the westbound Mission Gorge Road bus stops, while ensuring the pathway and users do not interfere with bus boarding and alighting operations.

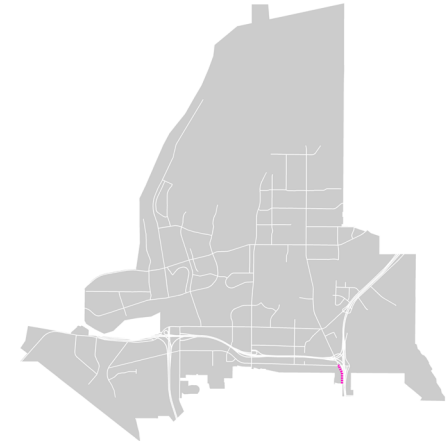
PROPOSED PROJECT



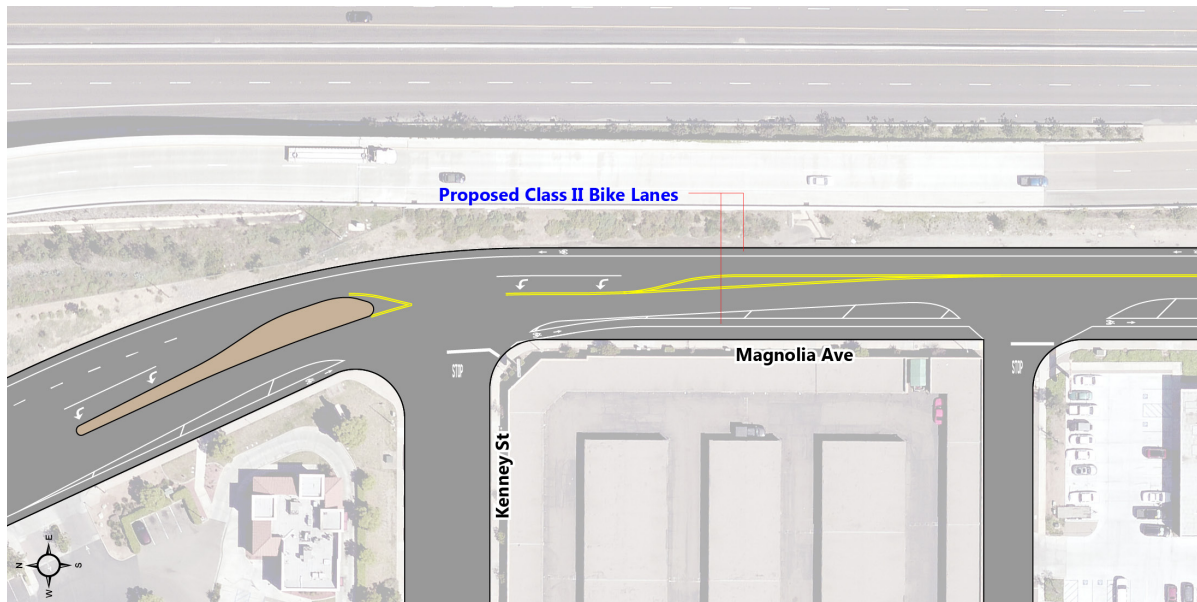
Extents	North of Mission Gorge Road, between SR-125 and Carlton Hills Boulevard
Mileage	0.5
Features	Class I Bike Path
Rank / Score	#1 / 19 points
Cost Estimate	\$2,687,500

MAGNOLIA AVENUE CLASS II BIKE LANES

Class II bike lanes are planned along Magnolia Avenue from Prospect Avenue to the City's southern boundary. The bike lanes will connect to existing bike lanes on Prospect Avenue and facilitate travel between the City of Santee, County of San Diego and City of El Cajon further to the south. Bike lanes are planned along Magnolia Avenue south of the Santee boundary as part of the County of San Diego's currently adopted Bicycle Transportation Plan. Within Santee, implementation can occur through roadway restriping, taking advantage of the existing wide shoulder along the west side of the roadway.



PROPOSED PROJECT



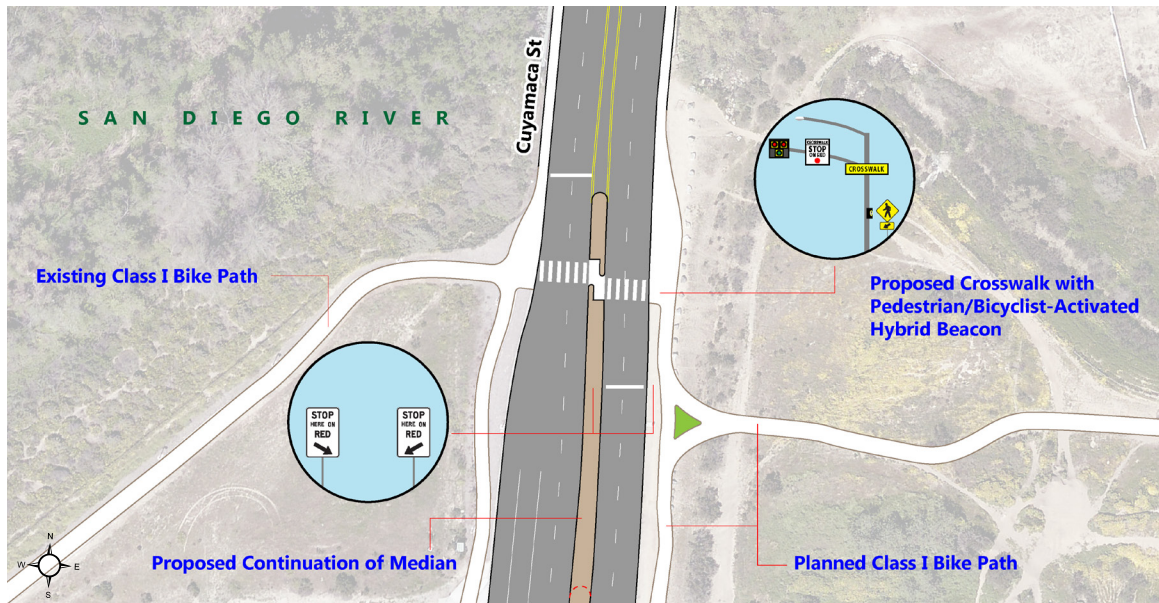
Extents	Prospect Avenue to South City Boundary
Mileage	0.3
Features	Class II Bike Lanes
Rank / Score	#2 / 16 points
Cost Estimate	\$95,762

SAN DIEGO RIVER TRAIL AT CUYAMACA STREET

A Pedestrian Hybrid Beacon – also known as a HAWK – is recommended at the southern San Diego River Trail across Cuyamaca Street. An existing trail segment is located to the west of Cuyamaca Street, while additional segments are planned to the east and to the south parallel to Cuyamaca Street. The Pedestrian Hybrid Beacon will facilitate safe pedestrian and bicycle crossings at this mid-block location and should be implemented in conjunction with the future trail segments. The recommendation includes a marked crosswalk, curb ramps, and advance stop bars across Cuyamaca Street. Additional signage directing where drivers are to stop and pedestrian warning signage should accompany the new traffic control. The existing median south of the crossing is proposed to be extended northwards to create a pedestrian refuge to further improve pedestrian safety and serve as a traffic calming measure. Note, pending potential development of the parcel to the southeast, the crossing may be implemented as a fully signalized intersection with pedestrian signal heads and marked crosswalks.



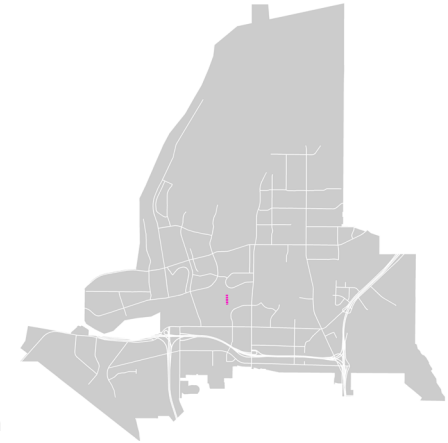
PROPOSED PROJECT



Location	San Diego River Trailhead (south) at Cuyamaca Street
Features	<ul style="list-style-type: none"> Pedestrian Hybrid Beacon Marked Crosswalk Advanced Stop Bars Accessible Curb Ramps Signage Extended Median/ Pedestrian Refuge
Rank / Score	#2 / 16 points
Cost Estimate	\$486,347

CLASS I SAN DIEGO RIVER CROSSING

An existing unpaved pathway currently extends across the San Diego River, just behind the Walmart shopping center. This recommendation intends to utilize the existing pathway and bridge spanning the San Diego River to construct a more permanent surface multi-use path. The path will connect to existing paved pathways running along the north and south sides of the river. In addition to new recreational opportunities, the path will also connect the residential neighborhood north of the river to the Town Center shopping areas to the south. Path materials should be consistent with those running along the river and present throughout the Town Center. The sensitive habitats present in this area will require further consideration at the project design and construction phases.



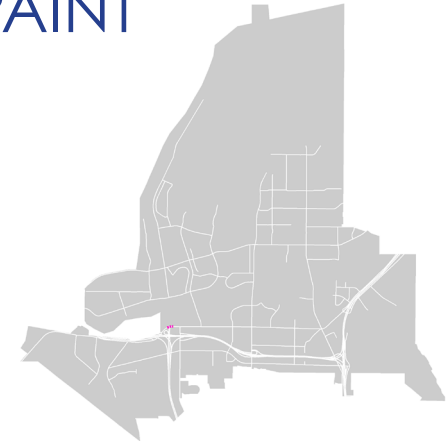
PROPOSED PROJECT



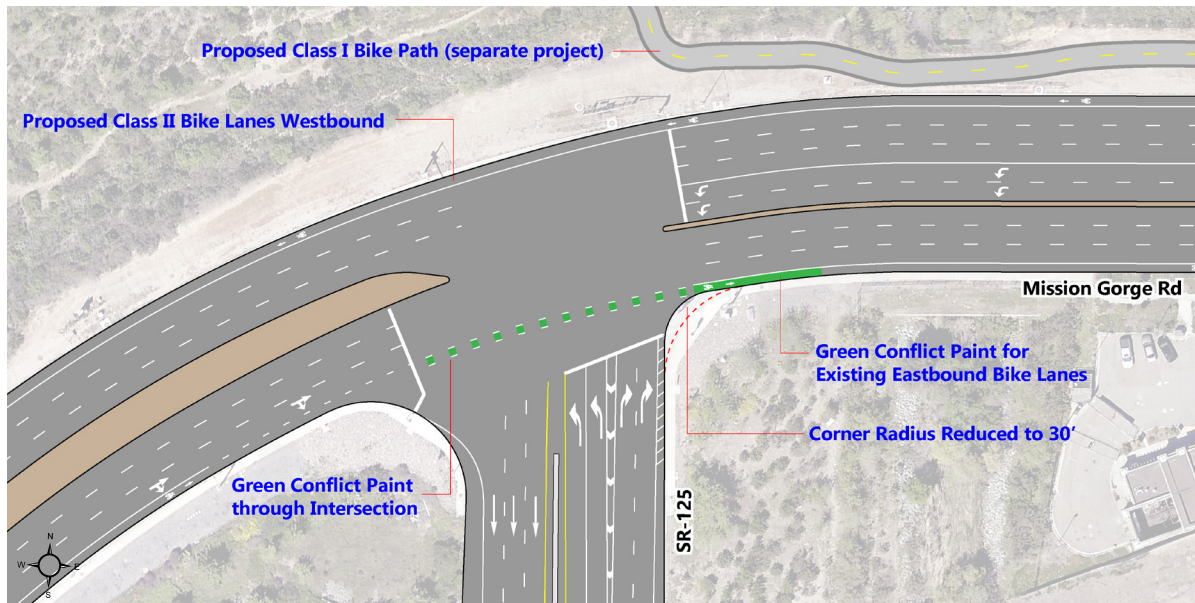
Extents	North side of Walmart to River Rock Court
Mileage	0.1
Features	Class I Bike Path
Rank / Score	#4 / 13 points
Cost Estimate	\$806,250

MISSION GORGE RD & SR-125 CONFLICT PAINT

Green conflict paint is proposed on eastbound Mission Gorge Road through the intersection and within the intersection departure leg. The paint will serve to remind drivers to anticipate people on bikes while turning right from SR-125 onto eastbound Mission Gorge Road and help guide bicyclists through the approximately 160' wide intersection. The traditional Bicycle Lane symbol and directional arrow are recommended to also be placed within the departure leg green paint to further raise awareness of cyclist and reinforce the intended direction of the facility. Additional consideration should be made to reduce the southeast intersection corner radius – either through paint or physical modifications – to encourage slower vehicle speeds while turning. If feasible, the green conflict paint should be implemented concurrently with the westbound bicycle lane on Mission Gorge Road, between the Fanita Drive and the westbound SR-52 on-ramp. Implementation will require coordination and approval from Caltrans.



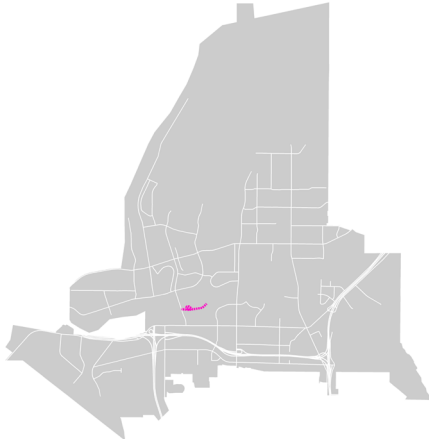
PROPOSED PROJECT



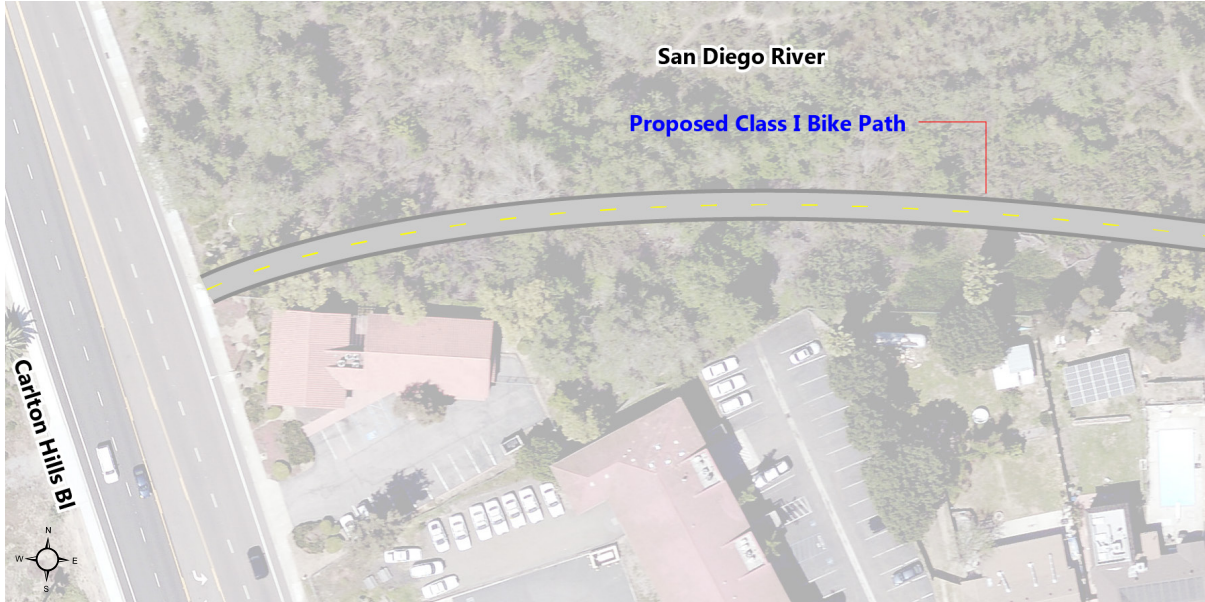
Location	Mission Gorge Road & SR-125 Intersection
Features	Green Conflict Paint
Rank	#4 / 13 points
Cost Estimate	\$44,647

SAN DIEGO RIVER TRAIL (SOUTH) CLASS I

This project consists of completing the San Diego River Trail segment along the south side of the river, spanning from Carlton Hills Boulevard eastwards to the existing paved pathway just northeast of Willowgrove Place, near the Walmart. The exact alignment will require further study to avoid sensitive habitats, however, the trailhead at Carlton Hills Boulevard should be located as far south as possible and continue eastwards, likely following the existing unpaved path that begins approximately north of Willowgrove Court and then terminating at the existing paved pathway just north of the Walmart shopping center. Path materials should be consistent with those of the existing paved pathway. Trailhead signage should also be installed along Carlton Hills Boulevard to make community members aware of the facility.



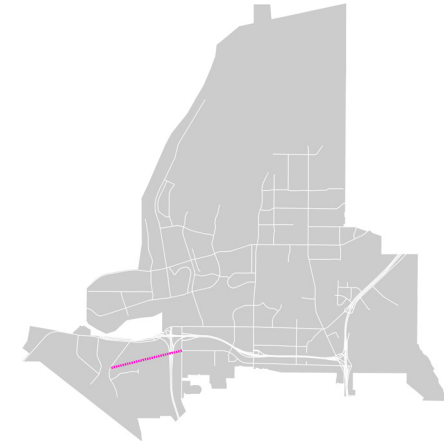
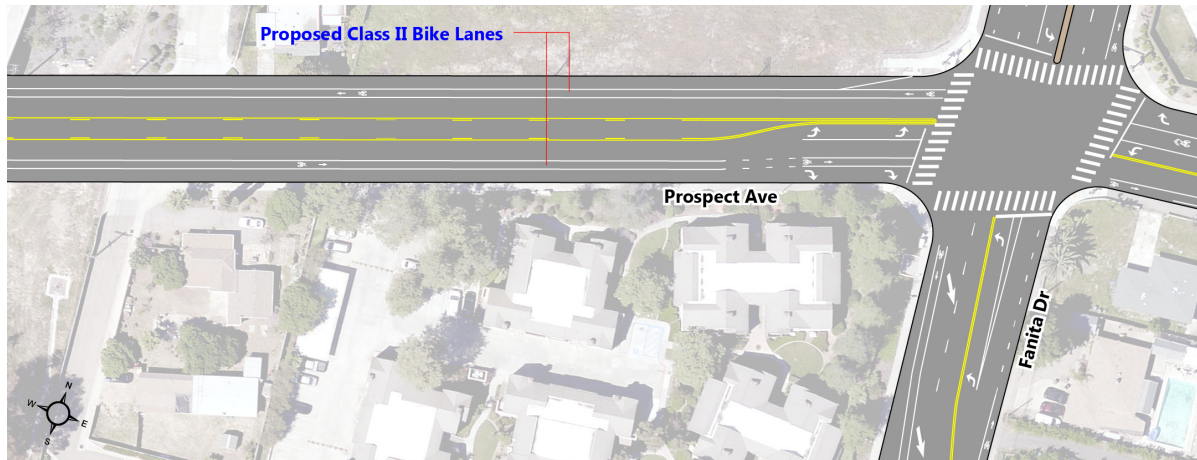
PROPOSED PROJECT



Extents	Carlton Hills Boulevard to Willowgrove Place
Mileage	0.5
Features	Class I Bike Path
Rank / Score	#6 / 12 points
Cost Estimate	\$2,687,500

PROSPECT AVENUE CLASS II BIKE LANES

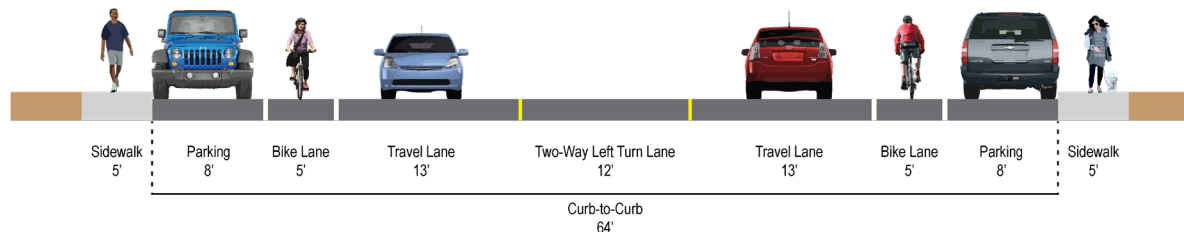
PROPOSED PROJECT



Class II bike lanes are planned along Prospect Avenue between Mesa road and Fanita Drive. At the west end of this segment, the bike lanes will connect to existing bike lanes along Mesa Road that extend north of Prospect Avenue. The facility will also provide connections to Chet F Harritt Elementary School and Big Rock Park at the western terminus. This planned project extents end at the intersection with Fanita Drive, where existing bike lanes continue to the east along Prospect Avenue as well as to the north and south along Fanita Drive. Full implementation of this facility will require property redevelopment so the road can be built to a 64' curb-to-curb width, consistent with the standard two-lane Collector with Two-Way Left Turn Lane classification as specified in the adopted Santee Mobility Element.

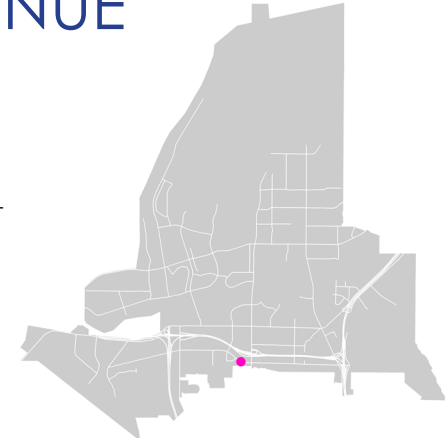
Extents	Mesa Road to Fanita Drive
Mileage	1.0
Features	Class II Bike Lanes
Rank / Score	#6 / 12 points
Cost Estimate	\$63,640

PROPOSED CROSS-SECTION

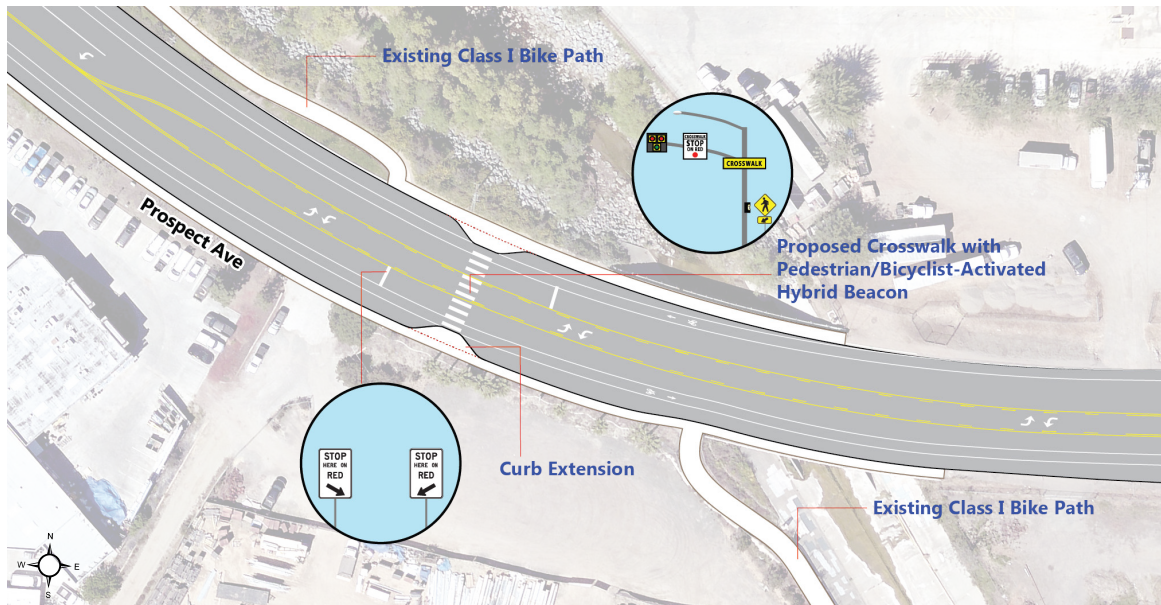


FORRESTER CREEK TRAIL AT PROSPECT AVENUE

A Pedestrian Hybrid Beacon - also known as a HAWK - is recommended across Prospect Avenue at the Forrester Creek Trail. Existing trail segments are located to the north and south of the proposed crossing location. The Hybrid Beacon will facilitate safe pedestrian and bicycle crossings at this mid-block location, better connecting the two trail segments. The recommendation includes a hybrid beacon, high visibility crosswalk, advanced stop bars, curb ramps and curb extensions. Additional signage directing where drivers are to stop and pedestrian warning signage should accompany the newly marked crossing. Further design may adjust the project location to ensure adequate site distance is provided for approaching vehicles.



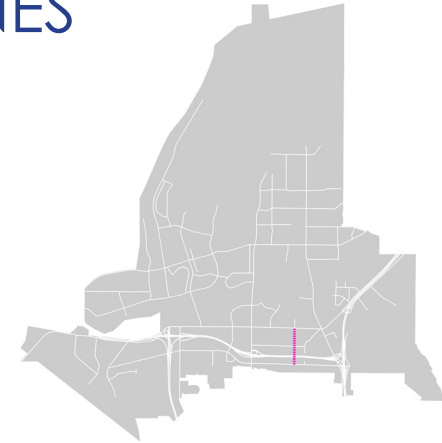
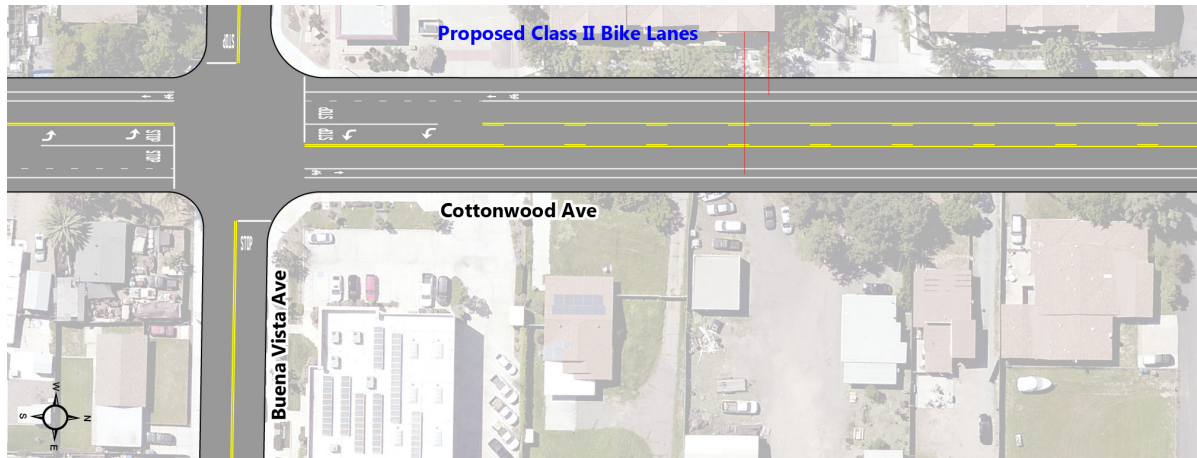
PROPOSED PROJECT



Location	Forrester Creek Trail at Prospect Avenue
Features	<ul style="list-style-type: none"> Pedestrian Hybrid Beacon Marked Crosswalk Advanced Stop Bars Accessible Curb Ramps Signage Curb Extensions
Rank / Score	#6 / 12 points
Cost Estimate	\$585,000

COTTONWOOD AVENUE CLASS II BIKE LANES

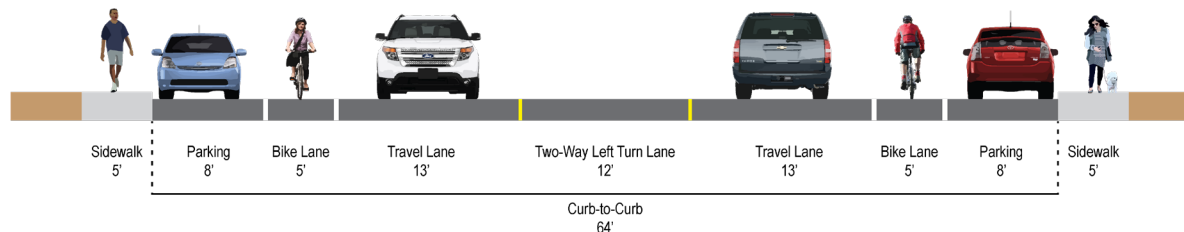
PROPOSED PROJECT



Class II bike lanes are planned along Cottonwood Avenue between Mission Gorge Road and Prospect Avenue. This facility will connect to the planned multi-use path and buffered bike lanes along Mission Gorge Road to the north and the existing bike lanes along Prospect Avenue to the south. Implementation of the bike lanes will require property redevelopment so the road can be built to a 64' curb-to-curb width, consistent with the standard two-lane Collector with Two-Way Left Turn Lane classification as specified in the adopted Santee Mobility Element. The Mobility Element also designates the project extents as a Multi-Modal Corridor, further emphasizing the importance of this planned bicycle connection.

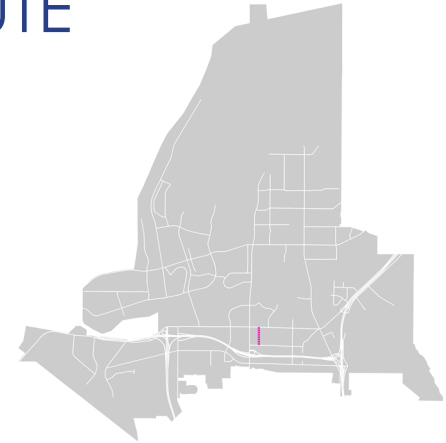
Extents	Mission Gorge Road to Prospect Avenue
Mileage	0.5
Features	Class II Bike Lanes
Rank / Score	#9 / 11 points
Cost Estimate	\$31,820

PROPOSED CROSS-SECTION

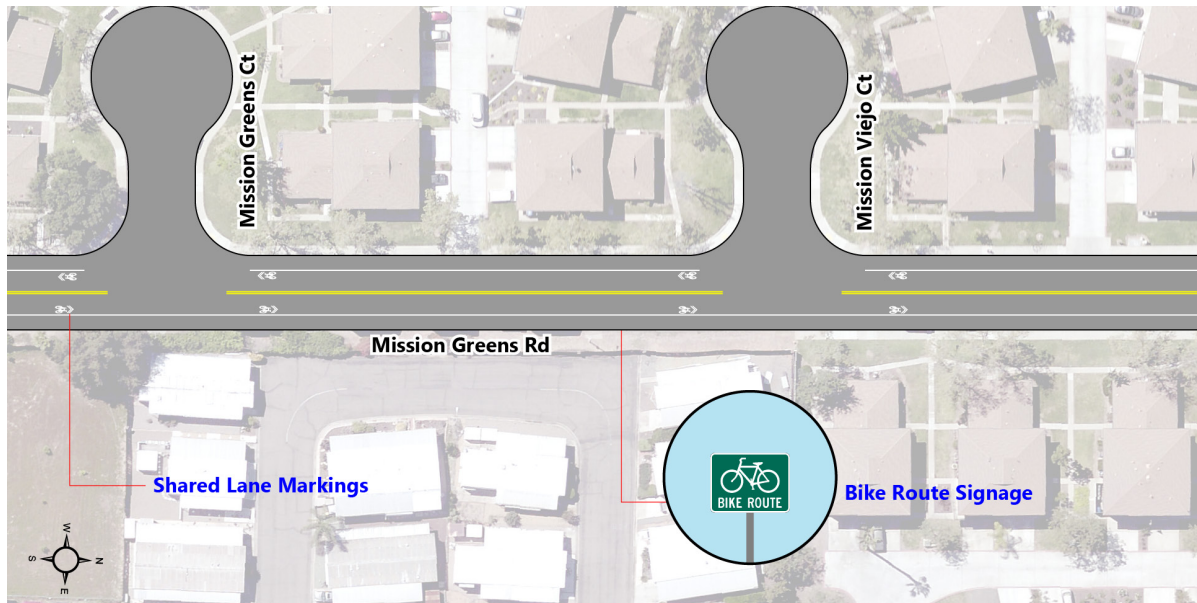


MISSION GREENS ROAD CLASS III BIKE ROUTE

Mission Greens Road is planned to be designated as a Class III bike route between Mission Gorge Road and Buena Vista Avenue. The 25 MPH posted speed limit, low vehicular volumes, and surrounding residential land uses make the bike route designation appropriate for the corridor, which will emphasize Mission Greens Road as a brief parallel alternative to Cuyamaca Street. At the northern terminus with Mission Gorge Road, the roadway connects to the Santee Town Center and Green Line Trolley via a signalized intersection. In addition to the designation of bike route, the placement of in-road shared lane markings (sharrow) and vertical signage should be implemented to remind drivers to anticipate cyclists and encourage use of the corridor.



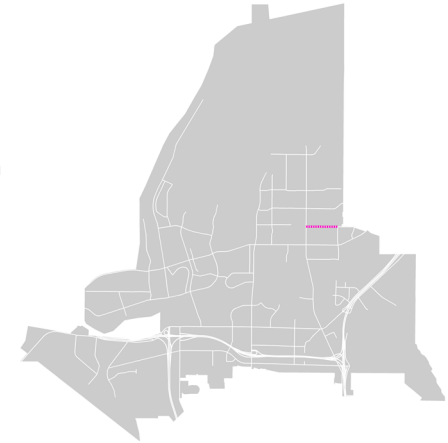
PROPOSED PROJECT



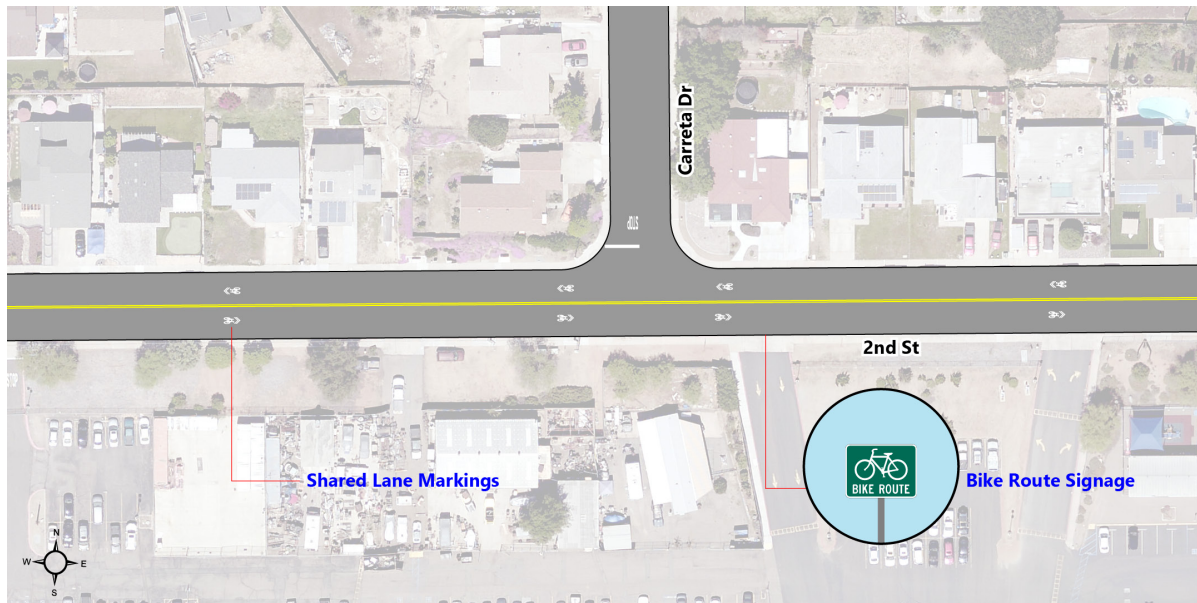
Extents	Mission Gorge Road to Buena Vista Avenue
Mileage	0.2
Features	Class II Bike Lanes
Rank / Score	#9 / 11 points
Cost Estimate	\$3,822

2ND STREET CLASS III BIKE ROUTE

2nd Street is planned to be designated as a Class III bike route between Magnolia Avenue and Jeremy Street. 2nd Street is a school route due to the presence of Santa High School at the western terminus. In addition to the designation of bike route, the placement of in-road shared lane markings (sharrow) and vertical signage should be implemented to remind drivers to anticipate cyclists. The sharrows are also intended to inform bicyclists where to position themselves within the roadway, to help avoid conflicts with opening doors from parked cars.



PROPOSED PROJECT



Extents	Magnolia Avenue to Jeremy Street
Mileage	0.4
Features	Class II Bike Lanes
Rank / Score	#9 / 11 points
Cost Estimate	\$5,382

5.4 Facility Maintenance

Maintaining transportation facilities is important for all modes, and especially for active transportation users. Potholes, debris, and overgrown landscaping have a greater influence on people walking and riding bikes than they do on drivers. Well-maintained facilities increase safety, preserve the longevity of facilities, and help to encourage use.

The City of Santee Public Services Division of the Community Services Department is responsible for maintaining the City's streets, curbs and gutters, and sidewalks. In-road bicycle facilities are maintained through regular street sweeping, the filling of potholes as they are reported, and scheduled roadway resurfacing and restriping. Bike paths and multi-use paths are swept and cleared of landscaping

on regular schedules and as issues are reported. Sidewalks are cleared of debris and maintained similarly, with additional maintenance occurring as issues such as sidewalk raising or cracks are reported.

Maintenance issues can be reported via the Community Services Department hotline at 619-258-4100 ext. 304, or via the free "mySantee" mobile app.

5.5 Active Transportation Performance Monitoring

The active transportation monitoring program is intended to fortify City staff and community member understanding of active travel patterns and related responses to investments in cycling and walking infrastructure. Performance monitoring serves to supplement the programs described in Chapter 4 and help track some of the performance indicators identified under the project goals and policies. Over the past decades, the transportation planning field has suffered from a lack of data and analysis methods related to walking and cycling, and is currently experiencing a renaissance in investment through the complete street movement and concerns about over-reliance on automobile travel.

Implementing and maintaining an active transportation monitoring program will provide the City of Santee with the on-going data needed to measure and track trends and changes in active travel. The data can also be utilized to pursue grant funding sources by giving City staff the necessary information to estimate potential impacts of implementing future active transportation related projects. In addition to identifying performance measures and data types to collect over time, this monitoring program also provides a sample of potential data applications.

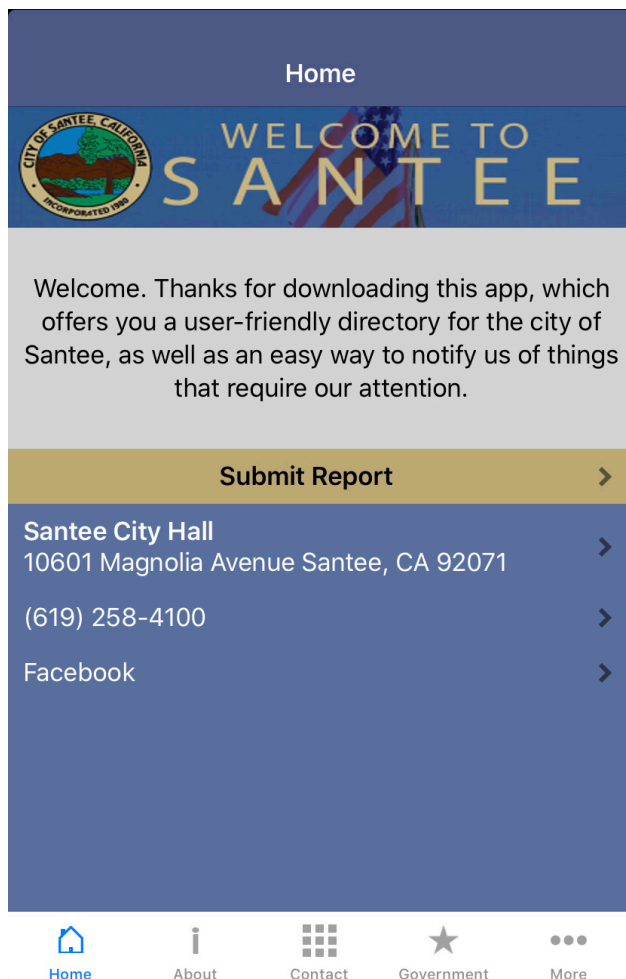


Table 5.4 Data Types and Collection Methods

Performance Measure	Data Type	Source
Bicycle and Pedestrian Volumes	AM/PM Peak Period Counts	City of Santee
Bicycle and Pedestrian Collisions	Total collisions by mode and collisions by location	State of CA SWITRS
Bicycle and Pedestrian Infrastructure Improvements	Track miles of bicycle facilities, linear feet of sidewalk infill, and number of crosswalks and curb ramps implemented	City of Santee
Enforcement Citations	Number of pedestrian and bicycle citations	Sheriff's Department
Bicycle Racks Inventory	Track the number and location of new bicycle racks and supporting features installed	City of Santee
Safe Routes to School Infrastructure Projects Inventory	Track the location and type of Safe Routes to School improvements implemented	City of Santee

Performance Measures

Several performance measures are proposed to be tracked over time in the City of Santee, either yearly or every other year. These measures are intended to support the plan’s goal and policy performance indicators and help track progress towards achieving Climate Action Plan goals. The performance measures are focused on documenting overall levels of activity associated with walking and cycling, as well as safety, network improvements, and potential air quality and health benefits.

Table 5.4 identifies recommended performance measures and data variables to track over time, as funding and resources permit.

Data Collection

Each of the performance measures and data types to track over time are further described within this section.

Pedestrian and Bicycle Counts

Data collection was part of the development of this Active Santee Plan to evaluate existing levels of activity. Thirty locations within the City of Santee were identified as pedestrian and bicycle count locations. Data was collected during the AM and PM peak commute periods.

For continued monitoring of active transportation levels in Santee, counts are recommended to be conducted on a regular basis, depending on funding. Data should be collected at the same locations as the original bicycle and pedestrian count locations to observe changes over time. Additional locations may be included or substituted as deemed necessary.

Counts are recommended to be conducted on Tuesdays, Wednesdays, or Thursdays during the morning and evening peak period (7:00AM to 9:00AM and 4:00PM to 6:00PM). Counts should be conducted during the school calendar year to capture the student commutes.

Counts may also be performed during the weekend peak period, Saturday mornings from 10:00AM – 12:00PM, to capture recreational pedestrian and cycling activity within Santee. Weekend counts are recommended for locations more likely to draw recreational activity.

Bicycle and Pedestrian Collisions

For continued monitoring of safety trends over time, it is recommended to review the locations at which bicycle and pedestrian collisions have occurred, on a bi-annual basis. Ideally, the City would establish a database to track changes over time and create a GIS layer displaying collision locations and types. This review may identify potential problematic locations or behaviors that can be addressed through infrastructure improvements or educational campaigns.

Bicycle and Pedestrian Infrastructure Improvements

It is recommended that the City review completed bicycle and pedestrian improvement projects on an annual basis. Ideally, the City would establish a database to track improvements over time, as well as, maintain a GIS database.

Additionally, the Climate Action Plan (CAP) contains a Measure to “Implement [the] Bicycle Master Plan to Expand Bike Routes Around the City.” This Measure includes the Action item of implementing the Bicycle Master Plan in its entirety. This Plan supersedes the Bicycle Master Plan, none-the-less in order to establish whether the City is fulfilling its CAP Action items an inventory of pedestrian and bicycle infrastructure improvements should be maintained.



Enforcement Action Citations

When the City of Santee works in collaboration with the Sheriff's department to conduct enforcement actions, such as stop sign or crosswalk enforcements, it is recommended that the City catalog the citations and maintain a database regarding the location, the number of citations issued and the code infraction. Additionally, it is recommended that the City track the number of warnings issued and the cause for the warning, if available. This effort may be supplemented through conversations with the Sheriff's department to learn about common observations or complaints they may be aware of.

Showers, Lockers and Bicycle Racks Inventory

It is recommended that the City of Santee track and inventory the number of non-residential developments which provide showers, lockers and/or bicycle racks.

In addition to inventorying bicycle racks at non-residential developments, the City is recommended to inventory the location of bicycle racks at major destinations such as parks, schools, civic locations and commercial centers. It is further recommended that the City maintain this information in a GIS file.

It is also recommended that the City count parked bicycles at the bicycle racks throughout the City either as funding becomes available or through partnership with a non-profit organization or academic institution.

Safe Routes to School Infrastructure Projects Inventory

It is recommended that the City continue to maintain an inventory of infrastructure projects from the Safe Routes to School Plan which are located on City Right-of-Way.

It is also recommended that the City work with the schools to receive data from the Student Travel Tallies as well as Parent Surveys regarding school commutes.

Analysis and Reporting

There are several important applications for the bicycle and pedestrian data collected through the City's on-going monitoring program. This section outlines the potential applications for pedestrian and bicycle count data that will support and enhance the City's understanding of cycling and walking travel patterns and associated benefits, as well as applications for the other data collected.

Cycling/Walking Trends

Implementing a citywide cycling and pedestrian monitoring program where systematic bicycle and pedestrian counts are regularly collected will enhance the City's understanding of a number of important travel behavior aspects, including:

- What is the estimated average daily number of bicycle and walk trips in Santee?
- Is the number of cyclists and pedestrians growing or shrinking over time?
- How do cycling and walking levels vary by facility type and location across the City?
- How does cycling/walking vary by time of day, day of week, and season of year?
- What percent of cyclists are riding on the sidewalk?

This rich data can support the production of an annual "State of Active Travel in Santee" report that serves to inform policy makers, planners, advocates, and community members about how much and where cycling and walking is occurring in the City.

Linking Cycling and Walking Trends to Investments

Once City staff is tracking cycling and walking trends by time and location, there is an opportunity to link specific investments to changes in cycling and walking patterns in a manner that improves their understanding of how community members respond to new or enhanced cycling and pedestrian facilities and programs. This kind of before-after assessment is critical to supporting long range planning and directing investments toward active travel.

Cycling and Pedestrian Safety Assessments

A more comprehensive understanding of cycling and walking demands allows for a more rigorous safety assessment of bicycle-vehicle and pedestrian-vehicle crash risk. The City of Santee will be able to develop bicycle and pedestrian crash risk measures that account for the level of cyclist and pedestrian exposure, such as the rate of pedestrian and cyclist collisions.

Coupled with this, review of the collision data will allow the City to identify problematic locations, assess infrastructure types and seek feasible solutions.

Assessment of Network Quality and Completeness

By tracking infrastructure improvements in a comprehensive fashion, not only will the City be able to evaluate ridership regarding facility type as mentioned above, the City will also be able to assess the completeness of its pedestrian and bicycle networks.

By further evaluating the network in relationship to bicycle trip attractors, as recommended, the City will be able to gain insight into how well the network is serving the needs of the network users, in other words, is the new infrastructure allowing for greater access to locations where people on bicycles would like to go.



Educational Program Effectiveness

By tracking the number of citations generated in an enforcement action, the City will be able to gain insight into whether the educational programs that the City offers are effective. Likewise, based on the citations and warnings generated the City will gain insight into what other information should be included in the educational programs, and/or whether a safety campaign should target specific types of behavior.

Safe Routes to School Infrastructure Projects Inventory

The school commute Student Travel Tallies and Parent Surveys previously described on page 126 can be analyzed to gauge progress towards meeting the Climate Action Plan Measure 7.6 Reduce Vehicle Trip To/From School.

This data offers an annual snapshot in time as to which modes students use to get to school and whether they are carpooling. The carpooling information will further inform progress towards CAP Measure 7.6 Action Item, which encourages the promotion of electronic applications to foster carpooling.

5.6 Potential Funding Sources

Funding is a common impediment to implementing capital projects. The City of Santee, like other public agencies, are tasked with allocating scarce General Fund budgets towards a variety of services, projects, and maintenance efforts. A variety of competitive grant sources are available to help fund additional desired projects and programs that may not be covered through traditional revenue streams.

Table 5.5 outlines relevant grant programs for the City of Santee to consider pursuing. A brief description of each program, the eligible projects, and funding cycles is provided, along with a link to the program webpage for additional program information.



Table 5.5 Funding Sources

Funding Program	Relevant Eligible Projects	Notes
<p>Active Transportation Program (ATP) – Caltrans Caltrans' ATP was created to encourage increased use of active modes of transportation, increase the safety and mobility of non-motorized users, help achieve greenhouse gas reduction goals, enhance public health, provide a broad spectrum of projects to benefit many types of active transportation users while ensuring disadvantages communities share in the benefits.</p>	<ul style="list-style-type: none"> Capital Projects: environmental, design, right-of-way, and construction phases of a capital project. Plans: Community wide bicycle, pedestrian, safe routes to school, or active transportation plan. Non-Infrastructure (NI) Projects: Education, Encouragement, and Enforcement activities 	<ul style="list-style-type: none"> Cycle 5 Call for Projects is anticipated to be announced in Spring 2020 Minimum request for infrastructure projects is \$250,000, however, the minimum does not apply to Safe Routes to Schools projects or Recreational Trail projects
<p>Local Streets and Roads Program (LSRP) – Caltrans Funding dedication for cities and counties to perform basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads systems.</p>	<ul style="list-style-type: none"> Safety Projects Complete Streets Components Traffic Control Devices Maintenance and Rehabilitation 	<ul style="list-style-type: none"> Available annually To be eligible, cities must submit an adopted proposed project list to the California Transportation Commission.
<p>Regional Trails Program (RTP) – California Parks Department Administered by the California Department of Parks and Recreation. Provides funds for recreational trails and trails-related projects</p>	<ul style="list-style-type: none"> Development and Rehabilitation of Trails, Trailside and Trailhead Facilities Construction of new trails Acquisition of easements and simple title to property for Recreational Trails 	<ul style="list-style-type: none"> Annual funding cycle with applications typically due in early February
<p>Highway Safety Improvement Program (HSIP) – Caltrans Serves to reduce traffic fatalities and serious injuries on all public roads.</p>	<ul style="list-style-type: none"> HSIP funds are eligible for work on any public road or publicly owned bicycle or pedestrian pathway or trail that improves the safety for its users 	<ul style="list-style-type: none"> Cycle 10 call for projects around April 2020 Cycle 11 call for projects around April 2022
<p>Public Access Program – California Wildlife Conservation Board Program funding is focused on creating opportunities for meaningful wildlife-oriented recreation experience.</p>	<ul style="list-style-type: none"> Planning, preliminary design, environmental review, permitting, final design and construction costs for facilities or the enhancement of existing facilities that will provide for public access to wildlife-oriented activities 	<ul style="list-style-type: none"> Generally available annually with a call for projects open in the spring
<p>Active Transportation Grant Program (ATGP) – SANDAG The goal of the ATGP is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices and build connectivity.</p>	<ul style="list-style-type: none"> Capital Projects Non-Capital projects: Planning, Education, Encouragement, and Awareness, & Bike Parking 	<ul style="list-style-type: none"> On a three-year funding cycle Last funded project cycle was 2018

Funding Program	Relevant Eligible Projects	Notes
<p>Smart Growth Incentive Program (SGIP) – SANDAG The SGIP provides funding for transportation-related infrastructure improvements that within Smart Growth Opportunity Areas as shown in SANDAG’s Smart Growth Concept Map. The goal is to fund public infrastructure projects and planning activities that facilitate or support compact, mixed-use, transit oriented development and transportation choices.</p>	<ul style="list-style-type: none"> • Climate Action Planning • Capital & Planning projects 	<ul style="list-style-type: none"> • Initially on a four-year cycle, recently on a three-year cycle. • Last funded project cycle was 2018 • The Smart Growth Concept Map designates an existing Town Center at the Santee Town Center (area to the northeast of Mission Gorge Road and Cuyamaca Street) • Additional potential Smart Growth designations are identified that would require land use and/or transit service changes





City of Santee

Active Santee Plan

January 2021