Los Altos Complete Streets Daster Plan: An Active Transportation Framework

Prepared for:



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ACKNOWLEDGMENTS

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Note: The City of Los Altos was initiating an update to the Housing Element of the General Plan at the time this plan was adopted. Additional housing may necessitate modifications to the proposed improvements in this plan to accommodate increased demand on city streets, sidewalks, and bikeways.

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ABBREVIATIONS

ADA: Americans with Disabilities Act of 1990

CSMP: Complete Streets Master Plan

HAWK: High-Intensity Activated Crosswalk Beacon

PROWAG: Public Right-of-Way Accessibility Guidelines

RRFB: Rectangular Rapid Flashing Beacon

SRTS: Safe Routes to School

GLOSSARY OF TERMS

Accessibility: In general, accessibility refers to destinations, infrastructure, or other important areas being easily reachable for all members of a community. It is critical transportation networks are accessible so that anyone, regardless of age, income, or physical ability is able to get where they need to go.

Active Transportation: Active transportation is any self-propelled, human-powered mode of transportation, such as walking or bicycling.¹

ADA and PROWAG: ADA Accessibility refers to whether or not something is accessible based on the parameters set by the Americans with Disabilities Act. It is commonly

¹Center for Disease Control: <u>www.cdc.gov/</u> <u>healthyplaces/transportation/promote_strategy.</u> <u>htm#:~:text=Active%20transportation%20is%20any%20</u> <u>self.conditions%20in%20the%20United%20States.</u> referred to when assessing and developing transportation infrastructure. PROWAG refers to the Public Right-of-Way Accessibility Guidelines, which are under development, but not yet adopted. The guidelines set by PROWAG are more comprehensive, suitable for outdoor infrastructure, and ensure better access for more people.

Advance Yield Lines: Advance Yield Lines are triangular pavement markings placed in advance of a marked pedestrian crossing to alert motorists to the upcoming crossing. From the advance position, motorist visibility of the crosswalk is also improved. Advance yields have been shown to increase yield rates. Stop lanes are placed in advance of a stop sign and alert motorists of where they should stop. For an example image, see page 112.

Bike Boxes/Green Bike Lane Approach:

Bike Boxes designate an area for bicyclists to queue in front of automobiles at signalized intersections. These designs increase visibility and reduce vehicle incursion into crosswalks. For an example image, see **page 110**.

Bike Lane: Dedicated lane for bicycle travel adjacent to traffic. Caltrans classifies Bike Lanes as Class II bikeways. For an example image, see **page 93**.

Bike Route: Signed bike routes on slow speed residential streets where bicyclists share the roadway with motor vehicles. Caltrans classifies Bike Routes as Class III bikeways. For an example image, see **page 93**. **Buffered Bike Lane:** Dedicated lane for bicycle travel separated from traffic by a painted buffer. Caltrans classifies Buffered Bike Lanes as Class II bikeways. For an example image, see **page 93**.

Complete Streets: Complete Streets are streets for everyone. They are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street. Complete Streets make it easy to cross the street, walk to shops, jobs, and schools, bicycle to work, and move actively with assistive devices. They allow buses to run on time and make it safe for people to walk or move actively to and from bus stops and train stations.²

Curb Radius: Curb radius refers to the curved line of a street corner. Shorter radii shorten the crossing distance for pedestrians and require vehicles to turn more slowly.

Curb Ramp: Curb Ramps transition pedestrians from the sidewalk to the street. Accessible` curb ramps must be designed to specific specifications to ensure they are usable for all. For an example image, see "Curb Ramp" on **page 112**.

Delineators: In the CSMP, Delineators refer to vertical posts that separate bike or pedestrian infrastructure from motor vehicle traffic. These are most commonly made of durable, flexible plastics that are mounted to the ground with a small base. Flexible delineators are designed to be a visual cue, and can be driven over in the event of an emergency.

"Double Threat" of Collision: Double Threat refers to the conflicts pedestrians can face when trying to cross roadways with multiple lanes of traffic. If a driver in one lane yields to a pedestrian, the pedestrian may attempt to cross the road despite the potential threat of traffic in the next lane. Additionally, the yielding vehicle may also obstruct the site line, making the pedestrian less visible to other drivers. Curb Extension: Curb extensions, or bulb outs, are extensions of the sidewalk and curb at the corners of intersections. They shorten the roadway crossing distance and make pedestrians more visible to motorists. They can also help calm traffic by narrowing the travel lane, and provide additional space for plantings and street furnishings. For an example image, see page 108.

Leading Pedestrian Intervals: Pedestrianonly crossing signals that occur slightly before the green signal for parallel lanes of vehicle traffic, allowing pedestrians to get a headstart in the crosswalk and making them more visible to turning motorists. For an example image, see **page 116**.

Modify Skewed Intersection: This spot treatment can be used at some intersections where roadways meet at angles that create challenges for active transportation users. In these instances, roads can sometimes be realigned to meet closer to 90 degrees, which

²This definition comes from the National Complete Streets Coalition. For more information, see: <u>smartgrowthamerica.org/program/national-complete-</u> <u>streets-coalition/</u>

can improve predictability, shorten crosswalk distances, and increase safety. For an example image, see **page 109**.

Neighborhood Traffic Circle: Neighborhood traffic circles are raised, circular islands placed in the middle of local roadway intersections that control turning movements and help reduce vehicle speeds by forcing slow turns in a predictable manner. For an example image, see **page 109**.

Pedestrian and Bicycle Networks: The success of all modes of transportation or reliant on an established network to connect users to destinations. Pedestrian and Bicycle Networks consist of infrastructure elements such as sidewalks and bike lanes to provide connectivity for active transportation users.

Pedestrian Hybrid Beacon/HAWK: Useractivated traffic control devices that cycle through a flashing yellow, steady yellow, and then steady red light to stop vehicles and allow pedestrians to cross a road safely. For an example image, see **page 115**.

Pedestrian Refuge Island: Typically areas at the mid-point of a marked crossing that prove a safe waiting space for pedestrians. They minimize pedestrian exposure by shortening crossing distances and allowing pedestrians to cross one direction of traffic at a time. For an example image, see **page 113**.

Planning: When mentioned in the CSMP, planning is referring to the field of urban or practice of urban planning, which focuses on transportation, development, land use

and other important topics that impact the physical environments of communities.

Raised Crossing: Elevated crossings, often at the same height as the curb, which slow vehicles down (similar to a speed bump), while reducing the grade change for pedestrians and helping improve pedestrian visibility. For an example image, see **page 113**.

Rectangular Rapid Flashing Beacon (RRFB):

User-activated pedestrian signals that use flashing yellow lights to alert motorists to the presence of pedestrians in the crosswalk. They can be installed in mid-block locations or at intersections where a full traffic signal is not warranted. In residential areas, alternative flashing signs may be considered that illuminate the perimeter of the sign.

Ridership: Ridership refers to the number of people using a particular mode of transportation, usually buses or bicycles.

Roundabout: Intersections where drivers travel around a central island in a counterclockwise rotation. Outside traffic yields to traffic already inside the roundabout, which does not stop moving before exiting. For an example image, see **page 109**.

Safe Routes to School: Safe Routes to School is a nationwide program aimed to make it safer for students to walk and bike to school and encourage more walking and biking where safety is not a barrier.³

³National Center for Safe Routes to School: <u>www.</u> <u>saferoutesinfo.org/</u> Separated Bikeway: Paths shared by people walking and biking that are completely separated from motor vehicle traffic. Caltrans classifies Shared Use Paths or Bike Paths as Class I bikeways. For an example image, see page 93.

Shared Street (Woonerf): Streets where all roadway users have a right to use the space without prioritization of motor vehicles. Shared Streets often feature narrow lanes, chicanes, and other traffic calming treatments to keep vehicle speeds low. Shared Streets are sometimes referred to as woonerfs, due to their Dutch origin. For an example image, see **page 111**.

Shared Use Path: Paths shared by people walking and biking that are completely separated from motor vehicle traffic. Caltrans classifies Shared Use Paths or Bike Paths as Class I bikeways. For an example image, see page 93.

Slip Lane: Slip Lanes are traffic lanes where two lanes merge together with one lane yielding and no stop controls. Slip lanes are commonly used on highway on-ramps and at right-turns of intersections with high traffic volume. Slip lanes can increase the vehicle throughput of an intersection, but can also create challenges for pedestrians, as vehicles are not required to stop and drivers may be focused on merging. The term "pork chops island" is often used to describe the refuge areas between the slip lane and other lanes of traffic. For an example image, see **page 111**. **Stop Bar:** Lines on the pavement indicating where vehicles should stop at stop signs or traffic lights.

Streetscape: The Streetscape is the physical environment of the street, including the roadway, sidewalk, and other components of the right-of-way. In cities and villages, the streetscape is generally the area between buildings on either side of the road. Streetscapes are vital public spaces used for transportation, utilities, and more.

Traffic Calming: Traffic Calming is a term used for streetscape elements designed to reduce vehicle speeds and unpredictability. Traffic calming elements range from vertical elements, like speed cushions, to horizontal elements, like curb extensions. For an example image, see the Visual Legend on **page 110**.

Walking School Bus: A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school to as structured as a route with meeting points, a timetable and a regularly rotated schedule of trained volunteers.⁴

Warrant Analysis: A warrant is a condition that an intersection must meet to justify a signal installation according to the California Manual on Uniform Traffic Control Devices (CA MUTCD). The warrant analysis is a study of traffic conditions to determine if the intersection meets criteria for a traffic signal, beacon, or stop sign.

⁴Starting a Walking School Bus: <u>http://www.</u> walkingschoolbus.org/

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Vision Statement: Our community-focused and sustainable streets empower people of all ages and abilities to access destinations comfortably, safely, and conveniently, regardless of their mode of transportation.

What is the purpose of the plan?

The Los Altos Complete Streets Master Plan : An Active Transportation Framework (CSMP) establishes a community-supported long term vision for improving walking and bicycling in Los Altos. Building from the City's previous Bicycle and Pedestrian Master Plans, this CSMP provides a strategy to develop a comprehensive bicycling and walking network to provide access to transit, schools, and downtown alongside support facilities like bicycle parking and pedestrian amenities. These network improvements are paired with education, encouragement, enforcement, and evaluation programs. This document also identifies a plan to implement these projects and programs through prioritization and phasing to ensure implementation is manageable and fundable. Future updates will be based on staff capacity and resources. This document serves as a companion to the City's adopted Collector Traffic Calming Plan and Neighborhood Traffic Management Plan.

The Collector Traffic Calming Plan is a framework for implementation of traffic calming devices on collector roadways in to reduce vehicle speeding. The Neighborhood Traffic Management Plan was produced as a guideline for neighborhoods with traffic problems to request further analysis, and to design and construct engineering solutions if necessary. These documents provide guidance for the City to create streets that are safer and more comfortable for all to enjoy.

What is in the plan?

Chapter 1:

Introduction outlines the CSMP purpose. It includes the vision statement and goals to realize that vision. The chapter also includes performance measures so that progress toward reaching each goal can be evaluated on a regular basis and prompt adjustments to strategies in the plan.

Chapter 2:

Existing Conditions provides a brief inventory of present-day walking and bicycling conditions in Los Altos, including maps of existing bikeways, development patterns that encourage or discourage active modes of transportation, employment clusters and commute patterns. The chapter also examines the geographic distribution and factors leading to motor vehicle collisions with people walking and bicycling.

Chapter 3:

Community Engagement chronicles how stakeholders like the CSMP Task Force and Complete Streets Commission along with hundreds of community members participated in shaping the recommendations in the plan.

Chapter 4:

Safe Routes to School Plan includes updated maps for students to use to plan their walking or rolling routes to school. This chapter also includes school improvement maps that identify short-term and long-term roadway and street crossing improvements to improve safety near schools.

Chapter 5:

Recommended Improvements describes and maps the types of infrastructure projects the City should pursue to meet the needs identified through data analysis and community input.

Chapter 6:

Programs explains the existing and proposed non-infrastructure programs that the City should lead or support. Programs were selected to encourage more people to walk and bicycle, educate them on how to do it safely, and evaluate how the City is meeting its goals.

Chapter 7:

Implementation presents a strategy to evaluate and prioritize projects based on the goals established in **Chapter 1**, with input from the community, CSMP Task Force, and Complete Streets Commission.

Appendix A:

Community Survey Results provides the full results of the Community Survey.

Appendix B:

Bikeway Network Recommendations Table provides a table of bikeway recommendations categorized as high, medium, and low priority.

Appendix C:

Pedestrian Network Recommendations Table provides a table of pedestrian network (walkway) recommendations categorized as high, medium, and low priority.

Appendix D:

Spot Improvement Recommendations Table provides a table of spot improvement (intersection crossing) recommendations categorized as high, medium, and low priority.

Appendix E:

Concept Plan Line Drawings presents schematic plans for potential projects identified by City Council, Complete Streets Commission, and the City's repaving plan. Concept plans were reviewed at three community meetings and published on the project website. Features of each concept plan that were largely supported by the community were included as specific recommendations in **Chapter 5** and **Appendices B, C, and D**.

Vision Statement

The vision statement expresses what walking, bicycling, and driving will be like in Los Altos in the future if the City successfully implements this Plan. The vision statement is:

Our community-focused and sustainable streets empower people of all ages and abilities to access destinations comfortably, safely, and conveniently, regardless of their mode of transportation.

Goals

Goal statements serve as metrics and guideposts to evaluate the City's progress towards achieving the vision laid out in the CSMP. The proposed goal statements include feasible time-bound aspirations for implementing comfortable, safe, and community-based Complete Streets in Los Altos.

Category	Goal Statements	
Activity	Increase the share of people walking, biking, and riding transit to work to 10% by 2030 and 20% by 2040.	
2	Increase the share of students walking and biking to school by 10% by 2030.	
Safety	Reduce the number of collisions in the community involving people walking, biking, and/or driving by 50% by 2030.	
	Work to eliminate all collisions resulting in severe and fatal injuries by 2030.	
	Reduce before and after traffic speeds and cut-through rates on projects aimed to address those issues.	
Connectivity	Implement at least 10 high-priority projects by 2030.	
	Decrease the number of gaps in pedestrian and bicycle networks by 50% by 2030.	
Climate Change	Reduce the number of Vehicle Miles Traveled (VMT) per capita to meet the goals of the City's Climate Action and Adaptation Plan.	
Community Input	Ensure all projects include pre- and post- engagement and evaluation with community members by 2022.	
	Increase opportunities for community members to share additional feedback and insights on methods for improvement. Implement a feedback process by 2022.	
Evaluation	Collect and publish multimodal transportation counts on arterials once every five years.	
	Ensure all City sponsored transportation projects include before and after multimodal transportation counts by 2025.	

Priority Recommendations

This Plan recommends implementing high priority bikeway projects that most effectively meet the CSMP's goals. Completing all high priority bikeway recommendations is estimated to cost \$4 million. To learn more, see **Chapter 5**: Recommended Improvements and **Appendix B**: Bikeway Network Recommendations Table.



Figure 1 High Priority Bikeway Recommendations

This Plan recommends the implementation of a 16-mile long, high priority, crosstown corridor network to form the "Los Altos Loop." When complete, the Los Altos Loop will provide access around Los Altos on low stress streets and high-quality bikeways. To learn more, see **Chapter 7**: Implementation.





This Plan recommends implementing high priority pedestrian walkway and crossing or spot improvement projects that most effectively meet the CSMP's goals. Completing all high priority pedestrian recommendations is estimated to cost \$2.8 million and spot improvements are estimated to cost \$7.4 million. To learn more, see **Chapter 5**: Recommended Improvements, **Appendix C**: Pedestrian Network Recommendations Table, and **Appendix D**: Spot Improvement Network Recommendations Table.



Figure 3 **High Priority Pedestrian Recommendations**

CHAPTER

INTRODUCTION

What is a Complete Street?

Complete Streets are streets for everyone. They are designed and operated to prioritize safety, comfort, and access to destinations for all people who use the street. Complete Streets make it easy to cross the street, walk to shops, jobs, and schools, bicycle to work, and move actively with assistive devices. They allow buses to run on time and make it safe for people to walk or move actively to and from bus stops and train stations.



Plan Purpose

Complete Streets are planned, designed, and operated for safe mobility for all users including pedestrians, bicyclists, motorists, and transit users of all ages and abilities. The Los Altos City Council passed a Complete Streets Policy through Resolution 2015-41 on December 8, 2015. The policy commits Los Altos to creating and maintaining Complete Streets. The policy sets out principles and a path for implementing the policy. The City of Los Altos recognizes the value of walking and biking, and has developed this Citywide Complete Streets Master Plan to improve the pedestrian and biking environment and to establish itself as a more walkable, livable, and healthy city.

This Plan provides a broad vision, strategies, and actions for improving the pedestrian, bicycling, and driving environment in Los Altos. Recommendations are built on and consistent with local and regional goals and policies for increasing the number of people who walk and bike in Los Altos. These goals include specific recommendations for streets, sidewalks, and multi-use paths, as well as policy recommendations to make Los Altos more sustainable by reducing the city's carbon footprint and increasing the mode share of active transportation.

While walking and biking represent low cost transportation modes, building and maintaining high quality pedestrian and bicycle infrastructure requires comprehensive planning and long term funding and community commitment. The recommendations in this Plan will help the city reach goals adopted in the General Plan by creating an environment and programs that support walking and biking for transportation and recreation, encourage fewer trips by car, and support active lifestyles.

This definition comes from the National Complete Streets Coalition. For more information, see: <u>smartgrowthamerica.org/program/national-</u> <u>completestreets-coalition/Resolution 2015-41</u>

This Plan is a blueprint for the City to improve the pedestrian, bicycle and active transportation user environment, secure funds dedicated to pedestrian and biking safety and livable communities, and increase the number of walking and biking trips. This document serves as a companion to the City's adopted <u>Collector Traffic Calming Plan</u> and <u>Neighborhood Traffic Management Plan</u>. The Collector Traffic Calming Plan is a framework for implementation of traffic calming devices on collector roadways in to reduce vehicle speeding. The Neighborhood Traffic Management Plan was produced as a guideline for neighborhoods with traffic problems to request further analysis, and to design and construct engineering solutions if necessary. These documents provide guidance for the City to create streets that are safer and more comfortable for all to enjoy.



To offer more Complete Streets, the City is working to add new bikeways like the bike lanes shown above, sidewalks and pedestrian walkways, and street crossing enhancements.

Vision, Goals, and Policies

The vision, goals, and policies presented in this chapter are drawn largely from the Los Altos Bicycle and Pedestrian Master Plans which contains numerous policy statements that are supportive of walking and biking. This overall policy framework guides and supports the specific implementation actions identified in the Plan.

VISION, GOALS, AND PERFORMANCE MEASURES

The vision statement expresses what walking, bicycling, and driving will be like in Los Altos in the future if the city successfully implements this Plan. The vision statement is:

Our community-focused and sustainable streets empower people of all ages and abilities to access destinations comfortably, safely, and conveniently, regardless of their mode of transportation.

GOALS

Goals expand on the vision with more detail and provide specific direction for implementation. The goals identified here are drawn and expanded from the General Plan's Circulation Element, the Los Altos Bicycle Transportation Plan (2012), and relevant regional and state policy priorities that emphasize integrated, multi-modal transportation planning that encourages viable travel alternatives to the automobile.

MEASURABLE GOAL STATEMENTS

Table 1 presents the proposed Goal Statements that will serve as metrics and guideposts to evaluate the City's progress towards achieving the vision laid out in the CSMP. The proposed goal statements include feasible time-bound aspirations for implementing comfortable, safe, and community-based Complete Streets in Los Altos.



Top: An example of traffic calming treatment and bike lanes to provide Safe Routes to School. Bottom left: An example of an informal pedestrian walkway separated from the street by an asphalt berm. Bottom right: In order to meet the City's goals, removing barriers to walking and biking such as this guardrail will need to be evaluated.

Table 1 Proposed Goal Statements

Category	Goal Statements	Baseline	Data Source/ Responsible Party
Activity	Increase the share of people walking, biking, and riding transit to work to 10% by 2030 and 20% by 2040.	5.5%	2019 American Community Survey – 5-year estimates¹
	Increase the share of students walking and biking to school by 10% by 2030.	Not Available	Safe Routes to School Annual Hand Tallies
Safety	Reduce the number of collisions in the community involving people walking, biking, and/ or driving by 50% by 2030.	94 collisions (2019)²	Statewide Integrated Traffic Record System (SWITRS)
	Work to eliminate all collisions resulting in severe and fatal injuries by 2030.	6 severe and fatal collisions (2019)	SWITRS
	Reduce before and after traffic speeds and cut-through rates on projects aimed to address those issues.	Not Available	To be collected on a case-by-case basis
Connectivity	Implement at least 10 high-priority projects by 2030.	Not Applicable	2021 Los Altos Complete Streets Master Plan (CSMP)
	Decrease the number of gaps in pedestrian and bicycle networks by 50% by 2030.	To be determined	2021 Los Altos CSMP
Climate Change	Reduce the number of Vehicle Miles Traveled (VMT) per capita to meet the goals of the City's Climate Action and Adaptation Plan.	Climate Action Plan (currently under development)	2021 Climate Action and Adaptation Plan
Community Input	Ensure all projects include pre- and post- engagement and evaluation with community members by 2022.	Not Applicable	City Staff
	Increase opportunities for community members to share additional feedback and insights on methods for improvement. Implement a feedback process by 2022.	Not Applicable	City Staff
Evaluation	Collect and publish multimodal transportation counts on arterials once every five years.	2019	Mobility Traffic Counters (Research Tools)
	Ensure all City sponsored transportation projects include before and after multimodal transportation counts by 2025.	Not Available	

¹2019 American Community Survey is the most recent data available at the time of publication. ²2019 data is the most recent available at the time of publication and is provisional.

CHAPTER

EXISTING CONDITIONS

This chapter provides an overview of existing conditions as they relate to walking and bicycling in Los Altos. It builds on the extensive existing conditions work located in the City's Pedestrian and Bicycle Master Plans and updates select demographic and infrastructure changes since these two plans were adopted. The information from previous planning efforts, new analysis in this document, and the input of community residents, the Los Altos Complete Streets Commission, City Council, and many others was used to develop new and revised policies and projects in Chapter 5.

Demographics and Equity

Understanding a community's demographics is paramount to planning and prioritizing transportation facility improvements to ensure that projects improve accessibility, provide the greatest public benefit and serve communities equitably.



POPULATION DENSITY

Los Altos is a small residential community of 31,625 residents in Northern Santa Clara County, in the heart of Silicon Valley, just 40 miles south of San Francisco. Compared to its neighbors, Los Altos at 4,873 people per square mile is slightly less dense than neighboring Mountain View (6,899 people/ sq mi) and Sunnyvale (6,932 people/sq mi), but more dense than neighboring Palo Alto (2,740 people/sq mi) and Los Altos Hills (952 people/ sq mi). Population density is one piece of information that can inform where infrastructure should be placed to meet demand.



AGE

The median age is 45.8 years old, which is about 25 percent higher than the median age of California (36.3). About 46 percent of residents are either under the age of 18 years or 65 years or over. This is important because these residents are less likely to be able to drive, and are more likely to rely on nondriving modes to reach their destinations. **Figure 4** shows the percentage of area residents that are under 18 or 65 and over by census tract.



Figure 4 **Percent of Population Under 18 Years or 65 or Over**

ACCESS TO A VEHICLE

The vast majority of working age Los Altos residents (over 16 years old) have access to a vehicle. According to American Community Survey data, less than 100 (0.6 percent) of Los Altos-based workers over the age of 16 do not have access to a vehicle. The percentage of workers over the age of 16 without access to a vehicle in Mountain View (4.8 percent) is higher. Understanding where a concentration of these workers live helps inform decisions about providing additional transportation options to meet their needs. **Figure 5** shows the percentage of workers over the age of 16 by census tract that do not have access to a vehicle.



Figure 5 **Percent of Households without Access to a Vehicle**

MEDIAN HOUSEHOLD INCOME

Los Altos is an affluent city, and the median household income is \$215,339, more than double the same figure for the State of California. **Figure 6** shows the median household income for each census tract in Los Altos and surrounding communities.





CALENVIROSCREEN

<u>CalEnviroScreen</u> is a tool developed by the California Environmental Protection Agency (CalEPA) and the Office of Environmental Health Hazard Assessment (OEHHA) that assigns a social and environmental equity score to census tracts based on pollution and sociodemographic data. Every census tract in Los Altos is in the lower 20 percentiles, signifying that its exposure to environmental hazards, pollution, and other sociodemographic risks is far below the State mean. **Figure 7** shows the area's CalEnviroScreen 3.0 scores.





Land Use

The arrangement of different land uses and distance between them is useful to understand where people live, work, recreate, shop, and go to school. A mixture of land uses in close proximity encourages short trips that can be accomplished by walking or bicycling as an alternative to driving. Understanding where the City is planning new development is also helpful to make sure that walking and bicycling facilities meet future demand. Los Altos is primarily composed of single-family residential neighborhoods served by seven small retail districts. The City is also home to small businesses, schools, parks, and recreational centers. Figure 8 shows land uses in Los Altos. The City also makes an interactive map available online for viewing at: <u>www.losaltosca.gov/</u> communitydevelopment/page/public-gisviewer.

KEY DESTINATIONS

Primary trip generators and destinations in Los Altos include:

- Retail Districts. Downtown and the Village Court/El Camino Real area are the largest and busiest shopping areas within the City. Neighborhood commercial centers include Loyola Corners, Woodland, Rancho Shopping Center, and Foothill Crossing. Additional commercial nodes include medical facilities, and the City's civic/ senior center complex near Hillview and San Antonio Road.
- **Medical Services.** While nearby El Camino Hospital and Stanford Medical Center offer health specialists, there are local general practitioners, dentists, eye doctors, and other medical professional offices that generate trips to and within Los Altos' neighborhood commercial zones such as on the west side of Altos Oaks Drive and along San Antonio Road near Downtown Los Altos.
- Parks and Schools. Schools in Los Altos are neighborhood-based, with elementary schools serving smaller enrollment areas than the junior high school that pulls from wider areas. Los Altos High School pulls students from the cities of Mountain View, Los Altos, and Los Altos Hills. Additionally, neighborhood parks or playgrounds are found within walking distance (approximately ½ mile) of nearly every resident of Los Altos.
Figure 8 Land Use Map



Employment and Commute Patterns

Most workers in Los Altos commute to other areas in the Silicon Valley for work, but there are many employers and key destinations in Los Altos and neighboring towns. This section looks at commute patterns of Los Altos residents and top employers in Los Altos. While not every work trip may make sense for biking, the rise in popularity of e-bikes has extended the distance people are willing to travel. Understanding the patterns will also make sure comfortable facilities are available to meet demand. For workers interested in taking transit, providing a pleasant walking experience to high use transit stops is important.



COMMUTE TO WORK

The breakdown of how Los Altos workers commute to work is listed in **Table 2** below.

Table 2Mode Share of Commute to Workfor Los Altos Workers

Travel Mode	Total Number	Percentage of Total
Drove Alone	10,144	78.0%
Carpooled	736	5.7%
Public Transit	379	2.9%
Bicycle	260	2.0%
Walked	163	1.3%
Other	82	0.6%

Source: ACS 2018 5-year estimates, Table B08006: Means of Transportation to Work

TOP EMPLOYERS

The top employers in the City are listed in **Table 3** below. It should be noted that these employers draw their workforce from throughout the region, not just Los Altos.

Table 3City of Los Altos Principal Employers

Employer	Employees	% of Total City Employment
Los Altos School District	568	4.26%
Whole Foods Market	242	1.81%
Los Altos High School	217	1.63%
Palo Alto Medical Foundation	135	1.01%
City of Los Altos	133	1.00%
Coldwell Banker	130	0.97%
Adobe Animal Hospital	129	0.97%
Alain Pinel Realtors	107	0.80%
The David and Lucile Packard Foundation	100	0.75%
Trader Joes	71	0.53%
Total	1,832	13.73%
Total Employees Working in the City	13,341	

Source: City of Los Altos Comprehensive Annual Financial Report: Fiscal Year Ended June 30, 2018

EMPLOYMENT DESTINATIONS

About 57.8% of Los Altos residents travel less than 10 miles to get to work, 21.8% travel 10 to 24 miles, while the remaining 20.3% travel over 25 miles. **Figure 9** shows where Los Altos residents commute to work.

Figure 9 **Employment Map**



Bicyclist- and Pedestrian-Involved Collisions

To better understand bicyclist and pedestrian safety conditions in Los Altos, this section quantifies and maps pedestrian- and/or bicyclist- involved collisions in the City. The collision data was acquired from UC Berkeley's Transportation Injury Mapping System (TIMS) for collisions occurring between January 1, 2015 and December 31, 2019. This data omits collisions that do not involve an injury or death (property damage only collisions).

During the 5-year study period, there were a total of 422 reported collisions within the City involving at least one injury. Of these collisions, 90 involved a bicyclist, while 31 involved a pedestrian. Eleven of these crashes involved a severe injury or death. **Figure 10** and **11** show the locations of reported bicyclist- and pedestrian-involved collisions. Locations of collisions involving a severe injury or death are also mapped. Note that these collision numbers reflect only those collisions reported to the Police and may represent an undercount of all injury collisions.









Figure 12 below shows the top five primary collision factors segmented by the party at fault for bicyclist-involved collisions. The top collision factor was "Automobile Right of Way," which includes collisions where it was determined that the motor vehicle had the right-of-way and a party (of any mode) did not yield to the driver's right-of-way or the driver observed his or her right-of-way

improperly, depending on which party is listed at fault. A common citation under this category is for drivers who do not yield to oncoming traffic during a left turn or U-turn. Other citations include not yielding properly at a stop sign, and not yielding when entering a road from a property. This also covers not yielding to pedestrians for right turns on red.

Figure 12 Bicyclist-Involved Collisions Primary Collision Factor by Party at Fault



Figure 13 below shows the primary collision factors segmented by party at fault for pedestrian-involved collisions. The most common collision factor was "Automobile Right of Way," which includes collisions where it was determined that the pedestrian had the right-of-way and the motorist did not. This is a common citation for drivers not yielding to a pedestrian at a crosswalk or at a driveway. The next most common collision factor was "Pedestrian Violation," which includes collisions where it was determined that the pedestrian did not follow a rule of the road. This is a common citation for a pedestrian crossing outside of a crosswalk or not yielding to vehicles. It also includes pedestrians crossing improperly during the flashing "DON'T WALK" or red phase of a signal, suddenly leaving the curb, and walking in the roadway on the right-hand side of the road.

Figure 13 **Pedestrian-Involved Collisions, Primary Collision Factor by Party at Fault**



Bicycle Facilities

While approximately 73 percent of workers in Los Altos drive a vehicle or carpool to work, many trips happen on foot, bike, transit, or other non-vehicular mode. This section of the report details existing bicycle facilities in and around Los Altos, and maps bicyclist- and pedestrian- involved collisions in the City.

TYPES OF FACILITIES

This Plan recommends bikeways according to Caltrans classifications – **Class I, II, III, and IV.**

Class I Shared Use Paths provide bicycle travel on a paved right-of-way completely separate from any roadway or highway. Class I path design standard is at least eight feet of paved width and two feet of graded shoulders. In Los Altos, Class I paths are typically adjacent to residential roadways and cross driveways. These paths are most commonly designated for non-motorized transportation uses.

Note: Wheeled personal mobility devices such as electric skateboards, electric scooters, and electric unicycles should be operated in accordance with local codes and California Vehicle Codes §21229 and §21235. The Code mandates that whenever a Class II Bicycle Lane or Class IV Separated Bikeway has been established on a roadway, any person operating a motorized scooter upon the roadway shall ride within the bikeway, except under specific circumstances called out in the code. Electric scooters may be used on Class I Shared Use Paths unless marked otherwise. Operating electric scooters on the sidewalk is prohibited unless accessing adjacent property. **Class II Bicycle Lanes or bike lanes** are striped lanes on roadways for oneway bicycle travel. Bike lanes are at least four feet wide and also include bike lane signage. Bike lanes may also include a painted striped buffer between the bicycle lane and the vehicle travel lane.

Class III Bicycle Routes or bike routes are designated by signs where bicyclists share a travel lane with motorists, with or without edge stripes. Class III bikeways may be designated if roadways do not have enough right-of-way for Class II bike lanes or if roadways do not have the traffic volume to warrant Class II bike lanes. These routes should be low volume and low speed. Traffic calming measures may be needed to make the experience comfortable for bicyclists.

Class IV Separated Bikeways are on-street bikeways separated from motor vehicle traffic by a curb, median, planters, parking delineators or other physical barriers.

BICYCLE NETWORK

Los Altos has approximately 26 miles of bicycle facilities. **Table 4** below shows the total mileage of bicycle facilities within the City, broken down by facility type. **Figure 14** on the following page shows the location and extents of bicycle facilities in and around Los Altos.

Table 4Bicycle Facility Mileage by FacilityType

Facility Type	Mileage
Class I Shared Use Paths	2.1
Class II Bicycle Lane	10.7
Class III Bicycle Route	13.2
Total	26 miles

BICYCLE PARKING

Bicycle parking is readily available throughout Los Altos. Assessment of the adequacy of existing bicycle parking is based on response to user demand, land use, anticipated parking duration and crime rate. Bicycles parked for less than two hours in safe locations require only a rack that provides two locking points to secure both wheels. The existing bicycle parking locations in Los Altos provide this short-term parking need with inverted u-racks. Bicycles parked for longer than two hours may require more secure facilities. Bicycle cage installation depends on a variety of factors including the population served (e.g., school), proximity to the served location and crime rates. Bicycle lockers provide the highest level of security, restricting access to only the user/renter. Lockers are appropriate at transit stations and employment centers with high bicycle access mode shares.

BICYCLE DETECTION

Bicycle detection systems use in-pavement electro-magnets or video cameras to sense bicycles and trigger a green light at traffic signals. Pavement markings are used in bicycle lanes or, if a bicycle lane is not present, in the outside through travel lane to show where bicyclists should stop at an intersection for the sensor to detect them. If bicycle detectors are not installed at sensor triggered traffic signals, bicyclists may not receive a green light. Some travel lanes at intersections detect bicycles but are not stenciled. City maintains an active inventory of locations with video detection systems or bike-sensitive inductive loops.

Figure 14 **Existing Bicycle Facilities**



Pedestrian Facilities

WALKWAYS AND SIDEWALKS

Walkways are the basic element of the pedestrian network, providing a separated space outside of the roadway travel lane for people to walk. In Los Altos pedestrian facilities vary significantly, and provide a range of protection and comfort from motor vehicle and bicycle traffic. Facility types fall into four main groups— sidewalks, multiuse paths, pedestrian/bike connectors, and informal walkways such as shoulders and berm-protected walkways.

Sidewalks create a space for pedestrian activity separated from motor vehicle traffic. Sidewalks often accommodate a number of activities and can be divided into one or several zones, based on the activities that occur along the sidewalk.

Sidewalks in the City include either vertical or rolled curbs. Rolled curbs are mountable, allowing vehicles to encroach onto the sidewalk, which can be advantageous for emergency vehicle maneuverability. However, rolled curbs also make it easy for cars to park atop the curb face, potentially obstructing pedestrian movement along an adjoining sidewalk. Rolled curbs exist primarily within single-family neighborhoods.

SHARED USE PATHS

Paths separate pedestrians and bicyclists from motor vehicle traffic; however, pedestrians and bicyclists may have to share the path with other active transportation users. Shared Use Paths, also called Multi Use Paths, paths provide a designated paved right-of-way completely separate from any roadway or highway and are classified by specific design criteria established by Caltrans. Multi-use path design standard is at least eight feet of paved width to allow for comfortable two-way movement and two feet of graded shoulders. In Los Altos, multi-use paths are typically adjacent to residential roadways and cross driveways. These paths are most commonly designated for active transportation uses.

PEDESTRIAN / BIKE CONNECTORS

Pedestrian/Bike connectors provide a cutthrough for active transportation users at local dead-end roads. These connectors are generally located in residential neighborhoods and provide a more direct pedestrian route to within and to destinations outside of the neighborhood.

SHOULDERS & INFORMAL WALKWAYS

Where dedicated walkways have not been provided, the quality of the roadway shoulder can determine whether it is an acceptable place for pedestrians to walk. In Los Altos, shoulders range from unimproved dirt or paved areas to a striped shoulder that may be shared with parking and/or bicyclists. On selected roads without formal sidewalks, such as Clark Avenue, Los Altos has created a lowcost informal walkway by installing an asphalt

Figure 15 Asphalt Berm Walkway Examples



berm that separates a paved shoulder from traffic. **Figure 15** shows two examples of this.

PEDESTRIAN CROSSINGS AT TRAFFIC SIGNALS

Traffic signals control movements and provide protected phases for pedestrians to cross. Pedestrian countdown signals tell pedestrians how much time they have to cross the street before the light changes. Countdown signals are especially important for road users who travel slower in the crosswalk than others, such as young children, and seniors.

All traffic signals in Los Altos include pedestrian countdowns and audible signals that can be actuated by hitting push buttons to call the signal, the latter for assisting sight-impaired pedestrians crossing the street. The majority of severe and fatal collisions have been statistically shown to occur crossing major roadways. Major roadways in Los Altos with challenging pedestrian crossing locations include:

- Cuesta Avenue
- E Edith Avenue
- El Camino Real
- El Monte Avenue
- Foothill Expressway
- Fremont Avenue
- Grant Road

- Miramonte Avenue
- San Antonio Road
- Springer Road

This list is not exhaustive and other crossing challenges have been reported on minor streets in Los Altos.

TRAFFIC CALMING DEVICES AT ROADWAY CROSSINGS

Curb extensions, or sidewalk/walkway "bulb-outs" into the adjacent parking lane, help shorten crossing distances, provide larger waiting/landing areas for accessibility, and improve pedestrian sight distances and visibility. In areas with high pedestrian demand, they also increase sidewalk capacity for queuing at crosswalks. Examples of well-designed curb extensions exist throughout downtown.

Outside of downtown Los Altos, there are relatively few curb extensions, although several have been built as part of the Suggested Routes to School projects. "Floating" curb extensions, or chicanes, have also been constructed as part of traffic calming efforts, such as on N. Clark Avenue north of Almond Avenue.

Other traffic calming devices at roadway crossings include raised crosswalks, pedestrian-activated flashers, speed feedback , Rectangular Rapid Flashing Beacons (RRFBs) and speed humps. Speed humps and speed feedback signage help slow the speed of oncoming vehicle traffic before reaching a key crosswalk. Raised crosswalks and pedestrian-activated flashers help improve the visibility of pedestrians at uncontrolled crossings and reinforce the pedestrian's right-of-way. RRFBs are pedestrian activated warning devices mounted adjacent to the roadway. The beacon lights are rectangular LED lights installed below a pedestrian crosswalk sign that flash in an alternating pattern when activated. The beacon is dark when not activated. RRFBs act as a supplement to pedestrian crossing signs and crosswalks, especially on roads with higher speed limits and mid-block crossings.



High visibility crosswalks painted in yellow with school crossing signage and a raised crosswalk have been installed in front of Springer Elementary.

MARKED CROSSWALKS

Legal crosswalks are located at all intersections, and are an extension of the sidewalk. Pedestrians have the right-ofway in all crosswalks, marked or unmarked. Marked crosswalks provide enhanced visibility and encourage pedestrians to cross at specific locations. The City currently makes decisions regarding crosswalk design and installation on a case-by-case basis following guidelines set forth by the California Manual on Uniform Traffic Control Devices (CA MUTCD). In general, transverse crosswalks (i.e., two parallel, longitudinal markings) are provided at signalized and major all-way, stop-controlled intersections, although in many locations only two or three legs of the intersections are marked.

Recent installations and upgrades include sufficient warning signage (known as traffic sign assemblies), high-visibility striping, in-roadway warning lights (actuated by pedestrians), and raised crosswalks. In many older installations, however, crosswalk visibility is more limited and signage is missing, outdated, or not optimally located. These include downtown decorative crosswalks, which have limited reflectivity and signage, as well as Foothill Expressway and other "free" right-turn slip lanes with minimally treated crosswalks. Multi-lane uncontrolled crosswalks, which tend to pose the greatest challenges for pedestrians due to a "double threat" of collision, exist at El Camino Real and San Antonio Road.

MEDIANS

Medians separate opposing lanes of traffic and can be used as a refuge by pedestrians and other active transportation users to aid in crossing wide roadways. Center landscaped median islands help to physically separate opposing lanes of traffic and can offer a sense of protection for pedestrians crossing the roadway. Landscaped medians may also help reduce vehicle travel speeds (since the roadway is visually more interesting and narrow) as well as localized urban heat island effects (by improving tree canopy).

In all but a few cases center medians within Los Altos are not optimally designed to benefit active transportation users. They are typically too narrow to provide accessible refuge for people desiring to make "twophase" roadway crossings, and are too narrow for additional warning signage to improve crosswalk visibility.

More so than center medians in Los Altos, triangular refuge islands help improve walkability by reducing crossing distances and separating vehicle movements at skewed and/or multi-leg intersections (of which there are many in Los Altos). Slip lane refuge islands, also called "pork chop islands" are most commonly applied at intersections with free-right-turn lanes. A successful example of both a triangular and center median can be found at the entrance to Main Street from San Antonio Road, where they offer accessible refuge while also acting as a gateway feature into the downtown.

Multimodal Connections

Access to frequent and reliable transit provides active transportation users with a greater set of destinations compared to walking and biking alone. The reach and frequency of transit service, as well as transit stop amenities, have a role in the desirability of transit as a mode choice.

TRANSIT

Transit access in Los Altos is provided by Valley Transportation Authority (VTA) and Caltrain. VTA provides local and regional connections through bus service. All VTA bus stops in Los Altos with at least one boarding or alighting per day (averaged over both weekday and weekend) were assessed for ADA and general accessibility as part of the Pedestrian Master Plan process. Characteristics assessed included accessibility of the bus stop and route to nearest intersection, condition of intersection curb ramps, and distance/ accessibility to nearest crosswalk of the major street. Provision of benches was also observed.

Regional rail transit is provided by Caltrain and VTA Light Rail. The Caltrain station at San Antonio Road is 0.54 miles from the nearest City boundary and the Mountain View station is less than one mile. At San Antonio Caltrain, Los Altans can board local and limited stop trains. At Mountain View Caltrain, rail service includes local, limitedstop, light rail, and baby bullet trains, providing faster connections to points further north and south along the Peninsula and to San Francisco.

The Mountain View Caltrain Station consistently ranks among the top three Caltrain stations in total ridership. Mountain View accounts for 7% of passengers in the Caltrain system; its average weekday passenger activity totals almost 5,000 ons and offs (pre COVID-19 ridership). The San Antonio Road Station sees significantly less ridership, with average ons and offs before COVID-19 totaling just over 1,000, but ridership has been increasing. VTA Light Rail can be accessed at the Mountain View Station as well. There, passengers board the Mountain View-Winchester line, which extends south from the Mountain View station with local stops in Santa Clara and San José. Transfers to the Mountain View -Alum Rock line are made at Tasman Station on the Mountain View-Winchester line.

BUS STOP AMENITIES AND ACCESSIBILITY

While most bus stops in Los Altos provide a bench for waiting passengers, few bus stops are sheltered. This is generally due to low transit demand outside of key stops along San Antonio Road and El Camino Real, but may also be a factor of limited space within the waiting area.

Although bus stops on El Camino Real are served by concrete sidewalks and good proximity to signalized crossings, considerable barriers including light poles, trees, street furniture, and numerous driveways with steep cross slopes limit ADA accessibility. The overall width of the sidewalk is also inadequate for the high volume of users, which includes transit riders each week heading to and from eastbound bus stops between San Antonio Road and Rengstorff Avenue.

San Antonio Road bus stops are generally accessible, particularly southbound stops that have benefited from streetscape improvements that include the city-led reconstruction of the Plaza S parking lot and the David and Lucille Packard Foundation office development. The southbound stop at Whitney and northbound stop at Hillview Avenue remain two of the least accessible stops.

CHAPTER

COMMUNITY ENGAGEMENT

The project team engaged the public and key stakeholders throughout the development of the Complete Streets Master Plan in order to:

- Develop a Vision for a Complete Streets Network – Stakeholders across different groups weighed in on the vision, objectives, and performance measures for the Plan, guiding the high-level direction of the Plan.
- 2. Understand Transportation Needs Los Altos residents weighed in on current barriers to biking and walking, and what destinations and routes could be made more bikeable and walkable. This information helped the project team develop an understanding of the needs and gaps of the citywide network.
- 3. Refine Recommendations The City presented the draft bicycle, pedestrian, and SRTS recommendations developed through the process. Stakeholders and the public helped the City revise these recommendations to better meet the needs of specific user groups.

Outreach Activities

The City held multiple community workshops and shared project updates with the City's Complete Streets Commission at key milestones throughout the plan development process. Outreach activities were developed to educate the public about the plan, collect input, and obtain feedback. Due to the COVID-19 public health emergency, in-person outreach was suspended. In lieu of engaging residents face-to-face, online tools were developed and virtual video conference meetings held. Overviews of the engagement activities conducted as part of this project, including descriptions of events and tools, are listed below.





The City solicited input from the public about barriers to walking and biking and received 684 responses and over 2,200 comments.



The City developed a project website to share information about upcoming meetings and gather feedback.

PROJECT WEBSITE AND INTERACTIVE WEB MAP

An online map gave people in Los Altos the chance to share where they currently walk and bike and where they would like to walk and bike in the future. People also identified barriers to walking and bicycling in the city. The online map received 684 individual responses and over 2,200 comments and "like" votes between January and April 2021. This feedback shaped the development of the active transportation network and spot improvement recommendations in this Plan.

aita Los Altos SRTS/Complete Streets Plan - Community Survey			
	4. If you have school-aged child	ren, what would encourage you to	
	allow them to walk or bike to sch has resumed to some extent)? (s	nool (assume in-person learning select all that apply)	
	 I don't have school-aged children OR my children currently walk/bike to school 	If there were safer ways to cross the street along their route	
	If our school was closer	If there was slow traffic along their route	
	If it was safer (traffic-related)	If myself, my partner, or another adult could accompany them while they walk, roll, or bike	
	If they were older and more independent	If my children owned or knew how to ride a bike/scooter/skateboard	
	Other (please specify)		
5. Would you walk or bike to any of the following places if it were more comfortable or convenient? (select all that apply)			

Over 300 people participated in an online survey to help the City understand transportation behaviors and issues.

COMMUNITY SURVEY

The City of Los Altos distributed an online survey to gather input on walking and bicycling challenges, preferences, and opportunities throughout Los Altos. The 11-question survey was made available online and advertised at virtual workshops and community meetings. The survey was open between January and April 2021 and received 338 responses. These responses informed the city's understanding of the public's current walking and bicycling patterns as well as barriers to walking and bicycling in Los Altos. A summary of survey responses can be found in **Appendix A**.

COMPLETE STREETS MASTER PLAN TASK FORCE

The City invited several members of the community to join an ad-hoc task force to inform the Complete Streets Master Plan. Members of the task force represented the following organizations:

Organization	Task Force Members
City Council	1
Complete Streets Commission	2
Youth Commission	2
Parks & Recreation Commission	1
Greentown Los Altos	1
Bicycle Advocate (resident)	1

The CSMP Task Force met four times between February and June 2021 to review and guide staff on CSMP document development prior to delivery to the community at future Complete Streets Commission study sessions and regularly scheduled meetings.

CSMP TASK FORCE MEETING 1

February 10, 2021

The City introduced the project to the task force and shared existing conditions analysis and draft concepts plan line drawings for task force feedback.

CSMP TASK FORCE MEETING 2

March 16, 2021

The City presented an introduction to the Safe Routes to School elements of the CSMP and collected feedback on the style of Walk n Roll Suggested Route Maps. Additional draft concept plan line drawings were also presented for Task Force member feedback.

CSMP TASK FORCE MEETING 3

May 25, 2021

The City shared draft bicycle and pedestrian network recommendations and draft spot improvement/intersection improvements for Task Force review and feedback.

CSMP TASK FORCE MEETING 4

June 28, 2021

The City presented revised bicycle and pedestrian network recommendations based on Task Force and Complete Streets Commission feedback. The City also presented draft prioritization results for review and feedback.

Community Workshops

The City hosted three online workshops to gather feedback on conceptual plans. The City sent a citywide mailer to all residents at the start of the project and shared the project website. The City noticed each meeting in the *Town Crier* newspaper, the City's social media channels, and placed



The City presented roadway reconfiguration concepts such as Loyola Corners to the public at a series of three online workshops.

A-frame posters along streets being studied. Over fifty members of the public participated in each of the meetings.

COMMUNITY WORKSHOP 1

January 27, 2021

At this workshop, the project team shared concept designs and gathered feedback for street improvement ideas on Clark Ave, Covington Road, Gordon Ave, and Miramonte/ Berry intersection.

COMMUNITY WORKSHOP 2

February 24, 2021

At this workshop, the project team shared concept designs and gathered feedback for street improvement ideas on Loyola Corners, El Camino Real, Jordan Ave, Casita Way, Alvarado Ave, and St. Joseph Ave.

COMMUNITY WORKSHOP 3

March 31, 2021

At this workshop, the project team shared concept designs and gathered feedback for street improvement ideas on Almond Ave, Jardin Dr, Valencia Dr, Panchita Way, Los Ninos Way, and Distel Dr.

Complete Streets Commission (CSC)

The Los Altos Complete Streets Commission advises the City Council on complete streets projects/programs, and recommends solutions in accordance with Complete Streets policies (directed by AB 1358, with implementation standards guided by VTA, CalTrans, and NHTSA) and consistent with partner agencies (CalTrans, Santa Clara County Roads, VTA, OBAG). The City met with the CSC at regularly scheduled meetings along with specific study sessions devoted to the CSMP. All CSC meetings are open to the public and were noticed on the City and project websites. Meetings that focused on elements of the CSMP are listed below by date and topic along with links to meeting agendas and supporting documents:

Date	Торіс	Agenda and Support Documents
September 30, 2020	Introduction to the Complete Streets Master Plan	www.losaltosca.gov/completestreets/page/complete-streets- commission-online-meeting-3
October	Project Outreach	www.losaltosca.gov/completestreets/page/complete-streets-
28, 2020	Strategy Review	commission-online-meeting-4
January 21,	Existing	www.losaltosca.gov/completestreets/page/complete-streets-
2021	Conditions	commission-complete-streets-master-plan-study-session
February	Vision, Goals, and	www.losaltosca.gov/completestreets/page/complete-streets-
27, 2021	Priorities	commission-complete-streets-master-plan-study-session
March 18,	Safe Routes to	www.losaltosca.gov/completestreets/page/complete-streets-
2021	School	commission-study-session-complete-streets-master-plans-safe
March 31,	Vision, Goals, and	www.losaltosca.gov/completestreets/page/complete-streets-
2021	Priorities - Part II	commission-online-meeting-8
April 22,	Safe Routes to	www.losaltosca.gov/completestreets/page/complete-streets-
2021	School - Part II	commission-study-session-complte-streets-master-plan-safe

May 19,	Concept Plan Line	www.losaltosca.gov/completestreets/page/complete-streets-
2021	Drawings	commission-study-session-complete-streets-master-plan-concept
May 26, 2021	Bicycle and Pedestrian Network Recommendations	www.losaltosca.gov/completestreets/page/complete-streets- commission-online-meeting-11
June 30,	Prioritization	www.losaltosca.gov/completestreets/page/complete-streets-
2021	Results	commission-online-meeting-12
August 10,	Implementation	www.losaltosca.gov/completestreets/page/complete-streets-
2021	Strategy	commission-online-meeting-13

SAFE ROUTES TO SCHOOL OUTREACH

The City hosted focus group sessions with parents, teachers, and Cupertino Union and Los Altos School District staff to share school improvement plans and suggested Walk n Roll to School maps. These focus groups provided valuable input that was reflected in subsequent revisions.

CHAPTER

SAFE ROUTES TO SCHOOL PLAN

WHAT IS SAFE ROUTES TO SCHOOL?

Safe Routes to School (SRTS) refers to a variety of multi-disciplinary programs aimed at both increasing the number of students walking and bicycling to school, and reducing the amount of vehicle trips associated with school travel. Such programs and projects improve traffic safety and air guality around school areas, and address childhood obesity and public health issues, through education, encouragement, increased law enforcement, and engineering measures. Safe Routes to School programs typically involve partnerships among municipalities, school districts, community members, parent volunteers, and law enforcement agencies.

WHY IS A SAFE ROUTES TO SCHOOL PROGRAM IMPORTANT?

Although most students in the United States walked or biked to school before the 1980s, the number of students walking or bicycling to school since has sharply declined. National statistics indicate that 42 percent of students between five and 18 years of age walked or bicycled to school in 1969 (with 87 percent walking or bicycling within a mile of school).³ This number fell to 16 percent of students walking or bicycling in 2001. This decline is due to a number of factors, including urban growth patterns and school siting requirements that encourage school development in outlying areas, budget cuts that force expanded enrollment boundaries, increased traffic, and parental concerns about safety.

The situation is self-perpetuating: as more parents drive their children to school, there is increased traffic at the school site, resulting in more parents becoming concerned about traffic and driving their children to school. Congestion is a concern for Los Altos residents and school areas experience high levels of congestion during drop-off and pickup periods.

A comprehensive Safe Routes to School program addresses the reasons for reductions in walking and biking through a multipronged approach that uses education, encouragement, and engineering efforts to develop attitudes, behaviors, and physical infrastructure that improve the walking and biking environment. Los Altos City Council has prioritized Safe Routes to School to create a viable alternative to vehicle trips to school as one way to reduce congestion. In its most advanced form, Safe Routes to School is also incorporated into City and school district policies/procedures and is highlighted as part of a larger vision for community sustainability.

³U.S. Centers for Disease Control and Prevention. Barriers to Children Walking to or from School United States 2004, Morbidity and Mortality Weekly Report September 30, 2005. Available: <u>www.cdc.gov/mmwr/ preview/mmwrhtml/mm5438a2.htm</u>. Accessed: December 28, 2007.

BENEFITS OF A SAFE ROUTES TO SCHOOL PROGRAM

Safe Routes to School programs directly benefit schoolchildren, parents, and teachers by creating a safer travel environment near schools and reducing motor vehicle congestion (and related air pollution) at school drop-off and pick-up zones. Neighborhoods around schools also enjoy calmer streets and improved infrastructure. Students that choose to walk or bike to school are rewarded with the health benefits of a more active lifestyle, and a sense of responsibility and independence that come from being in charge of the way they travel. Others who carpool or take the bus more often can build stronger social bonds with fellow students and/or learn the basics of how to travel without their parents. All students can learn at an early age that walking, biking, and ridesharing can be safe, enjoyable and good for the environment.

A Safe Routes to School program helps integrate physical activity into the everyday routine of school students. Since the mid-1970s, the number of children who are overweight has roughly tripled from five percent to almost 17 percent. Health concerns related to sedentary lifestyles have become the focus of statewide and national efforts to reduce health risks associated with being overweight. Children who walk or bike to school have an overall higher activity level than those who are driven to school, even though the journey to school makes only a small contribution to activity levels.⁴

The Six E's of SRTS

The following chapter provides an overview of safe routes to schools and the 6 E's:

- Education
- Encouragement
- Evaluation
- Engagement
- Engineering
- Equity

The City has four (4) school districts that serve seventeen (17) public schools. Schools that serve Los Altos families are located in the cities of Los Altos, Los Altos Hills, Cupertino, Sunnyvale and Mountain View.

The City of Los Altos Safe Routes to School (SRTS) Program is coordinated with the Complete Streets Master Plan project. The SRTS Program focuses on identifying opportunities to create education and encouragement activities both inside and outside of the classroom, including possible community-based activities led by the City. Stakeholders interviews were conducted in the winter and spring to identify existing SRTS efforts in Los Altos schools, challenges and opportunities to implement a SRTS program. Based on the

⁴Cooper A, Page A, Foster L, Qahwaji D. "Commuting to school: are children who walk more physically active?" American Journal of Preventive Medicine. 2003 November; 25(4):273-6.

Category	Program Activity, Strategy, or Event	Timeline	Partners	
Community Engagement	Crossing Guard Appreciation Day	February	ACMS	
	Drive Safely Neighborhood Yard Signs	Fall	Neighborhood Groups PTA	
Walking School Buses	Walking School Bus	February	РТА	
Family/Parent and Student Activity	Family Rodeo	April	The Bicycle Outfitter Bay Area Bike Mobile Green Town Los Altos	
Walk + Bike/Roll to School Days		October		
	Walk + Roll to School Day	January	ΡΤΑ	
		May		
		Spring	School Districts	
Technology	Student-produced pro-walk, pro-bike videos		ASBs	
			Science Clubs	
			AV Club	
Pedestrian/ Bike Safety Curriculum	Pedestrian/ Bike Safety Curriculum Pilot	Fall	School Districts	
Evaluation	Surveys	Spring	SRTS Coordinator	
	Key Informant Interviews	Spring	SRTS Coordinator	
	Dike and nodestrian counte/hand tollies	Fall		
	Bike and pedestrian counts/hand tallies	Spring	reachers	

Table 5SRTS Program Recommendations for a Typical School Year

input of key stakeholders (school districts, school administrations, Complete Streets commissioners, parents, local organizations, etc.), program recommendations that encompassed the 6E's were developed. The program is expected to start in the 2021-22 school year.

SUGGESTED ROUTES TO SCHOOL PROGRAM GOALS

School commuting is a major contributor to travel demand and greenhouse gas (GHG) emissions, and child/school zone safety is an important issue in the community. Suggested Routes to School maps are used to educate and encourage students and parents on available routes with focused bicycle and pedestrian enhancements. The maps include suggested routes identified in blue, the location of crossing guards, traffic signals, and stop signs, along with other supporting infrastructure like flashing beacons, marked crosswalks, and existing bikeways. The Complete Streets Master Plan created and updated Suggested Route maps for each school that serves the Los Altos community, including schools located in Mountain View and Cupertino. The new Suggested Route Maps also include recommended drop-off and pick-up routes to families that drive to school. These resources were developed with input of the Complete Streets Commission, school administrations and parents. Maps can also be found online at SchoolRoutes. org. The website has been optimized for use with mobile devices.

Updated Maps

- Santa Rita Elementary School (Los Altos School District)
- Loyola Elementary School (Los Altos School District)
- Almond Elementary School (Los Altos School District)

- Oak Avenue School (Los Altos School District)
- Blach Intermediate School (Junior High) (Los Altos School District)
- Covington Elementary School (Los Altos School District)
- Egan Junior High (Los Altos School District)
- Springer Elementary School (Los Altos School District)
- Gardner Bullis School (Los Altos School District)
- Montclaire Elementary School (Cupertino Union School District)

Seven new maps were created for schools located both inside and outside the Los Altos city limits.

New Maps

- Los Altos High School (Mountain View Los Altos High School District)
- Kennedy Middle (Cupertino Union School District)
- Monta Vista High (Cupertino Union School District)
- Stevens Creek ES (Cupertino Union School District)
- West Valley ES (Cupertino Union School District)
- Homestead HS (Cupertino Union School District)
- Cupertino Middle
 (Cupertino Union School District)

ALMOND ELEMENTARY

Suggested Routes to School

Walk 'n' Roll Safety



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Stop at the curb's edge.

- Look left, right, and behind you.
- Mak

Make eye contact with drivers.

Cross at corners and crosswalks.

Cross with heads up and looking around.

BE VISIBLE

- Wear bright and reflective clothing.
- Use lights when walking and rolling at night.

BE AWARE

- Follow all traffic laws and stop at stop signs.
- Be aware of traffic. Watch for cars turning left, right, or coming out of driveways.

Biking Safety

BE PREDICTABLE

Use hand signals to communicate with other road users:



WEAR YOUR HELMET

- Your helmet should cover your forehead and rest just above your eyebrows.
- Straps should form a V under ears when buckled.
- Tighten the strap so it is snug under your chin.

WATCH FOR SHARED LANE MARKINGS

 Ride down the center of the "sharrow" symbol to stay outside the door zone on streets without bike lanes.

540

Driver Safety

- Drive 15 mph or less in school zones.
- Share the road safely with people walking and bicycling.

✓ _{DO:}

- Ride single file in a straight line in the direction of traffic.
- Yield to pedestrians.
- Follow all traffic laws and stop at stop signs.
- Wear a helmet.
- Park upright.
- Park out of the way of pedestrians.
- Use lights when riding at night.

🖉 DO NOT:

- Ride on streets with speed limits over 35 mph unless there is a bike lane.
- Block wheelchair access when parking.



Learn more and get involved:

Los Altos Safe Routes to School Resources: losaltosca.gov/SafeRoutes

View Maps Online and Download App at: SchoolRoutes.org

PAGE 2 OF 2

Each Suggested Route Map is paired with a respective page like this one containing safety tips and resource links.


































School Improvement Plans

Safe Routes to School Improvement Maps were developed to identify immediate and long-term infrastructure changes to the streets and sidewalks near school campuses. The City developed improvement plans for 12 schools that are within the City's boundaries (and streets in Los Altos near Mountain View High School). Site visits were conducted to assess current infrastructure, but due to the COVID-19 health crises, audits to observe traffic behaviors with school staff. parents, and teachers were not available. The City hosted focus group sessions with parents, teachers, and Cupertino Union and Los Altos School District staff to share draft school improvement plans. These focus groups provided valuable input that was reflected in subsequent revisions. These recommendations are specific to streets in close proximity to school campuses and are not necessarily duplicated in the Pedestrian Network Recommendations in Chapter 5 of the CSMP. They have their own timeline for implementation. The City Council has approved \$500,000 to implement Safe Routes to School infrastructure recommendations informed by the following improvement plans.



Safe Routes to Schools Improvement Plan **Almond Elementary School** Los Altos, CA

School Safety Assessment held February 2021

School driveway loop (Almond Ave) 1a. Upgrade N Clark Ave crosswalk to high-visibility 1b. Install "Keep Clear" pavement markings in front of school driveway (entrance and exit) 1c. Install stop sign on both sides of driveway exit 1d. Install advance stop lines at driveway exit 1e. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage at driveway exit 1f. Restrict parking adjacent to crosswalk across Almond Ave

Almond Ave and Formway Ct 2a. Install transverse crosswall

Almond Ave and Doud Dr 3a. Install transverse crosswalk

A Clark Ave and Jay St 4a. Install high-visibility crosswalk across Clark Ave 4b. Install yellow transverse crosswalk on east leg of intersection (crossing Jay Street)

Jay St and El Monte Ave 5a. Install high-visibility crosswalks across Jay St

Almond Ave and El Monte Ave 6a. Install high-visibility crosswalks across Almond Ave

7a. Remove existing school signage 7b. Install pedestrian path along west side of El Monte (between Clark Ave and Almond Ave) 7c. Install "No Parking Any Time" signage" along pedestrian

El Monte Ave and El Monte Court 8a. Install high-visibility crosswalk 8b: Install 4'-wide green bike crossing 8c. Install advance stop lines 8d. Reduce curb radii 8e. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.







9 El Monte Ave and Mills Ave 9a. Install high-visibility crosswalk across El Monte Ave, south of Mills Ave 9b: Install curb extension with ADA curb ramp improvments on east side of crosswalk

10 El Monte Ave and Mayer Ct 10a. Install "School Ahead" Assembly D signage

11 El Monte Ave and Higgins Ave 11a. Install high-visibility crosswalk 11b. Install advance stop lines 11c. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage

12 El Monte Ave and S Clark Ave 12a. Add School Crossing signs to back of existing signs, and update all signs to most current assembly 12b. Refresh raised crosswalk striping 12c. Install speed feedback sign

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Blach Intermediate School Los Altos, CA

School Safety Assessment held February 2021

The Carmel Terrace Sidewalk Gap Project and Blach School Safe Routes to School improvements carry over from the planning process started in 2019. Recommendations here address the public input received at that time along

1a. Consider upgrading full length (Miramonte Ave to Grant Rd) to buffered bike lane

Covington Rd and Eastwood Dr

2a. Install curb extensions on all corners

2b. Install transverse crosswalks on north and south legs of intersection

2c. Install raised crosswalk on west leg

2d. Install advanced yield markings on either side of raised crosswalk

2e. Install back-to-back Assembly B "School Crossing" signage

School driveway (west, at Hayman PI) 3a. Install "Keep Clear" pavement markings at driveway entrance and exit

3b. Upgrade crossings at entrance and exit to high-visibility 3c. Install "Turning Vehicles Yield to Bikes and Pedestrians"

signage 3d. Remove arrows out of crosswalk area at entrance and exit 3e. Install stop signs on both sides of driveway exit 3f. Install stop pavement marking and advance stop bar at driveway exit

3g. Reconstruct curb ramp at east side of driveway exit

School driveway (east) 4a. Extend existing red curb to 50' on both sides of driveway 4b. Install stop signs, stop pavement markings, and advance stop bar

4c. Install "Turning Vehicles Yield to Bikes and Pedestrians"

signage 4d. Consider right turn only restriction 4e. Install red curb between center driveway and east driveway

Covington Rd and Thatcher Rd 5a. Reconstruct curb ramps

5b. Install back-to-back Assembly B "School Crossing" signage 5c. Consider RRFB

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2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.







6 Covington Rd and West Rose Circle 6a. Install transverse crosswalk

Covington Rd and East Rose Circle 7a. Install transverse crosswalk 7

Covington Rd and Grant Rd 8a. Install bike boxes at all legs of intersection 8b. Upgrade crosswalks to high-visibility 8

 Altamead Dr and Carmel Terrace
 9a. Install in-street pedestrian signage in existing crosswalk 10

Miramonte Ave 10a. Refresh existing bike lane markings and signage

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Gardner Bullis Elementary School Los Altos Hills, CA

School Safety Assessment held February 2021

1 Fremont Rd and La Paloma Rd* 1a. Install transverse crosswalk across La Paloma Rd

Fremont Rd and Manuella Rd* 2a. Refresh crosswalk striping on both legs of intersection 2b. Increase density of continental stripes for higher visibility

Fremont Rd and Fremont Pines Ln*

3a. Refresh crosswalk markings3b. Add additional RRFB signage for back-to-back signs3c. Increase density of continental stripes for higher visibility 3d. Consider construction of a raised crossing or installation of

4a. Construct curb ramps4b. Install crosswalks at both school driveways, including a

4c. Add stop pavement marking and advance stop bar4d. Install "Turning Vehicles Yield to Bikes and Pedestrians"

University Ave right-in/right-out only 6b. Install crosswalk with curb extensions across University Ave

6c. Make all crosswalks across free right slip lanes high-

visibility 6d. Add "Turning Vehicles Yield to Bikes and Pedestrians"

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

*Recommendations are located within Los Altos Hills





Edith Rd and 2nd St (inset) 7a. Construct curb ramps 7b. Install RRFB

8 Edith Rd and 4th St (inset) 8a. Install RRFB

General Recommendations

- Conduct ADA Ramp Assessment
- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan **Covington Elementary School** Los Altos, CA

School Safety Assessment held February 2021

 Covington at school driveway

 Update school crossing sign to Assembly B with down arrow
 Construct raised crosswalk
 Install ADA ramps on both sides of sidewalk at loop

 Maduate the with extension processes to the update school crosswalk

 1d. Work with existing homeowner to trim vegetation at crosswalk

Covington Rd near Bellevue Ct 2a. Install speed feedback sign

Covington Rd and Fremont Ave 3a. Evaluate potential for roundabout 3b. Install crosswalk

Covington Rd and El Monte Ave 4a. Extend the walk phase across El Monte Ave 4b. Construct curb extension on southeast corner

El Monte Ave 5a. Add buffers to existing bike lane

El Monte Ave and Shirlynn Ct 6a. Install crosswalk with pedestrian refuge island and RRFB

Giffin Rd 7a. Construct pedestrian path to fill sidewalk gap

San Antonio Rd and Cuesta Dr/1st St 8a. Install ADA ramps on all corners except northwest 8b: Install high-visibility crosswalk on free right turn lane, and evaluate potential for raised crosswalk 8c. Refresh all crosswalks 8d. Fix bike route sign facing wrong direction (east of intersection on north side of Cuesta Dr)

Cuesta Dr and Tyndall St 9a. Move stop bar back on Tyndall St (north side)

Cuesta Dr and Lassen St

10a. Reconstruct sidewalk where tree root has lifted concrete (east of Lassen)

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

> 300 ft 600 ft

Ν



- 11 Cuesta Dr and Gabilan St 11a. Install RRFB and ADA ramps on east leg at existing high-visibility crosswalk
- Cuesta Dr and El Monte Ave 12a. Install ADA ramps on northeast, southwest, and southeast legs of 12 intersection 12b. Tighten turning radius on southwest corner
- 13 Arboleda Dr
 - 13a. Install Assembly A school warning signage on Arboleda Dr
- Cuesta Dr and Campbell Rd 14a. Install advance stop bars on west side of intersection 14b. Install ADA ramps 14
- Arboleda Dr and Campbell Rd 15a. Install high-visibility crosswalks, including potential enhancements such 15 as median refuge or actuated beacon
- Campbell Rd and Rosita Ave 16a. Update School Crossing signs to Assembly B with down arrow 16
- Campbell Rd 17a. Construct pedestrian path 17
- Clark Ave 18 18a. Repair and widen existing sidewalk / berm-protected walkway

Clark Ave and Cuesta Dr 19a. Install high-visibility crosswalk across Cuesta Dr, including potential 19 enhancements such as median refuge or actuated beacon 19b. Install yellow transverse crosswalk on north leg of intersection

General Recommendations

- Conduct ADA Ramp Assessment
- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Egan Junior High School and Bullis Charter School Los Altos, CA

School Safety Assessment held February 2021

Portola Ave at west driveway 1a. Update crosswalks at driveway to ladder style 1b. Install stop pavement markings and advance stop bar 1c. Install "Keep Clear" markings outside driveway 1d. Install "Yield to Pedestrians and Bicycles" signage at driveway 1e. Construct curb extensions with upgraded ADA ramps on

both corners of exit side

If. Refresh crosswalk striping and add advance yield lines 1g. Install school loading zone signage and curb markings

Portola Ave at Pleasant Way 2a. Refresh crosswalk and add advance yield lines 2b. Add School Crossing signs to back of existing signs 2c. Install standard crosswalk across Pleasant Way 2d. Install speed hump warning signs

Portola Ave at east driveway 3a. Refresh "Keep Clear" markings, and add 24" bars 3b. Upgrade to ladder crosswalk 3c. Install stop pavement markings and advance stop bar 3d. Keep existing stop signs on both sides of driveway exit

Portola Ave at Santa Rita Ave 4a. Install all-way stop

Portola Ave at Los Altos Ave 5a. Consider constructed curb extensions at all corners 5b. Refresh existing high-visibility crosswalk

Portola Ave at Westminster Ln 6a. Install crosswalk

Portola Ave at Carmel Ave

7a. Install back-to-back School Crossing signage 7b: Refresh painted crosswalk, and update to ladder crossing 7c. Refresh painted curb extension 7d. Add crosswalk across Carmel

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

> 250 ft 500 ft

Ν



8 Portola Ave at Linden Ave 8a. Update sign to "School Zone Ahead" Portola Ave at Mercedes Ave
 9a. Add School Crossing signs to back of existing signs, and update all signs to most current assembly if necessary 9b. Refresh crosswalk striping and add advance yield lines 10 Portola Ave (between Los Altos Ave and San Antonio Rd) 10a. Install bike boulevard markings and signage **11** Portola Ave and San Antonio Rd 11a. Add bike boxes on Portola Ave at the approach to San Antonio Rd intersection (both sides)
11b. Upgrade ped push button to "wave" buttons (whole intersection)
11c. Upgrade crosswalks to high visability
11d. Remove parking and expand sidewalk from Bullis to San Antonio Rd 12 Portola Ave, east of Pico Ln 12a. Refresh red curb 12b. Add reflectors to edge line 12c. Reconstruct sidewalk where buckling 13 Portola Ave at Nela Ln 13a. Add crosswalk at Nela Ln **General Recommendations**

- Conduct ADA Ramp Assessment
- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Los Altos High School Los Altos, CA

School Safety Assessment held February 2021

1 Almond Ave at loop entrance 1a. Refresh existing high-visibility raised crosswalk 1b. Refresh existing "Keep Clear" pavement markings

Almond Ave at loop exit and main driveway 2a. Install "Keep Clear" pavement markings in front of main school driveway 2b. Install stop sign at driveway exits 2c. Install advance stop bars at driveway exits 2d. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage at driveway exits

Almond Ave at west driveway exit 3a. Install stop sign at driveway exit
3b. Install advance stop bars at driveway exit
3c. Install "Turning Vehicles Yield to Bikes and Pedestrians"

signage at driveway exit

4 Almond Ave and Velencia Dr 4a. Upgrade existing transverse crosswalk to high-visibility 4b. Consider extending curbs to reduce curb radii and pedestrian crossing distance

5 Almond Ave and San Antonio Rd 5a. Move stop bars back from crossing on San Antonio

6 Valencia Dr 6a. Install pedestrian path on west side of Valencia 6b. Designate Bike Boulevard 6c. Install speed cushions along Valencia 6d. Install high-visibility crosswalks on side streets

Valencia Dr and Jardin Dr

7a. Install all-way stop7b. Install curb extensions on northeast and southest corners7c. Install high-visibility crosswalks at all legs of intersection

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

N

* Under Construction in 2021

600 ft 300 ft



Jardin Dr

- Option A) Convert parallel parking to back-in angled parking, remove bicycle lanes, and install traffic calming speed humps and bicycle
- boulevard markings Option B) Install separated bikeway on south side of Jardin with low curb between parallel parking and bikeway; keep bicycle lane on north side of
- Jardin in-place Additional study and community input needed for each option.



11

9

10 Alicia Way, between Jardin Dr and Almond Ave 9a. Designate Bike Boulevard

Almond Ave and Doud Dr 10a. Install transverse crosswalk

Almond Ave and Verano Dr 11a. Install transverse crosswalk.

General Recommendations

- Conduct ADA Ramp Assessment
- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Loyola Elementary School Los Altos, CA

School Safety Assessment held February 2021

1 Berry Ave and Springer Rd 1a. Update all crosswalks to high-visibility 1b. Install advance stop bars at all legs of intersection

Berry Ave and Brentwood St 2a. Upgrade existing crosswalk to high-visibility

School driveway entrance (west) 3a. Install "Keep Clear" pavement markings

School driveway (center) 4a. Install "Keep Clear" pavement markings 4b. Install advance stop line and pavement marking 4c. Install red curb between center driveway and east driveway

School driveway exit (east) 5a. Install "Keep Clear" pavement markings 5b. Install advance stop line and pavement marking 5c. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage at driveway exit

6 Berry Ave crossing at pedestrian path connection 6a. Reconstruct raised crosswalk 6b. Replace existing signage with current Assembly B "School

Crossing" sign (back-to-back) 6c. Consider RRFB at this crossing 6d. Install advance yield lines on either side of raised crosswalk 6e. Install curb extension on both sides of crossing 6f. Repave pedestrian path on the north side, and reconstruct

barricade 6g. Install school loading zone signage and curb markings on south side of Berry from driveway exit to eastern edge of school property

Berry Ave and Golden Way 7a. Upgrade existing crosswalks on north and south leg of intersection to ladder-style 7b. Refresh existing high-visibility crosswalk across Berry Ave 7c. Install advance yield markings 7d. Install back-to-back Assembly B "School Crossing" signage

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

N

250 ft 500 ft



Berry Ave and Russell Ave 8a. Upgrade existing crosswalk on south leg of intersection to ladder-style 8d. Install advance yield markings 8

- Berry Ave and Miramonte Ave
 9a. Install all-way stop
 9b. Upgrade west crosswalk to ladder-style
 9c. Install truncated domes on curb ramps on west and east sides of Miramonte Ave

General Recommendations

- Desginate a bike boulevard along Berry Ave
- Conduct ADA Ramp Assessment
- Conduct sign audit to ensure all signs are current
- Add yellow reflector bands to all school signs



Safe Routes to Schools Improvement Plan Montclaire Elementary School Los Altos, CA

School Safety Assessment held February 2021

St Joseph Ave at school driveway 1a. Install crosswalks at both ends of driveway 1b. Install Keep Clear markings on St Joseph at driveway entrance and exit

St Joseph Ave and Scott Ln 2a. Install an all-way stop on St Joseph at Scott Ln 2b. Install advance stop bar markings

St Joseph Ave 3a. Install Bike Boulevard markings and signage from Scott Lane to Eva Ave 3b. Install bike lane from Scott Ln west

4 St Joseph Ave and Eva Ave 4a. Upgrade existing crosswalks to yellow paint 4b. Add transverse yellow crosswalk markings across St. Joseph Ave

5 St Joseph Ave near Robles Ranch Rd 5a. Fill gap in sidewalk along southeast side

Grant Rd and Morton Ave 6a. Repair existing RRFB system

7a. Restrict parking on the west side of Grant Road between Morton Ave and Foothill Expy

8 Deodara Dr and Arboretum Dr 8a. Install an all-way stop on Deodara Dr at Arboretum Dr 8b. Consider painting curb returns red at all four corners

Deodara Dr and Vineyard Dr 9a. Install an all-way stop on Deodara Dr at Vineyard Dr

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current

- Add yellow reflector bands to all school signs

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2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.







Safe Routes to Schools Improvement Plan Mountain View High School Mountain View, CA

School Safety Assessment held February 2021

Bryant Ave 1a. Remove parking on south side of Bryant across from curb extension, and shift lanes to close gap in bike lane on north side of street

1b. Upgrade existing bike lanes to buffered bike lanes

2 Bryant Ave and Truman Ave 2a. Refresh high-visibility crosswalks

School driveway 3a. Install stop signs at driveway exits 3b. Install "Keep Clear" pavement markings in front of main school driveway

4 Truman Ave and Bruckman Circle (south) 4a. Install advance yield lines 4b. Install back-to-back School Crossing signage

5 Truman Ave and Oak Ave For improvements at this intersection, please see Oak Avenue Elementary School Improvement Plan

 Truman Ave and Fremont Ave (inset)
 6a. Install RRFB at existing crosswalk
 6b. Upgrade existing curb extension posts and hatch curb extension area

6c. Prune tree in median so that pedestrian lighting is not blocked

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current

- Add yellow reflector bands to all school signs

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2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

> 250 ft 500 ft Ν





Safe Routes to Schools Improvement Plan Santa Rita Elementary School Los Altos, CA

School Safety Assessment held February 2021

School driveway loop entrance (Los Altos Ave) 1a. Reconstruct south corner to accomodate drainage and wider curb ramp

 b. Upgrade crosswalk across driveway to high-visibility
 1c. Install "Keep Clear" pavement markings in front of school driveway entrance

1d. Update school crossing signage to most recent 1e. Consider RRFB at crossing of Los Altos Ave 1f. Extend red curb on southeast side of crosswalk 1g. Consider putting out traffic cones on the edge line on both sides of crossing during drop-off and pick-up periods to prevent parking near crosswalk

School driveway loop exit (Los Altos Ave) 2a. Install stop pavement markings and advance stop bar at exit 2b. Upgrade crosswalk across driveway to high-visibility 2c. Install "Keep Clear" pavement markings in front of school driveway entrance 2d. Install "Do Not Enter" signage in addition to "Wrong Way"

Los Altos Ave at Alba Ct

3a. Update school crossing signage to most recent 3b. Construct raised crosswalk 3c. Consider RRFB at crossing of Los Altos Ave 3d. Extend red paint 20' on either side of the crosswalk

Los Altos Ave (south of Spagnoli Ct) 4a. Reconstruct sidewalk

Los Altos Ave and Pine Ln

5a. Install high-visibility crosswalks on all legs of intersection 5b. Install stop pavement markings and advance stop bar on all legs of intersection

5c. Reconstruct curb ramps on northeast, southeast, and southwest corners 5d. Paint 50' centerline at eastbound and westbound

approaches to intersection on Pine Lnv

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current

- Add yellow reflector bands to all school signs

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2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.









Safe Routes to Schools Improvement Plan Springer Elementary School Mountain View, CA

School Safety Assessment held February 2021

 School driveway / Rose Ave and Orangetree Ln
 1a. Restripe west crosswalk as high-visibility
 1b. Install "Keep Clear" pavement markings in front of school driveway (entrance and exit) 1c. Install stop sign on both sides of driveway exit 1d. Install advance stop lines at driveway exit 1e. Install "Turning Vehicles Yield to Bikes and Pedestrians" signage at driveway exit

2 Rose Ave and Limetree Ln 2a. Install Assembly A school warning signage

Springer Rd and Rose Ave 3a. Refresh high-visibility crosswalk at intersection

4a. Review public ROW to evaluate feasibility of reducing intersection width 4b: Study potential sidewalk with enhancements, including median refuge or actuated beacon 4c: Consider pedestrian path (per Ped Plan) 4d. Install "No Parking in Bike Lane" signage on Springer Rd

Cuesta Dr and Springer Rd 5a. Install a curb extension on southwest leg to tighten turning 5b: Construct raised crosswalk

Cuesta Dr north of Springer Elementary 6a. Upgrade crosswalks to high-visibility

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.

200 ft

400 ft N





Safe Routes to Schools Improvement Plan Oak Avenue Elementary School Los Altos, CA

School Safety Assessment held February 2021

1a. Install a time-of-day bike lane to Grant Rd (parking permitted at designated hours; bike lane only during daytime hours) to connect to existing bicycle lanes on Grant Rd.

Marinovich Way at Oak Ave 2a. Conduct stop warrant analysis on Marinovich

3a. Conduct stop warrant analysis on Chelsea 3b: Install stop pavement marking and advance stop bar 3c: Install transverse yellow crosswalk marking on Chelsea

Marlbarough Ave and Oak Ave 4a. Refresh existing high-visibility crosswalk 4b: Install advance yield line 4c: Add back-to-back pedestrian crossing signs on either side 4d: Install curb extension on north side

Oak Ave school frontage 5a. Install 20 ft of red curb west of driveway 5d: Install 40 ft of red curb east of driveway 5e: Refresh red curb along school frontage

Oak Ave and Truman Ave 6a. Refresh existing high-visibility crosswalks at 4-way stop* 6b: Install advance stop bars at approach to crosswalks* 6c: Add curb extensions to Oak Ave crossing on NW and SW

General Recommendations

- Conduct ADA Ramp Assessment

- Conduct sign audit to ensure all signs are current

1) The above items are recommendations only and based on Safe Routes to Schools site assessment best practices. Feasibility determination, final design, accessibility, funding, and implementation of any recommended improvements is the responsibility of the appropriate governing agency.

2) Red curb and/or parking restriction signage should be provided between advance stop/yield markings and the crosswalk. Exact red curb distance should be determined in accordance with the CA-MUTCD and City policies/standards.





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RECOMMENDED IMPROVEMENTS

Bicycle Infrastructure Recommendations

This chapter presents proposed bikeways to address the needs of Los Altos bicyclists. These proposed improvements are defined directly in response to existing field conditions, the previous Bicycle Transportation Plan, and the goals for this Plan in Chapter 1. Community input gathered from public workshops, survey responses, stakeholder meetings, and participation in the online interactive webmap also helped inform project recommendations. Major considerations for the proposed bikeways were improving access to schools, community destinations and safety. Traffic congestion is a concern for Los Altos residents and school areas experience high levels of congestion during drop-off and pick-up periods. The bikeway recommendations in this CSMP prioritize school access improvements to create a viable alternative to vehicle trips as one way to reduce congestion.

The recommendations also link with existing and proposed bikeways in neighboring jurisdictions. This will enable Los Altos residents to access nearby destinations like Mountain View's downtown and Caltrain Station. These connections will also promote non-vehicle trips to Stanford University, Foothill College, and the Stevens Creek Trail, among many other regional destinations.

The complete list of projects identified in this chapter cannot be implemented by the City in the short-term, so this plan provides a list of Priority Projects that can be completed in the next five years as well as a framework for completing the additional identified projects. All recommendations are subject to additional study, funding availability, and consistency with updates to the City's General Plan. This Plan gives priority to bikeway projects that provide direct access to schools and community destinations, and provide cross-town connectivity.

The following section briefly describes the bikeway types needed to complete Los Altos' bikeway network. There are a number of factors used to determine bikeway type appropriate for each roadway. In general, roadway speeds and volumes inform the preferred type of recommended bikeway, however, available right-of-way is also a determining factor. This Plan recommends Class III bicycle routes on roadways where there is not enough right-of-way for a Class II bike lane.

Note: The City of Los Altos was initiating an update to the Housing Element of the General Plan at the time this plan was adopted. Additional housing may necessitate modifications to the proposed improvements in this plan to accommodate increased demand on city streets, sidewalks, and bikeways.

TYPES OF FACILITIES

This Plan recommends bikeways according to Caltrans classifications – Class I, II, III and IV as described in Chapter 2. The Plan also differentiates between standard bicycle lanes (Class II) and buffered bicycle lanes (Class IIB). A more detailed description of each bikeway facility is listed in the "toolbox" below.

NETWORK IMPROVEMENTS

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Recommendations for improvements to the bikeway network can be found in **Figure 16** on the following spread. A table of recommendations can be found in **Appendix B**. To illustrate how the recommendations relate to resolving safety issues, **Figure 16** shows bikeway recommendations in relation to the bicycle-involved collisions for the most recent five years when data is available.



Bikeway Toolbox



Shared-Use Path (Class I) Paths shared by people walking and biking that are completely separated from motor vehicle traffic. Caltrans classifies Shared Use Paths or Bike Paths as Class I bikeways.



Bike Lane (Class II) Dedicated lane for bicycle travel adjacent to traffic. Caltrans classifies Bike Lanes as Class II bikeways.



Buffered Bike Lane (Class II) Dedicated lane for bicycle travel separated from traffic by a painted buffer. Caltrans classifies Buffered Bike Lanes as Class II bikeways.



Bike Route (Class III)

Signed bike routes on slow speed residential streets where bicyclists share the roadway with motor vehicles. Caltrans classifies Bike Routes as Class III bikeways.



Separated Bikeway (Class IV)

On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier. The bikeway could be on either side of the street or combined to one side. These facilities are also known as Cycle Tracks. Caltrans classifies Separated Bikeways as Class IV bikeways.

Corridor Studies

The CSMP recommends the City undertake two studies to further evaluate opportunities, collect more public input, calculate benefits, and understand any potential tradeoffs.

LOS ALTOS AVENUE BIKEWAY STUDY



Los Altos Avenue looking south. Bicyclists use the onstreet parking lane when available to avoid vehicles moving at higher speeds.

Extents: Los Altos Avenue from El Camino Real to Edith Avenue

The Complete Streets Commission identified Los Altos Avenue as a potential bikeway corridor that could parallel the much busier San Antonio Avenue corridor. A study is needed to evaluate the impact of reallocating on-street parking for Class II bicycle lanes or other Complete Streets facilities. The study should collect parking data at multiple times of the day and days of the week to understand current utilization. The study should also collect input from residents.

DOWNTOWN ONE-WAY STREET STUDY



Main Street looking north. Main Street has parallel and angled parking, one vehicle travel lane in each direction, curb extensions at intersections, and decorative crosswalk markings.

Extents:

- 1. Whitney Street from 1st Street to San Antonio Road
- 2. State Street from 1st Street to Main Street
- 3. Main Street from Foothill Expressway to Edith Avenue/San Antonio Road

The Complete Streets Commission and members of the public identified three downtown streets as potential one-way streets. By converting these streets to one-way traffic, additional space could be made available for bicycle lanes, parklets (outdoor cafe space/seating), or consolidating vehicle parking from other areas. Trade-offs include the potential for higher traffic speed and increased congestion. A traffic study will be needed to determine the benefits and potential impacts. The study should also collect input from residents and businesses.

To illustrate how the recommendations relate to resolving safety issues, **Figure 17** shows bikeway recommendations in relation to the reported bicycle-involved collisions for the most recent five years when data is available.









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BICYCLE SUPPORT FACILITIES

Bicycle support facilities accommodate bicyclists at the end of their trips, provide bicycle-oriented devices at intersections and provide guidance along recommended bicycle route.

Bicycle Parking

The appropriate bicycle parking type and number of spaces at community destinations is critical in attracting bicyclists. Downtown Los Altos has many destinations that attract bicyclists, including coffee shops, ice cream shops, restaurants and retail shopping.

One way to accommodate bicycle parking demand in commercial areas with limited sidewalk width is to convert automobile parking spaces into Bicycle Corrals. Cities throughout the Bay Area, including Palo Alto and Berkeley, have installed on-street bicycle parking. Other cities, including San Mateo have developed plans to do the same.

The benefits of converting a fraction of automobile parking to Bicycle Corrals include increased parking capacity for downtown patrons. This helps support increased retail activity and reduces vehicle miles traveled in Los Altos by encouraging more bicycle trips.

Beyond these benefits, parking spaces cost the City in terms of land value. In the Bay Area, the land value of an on-street parking space is nearly \$20,000. Los Altos does not charge motorists for parking downtown. Therefore, more benefit can be obtained from a parking space by increasing its capacity so that more people can patronize local businesses, from which the City collects tax revenue.





Recommendation

The City should develop a bicycle parking strategy plan as outlined below, as budget and staff time permit.

- Commission an interdepartmental effort to develop a bicycle parking requirement ordinance based on land use.
- Refer to the Association of Bicycle and Pedestrian Professionals (APBP) Bicycle Parking Guide for direction in developing an ordinance, selecting location, appropriate bicycling parking types and installing bicycle parking.
- Implement a pilot bicycle parking program that replaces one automobile parking space with (up to eight) bicycle parking spaces. Potential locations include frontage of coffee and ice cream shops along State Street.
 Examples of on-street bicycle parking are found in Palo Alto and Berkeley.

Colored Bike Lanes at Conflict Areas

Bicyclists are especially vulnerable at intersections where lane configurations lead to merging and crossing of facilities serving both automobiles and bicyclists with significant speed differential and poor sight lines. Dedicated right-turn lanes often leave bicyclists unsure of proper positioning. At large or wide intersections, bicyclists may not know the proper path of travel and motorists may not know where to expect bicyclists. Most cities provide green conflict zone striping with all new street surfacing projects.

Recommendation

Based on the high number of bicyclerelated collisions and existing lane configurations, colored bicycle lanes should be installed on the following roadways approaching either Foothill Expressway or Fremont Avenue. Signage should be installed in advance and at the colored bike lanes to direct motorists that they must yield to bicyclists.

- St. Joseph Avenue at Foothill Expressway
- Springer Avenue at Foothill Expressway
- Grant Road at Foothill Expressway
- El Monte at Foothill Expressway
- Miramonte Avenue at Fremont Avenue
- Grant Road at Fremont Avenue



An example of green painted bike lane with skip boxes at merge areas where there could be a conflict between vehicles and bicycles.

Bicycle Detection at Traffic Signals

Traffic signals control traffic by either using timers or detection. Timed intersections are most often used on very high volume roadways, whereas signals with detection are most often used on moderate volume roadways, such as local roadways in Los Altos. Detection can be calibrated to sense bicycles so that bicyclists trigger green lights.

The City has installed loop and video detection that senses bicyclists at many . The City maintains an active inventory of locations with video detection systems or bike-sensitive inductive loops. The locations with loop detection do not have painted stencils indicating to bicyclists where to wait in order to trigger a green light.

Recommendation

This CSMP recommends installing more video or loop detection or tuning existing loops to detect bicycles at all signalized intersections with detection. The City should paint bicycle stencils on the loop detection to indicate proper positioning of bicyclists. Stencils should be painted in a bicycle lane, or if a bicycle lane is not present, stencils should be painted in the middle of the outside through lane. Stencils should not be installed in dedicated right turn lanes. Caltrans Deputy Directive 64 stipulates the consideration of all non-motorized users in all maintenance, construction and operation activities.



Wayfinding Signs

To support easy navigation for pedestrians and bicyclists, cities are developing and installing comprehensive wayfinding or directional signage. Signs may also include "distance to" information, which displays mileage to community destinations. A citywide wayfinding system can raise awareness and improve access for residents and visitors to community assets such as downtown, Loyola Corners, City Hall, schools, and parks. The wayfinding system could also point out routes to access regional connections such as the Los Altos-Palo Alto Trail.

The design of wayfinding signs can vary depending on the City. Guide signs may follow CA MUTCD standards, which use additional plaques that display destinations and mileage. The City would mount these plaques under existing bike route and lane signs. Alternatively, the City may decide to design wayfinding signs that exhibit a unique facet of Los Altos. These signs display the community's identity and support of bicyclists.

Los Altos has many non-square bikeway intersections that can be confusing to navigate on a bicycle. Bicyclists often have to navigate a jog in an intersection to continue the same direction of travel. Wayfinding signs installed at these intersections will help in these situations, in addition to directing bicyclists to local and regional attractions.

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Development of a wayfinding signage plan requires interdepartmental and stakeholder collaboration to determine sign display design, the frequency that signs should be installed and the destinations to be displayed on each sign. Staff, consultants or volunteers with significant bicycling experience and knowledge of the local network should be involved to ensure local needs are met.

Recommendation

The City should develop a wayfinding sign plan as budget and staff time permit. The City should also examine pavement markings as a first measure, the City should install wayfinding signs at the following skewed intersections:

- Pine Lane at Alvarado Avenue
- Marich Way at Portola Avenue
- Panchita Way at Valencia Drive
- Casita Way at Alicia Way
- Alicia Way at Gordon Way
- Camellia Way at S. Clark Avenue and E. Edith Avenue
- Clark Avenue at Campbell Avenue
- Truman Avenue at Newcastle Avenue



The City should develop their own branded way finding signs such as the example from Jackson Hole or use standardized Bicycle Route signage. The image above shows directional signage placed along a bicycle boulevard in Palo Alto.





The City should explore pavement markings that can augment directional signage. Bicycle Boulevard stencils such as the image shown here is one example.

Pedestrian Infrastructure Recommendations

TYPES OF FACILITIES

The following section presents recommended pedestrian network improvements. Recommendations were identified through community input, City staff, and the previously adopted Pedestrian Master Plan. Proposed improvements, shown in **Figure 14**: Pedestrian Network Recommendations, are intended to make walking trips more comfortable, enjoyable, and safer for pedestrians of all ages and abilities and all trip purposes. These recommendations are broken into pedestrian walkway improvements (e.g., sidewalks and walkways) and spot improvements (e.g., at intersections). All recommendations are subject to additional study, funding availability, and consistency with updates to the City's General Plan.

Pedestrian Walkway Recommendations (**Table 6**) are located on street segments and include two types of recommendations. The first recommendation called Dedicated Walkways identifies locations for the City to fill in gaps with new walkways. Walkways could be concrete sidewalks, paved street shoulders with an asphalt berm, or crushed gravel walking paths. The City will coordinate with adjacent landowners prior to design and construction. The other recommendation type is Enhancement & Major Maintenance. This recommendation expands or rebuilds

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existing walkways to make them more comfortable for people who walk.

Spot Improvement Recommendations (**Table 7**) presents modifications at roadway intersections. Each intersection has a project ID number that corresponds to the map on **Figure 14**: Pedestrian Network Recommendations. Each intersection was evaluated for 24 possible improvements that fit within the following categories:

- Roadway Design
- Crossing Improvement
- Signs & Signals

A more detailed description of each pedestrian recommendation is listed in the "toolbox" on the following pages. This list represents the most commonly used spot improvement tools, but is not meant to be all inclusive. **Table 7** includes the recommended quantities for each specific improvement. To illustrate how the recommendations relate to resolving safety issues, **Figure 19** shows pedestrian recommendations in relation to the reported pedestrian-involved collisions for the most recent five years when data is available.

Pedestrian Corridor Toolbox



ASPHALT WALKWAY

ASPHALT BERM

CONCRETE SIDEWALK

Dedicated Walkways

This recommendation calls for new dedicated walkways. In Los Altos, a dedicated space for pedestrians can take many different forms that preserves the local rural character. They can be at the same level as the street marked with paint or separated with an asphalt berm between motor vehicle lanes. Dedicated walkways can also be elevated from the roadway and made out of concrete or asphalt (see Los Altos example images above). Dedicated walkways must adhere to ADA standards.

Walkway Enhancement & Major Rehabilitation

This recommendation repairs or widens existing dedicated walkways to create a more comfortable experience and brings the sidewalk into compliance with ADA standards.





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Figure 19 Pedestrian Network Recommendations and Reported Pedestrian–Involved Collisions



Los Altos Complete Streets Master Plan: An Active Transportation Framework | Recommended Improvements

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Street	Start	End	Туре
Alicia Way	Almond Ave	Jardin Dr	Dedicated Walkways
Altamead Dr	School	Grant Rd	Dedicated Walkways
Campbell Ave	Rosita Ave	Covington Rd	Dedicated Walkways
Fremont Ave	Permanente Creek	Lisa Lane	Dedicated Walkways
Grant Rd	Preston Dr	Foothill Expy	Dedicated Walkways
Jordan Ave	250' from El Camino	115' from El Camino	Dedicated Walkways
Los Altos Ave	Mariposa Ave	Yerba Santa Ave	Dedicated Walkways
N Gordon Way	Edith Ave	Almond Ave	Dedicated Walkways
Oak Ave	Grant Ave	50' west of Marinovich Way	Dedicated Walkways
Portland Ave	Carmel Ter	200' east of Carvo Ct	Dedicated Walkways
San Antonio Rd	Sherwood Ave	El Camino Real	Dedicated Walkways
Sherwood Ave	San Antonio Rd	El Camino Real	Dedicated Walkways
Springer Rd	Berry Ave	Los Altos city limit (N of Covington Rd)	Dedicated Walkways
Springer Rd	Todd St	Cuesta Ave	Dedicated Walkways
St Joseph Ave	Robles Ranch Rd	Granger Ave	Dedicated Walkways
Truman Ave	Oak Ave	Fremont Ave	Dedicated Walkways
Cristo Rey Dr	Foothill Blvd	City Limit	Dedicated Walkways
Clark Ave	El Monte Ave	Cuesta Dr	Walkway Enhancement & Major Maintenance
Cuesta Dr	San Antonio Rd	Tyndall St	Walkway Enhancement & Major Maintenance

Table 6 Pedestrian Walkway Recommendations

Street	Start	End	Туре
Portola Ave	San Antonio Rd	Jordan Ave	Walkway Enhancement & Major Maintenance
El Camino Real	Palo Alto border	Mountain View border	Walkway Enhancement & Major Maintenance
El Monte Ave	Cuesta Dr	Foothill Expy	Walkway Enhancement & Major Maintenance
El Monte Ave	Edith Ave	Hawthorne Ave	Walkway Enhancement & Major Maintenance
Fremont Ave	Lisa Ln	Grant Rd	Walkway Enhancement & Major Maintenance
Hawthorne Ave	El Monte Ave	Eleanor Ave	Walkway Enhancement & Major Maintenance
S El Monte Ave	Bay Tree Ln	225' south of Woodstock Ln	Walkway Enhancement & Major Maintenance
San Antonio Rd	Almond Ave	El Camino Real	Walkway Enhancement & Major Maintenance

ROADWAY DESIGN



Curb Extension

Curb extensions, or bulb outs, are extensions of the sidewalk and curb at the corners of intersections. They shorten the roadway crossing distance and make pedestrians more visible to motorists. They can also help calm traffic by narrowing the travel lane, and provide additional space for plantings and street furnishings.



Curb Radius Reduction

Shorter turn radii at intersections shorten the crossing distance for pedestrians and require vehicles to turn more slowly.



Construct Sidewalk or Ped Walkway

Constructing a sidewalk or pedestrian walkway can provide important connections and improve walkability by providing comfortable routes to important destinations.

ROADWAY DESIGN



Modify Skewed Intersection

Skewed intersections can often be realigned to improve safety. This typically involves changing the angles where roads meet, introducing traffic circles or curb extensions, or reducing corner radii to increase visibility, predictability, and reduce speeds.



Neighborhood Traffic Circle

Neighborhood traffic circles are raised. circular islands placed in the middle of local roadway intersections that control turning movements and help reduce vehicle speeds by forcing slow turns in a predictable manner. Additional benefits include reductions in local air and noise pollution from the removal of stop -and-go traffic, as well as visual and environmental benefits of added landscaping and tree planting opportunities.



Modern Roundabout

Modern roundabouts are intersections where drivers travel around a central island in a counterclockwise rotation. Outside traffic yields to traffic already inside the roundabout, which does not stop moving before exiting.

ROADWAY DESIGN



Bike Skip Boxes Through Intersection

Bike Skip Boxes identify conflict areas for motorists, helping to increase their awareness for cyclists who may be in the bike lane.



Bike Boxes/ Green Bike Lane Approach

Bike Boxes designate an area for bicyclists to queue in front of automobiles at signalized intersections. These designs increase visibility and reduce vehicle incursion into crosswalks.



Traffic Calming

Traffic Calming is a term used for streetscape elements designed to reduce vehicle speeds and unpredictability. Traffic calming elements range from vertical elements, like speed cushions, to horizontal elements, like curb extensions.

ROADWAY DESIGN





Right-Turn Slip Lane Removal

Slip lane removal can significantly improve pedestrian safety at certain intersections. Slip lanes do not require vehicles to stop and drivers can often be focused on merging, which can create a safety concern for bicyclists and pedestrians. Replacing slip lanes with right turn lanes can change traffic patterns to be more tailored to active transportation users.

Shared Street (Woonerf)

Shared Streets are streets where all roadway users have a right to use the space without prioritization of motor vehicles. Shared Streets often feature narrow lanes, chicanes, and other traffic calming treatments to keep vehicle speeds low. Shared Streets are sometimes referred to as woonerfs, due to their Dutch origin.

CROSSING IMPROVEMENTS



High Visibility Crosswalk Marking

High Visibility Crosswalks are enhanced crosswalks that clearly define the pedestrian space and help to deter vehicle encroachment. The continental type shown here is one of the most common configurations.



Advance Yield/Stop Lines

Advance Yield Lines are triangular pavement markings placed in advance of a marked pedestrian crossing to alert motorists to the upcoming crossing. From the advance position, motorist visibility of the crosswalk is also improved. Advance yield have been shown to increase yield rates. Stop lanes are placed in advance of a stop sign and alert motorists of where they should stop.



Curb Ramp

Curb Ramps gradually transition pedestrians from the sidewalk to the street. Properly designed curb ramps are critical for people with disabilities and those using wheeled mobility devices to improve access to and from curbed sidewalks. Intersections should have curb ramps at each crossing, directly in line with crosswalks. Crosswalks orienting pedestrians directly into crosswalks, towards the curb ramp on the other side of the street, help reduce crossing distances. Ramps should also have tactile warning strips, such as truncated domes, to safely accommodate users with vision impairments.

CROSSING IMPROVEMENTS





Raised Crossing

Raised Crossings are a traffic calming element that help reduce vehicle speeds by introducing a grade change on the roadway. In addition, raised crossings can provide an at-grade transition for pedestrians crossing the street and increase pedestrian visibility, due to their higher elevation relative to drivers.

Pedestrian Refuge Island

Pedestrian Refuge Islands are typically areas at the midpoint of a marked crossing that prove a safe waiting space for pedestrians. They minimize pedestrian exposure by shortening crossing distances and allowing pedestrians to cross one direction of traffic at a time.



Pedestrian-Scale Lighting

Pedestrian-Scale Lighting creates a more friendly environment by using shorter posts and more appropriately sized fixtures to illuminate the streetscape. This style of lighting provides adequate illumination for pedestrians and roadway users, while reducing the amount of upward exposure.

CROSSING IMPROVEMENTS





Standard/ Transverse Crosswalk

Transverse crosswalks indicate where pedestrians should cross a roadway. Standard or transverse crosswalks typically describe crosswalk marking with two parallel lines.

Pedestrian Undercrossing/Overcrossing

Pedestrian Undercrossings and Overcrossings are infrastructure that separates pedestrians from busy roadways, usually by bridge or tunnel, allowing them to cross without conflicting with motor vehicles.

SIGNS AND SIGNALS





Stop Sign/Warrant Analysis

Stop Sign or Signal Warrant Studies evaluate whether there is sufficient vehicle or pedestrian volumes at an intersection to warrant the installation of traffic controls. Changes in land use can increase traffic volumes, necessitating installation of stop signs or traffic signals.

Rectangular Rapid Flashing Beacon (RRFB)

Rectangular Rapid-Flashing Beacons are user-activated pedestrian signals that use flashing yellow lights to alert motorists to the presence of pedestrians in the crosswalk. They can be installed in mid-block locations or at intersections where a full traffic signal is not warranted. In residential areas, alternative flashing signs may be considered that illuminate the perimeter of the sign.



Pedestrian Hybrid Beacon/HAWK

Pedestrian Hybrid Beacons, also known as High-Intensity Activated Crosswalk Beacons (HAWKs), are user-activated traffic control devices that cycle through a flashing yellow, steady yellow, and then steady red light to stop vehicles and allow pedestrians to cross a road safely. They can be installed in mid-block locations or at intersections where a full traffic signal is not warranted. Research suggests that PHBs are more effective at inducing motorist compliance on highvolume, high-speed roadways than RRFBs.

SIGNS AND SIGNALS





Leading Pedestrian Intervals are pedestrian-only crossing signals that occur slightly before the green signal for parallel lanes of vehicle traffic. They allow pedestrians to get a head-start in the crosswalk, making them more visible to turning motorists.



"Yield Here to Peds" Sign

This signage helps reiterate that pedestrians have the right-of-way at crosswalks where there are no stop signs or traffic lights.

Table 7Spot Improvement Recommendations

						Road	way D	esign						(Cross	ing In	nprov	emen	t			Signs	5 & Si	gnals			Cate	gory	
The number i intersection. the St. Joseph Project ID	n each cell indicates how many of each treatment is recommended at each For example four (4) curb extensions are recommended for Project ID 1 at Avenue, Foothill Expressway, and Grant Road intersection.	Curb Extension	Curb Radius Reduction	Construct Sidewalk or Ped Walkway	Modify Skewed Intersection	Neighborhood Traffic Circle	Modern Roundabout	Bike Skip Boxes Through Intersection	Bike Boxes/ Green Bike Lane Approach	Traffic Calming	Right-Turn Slip Lane Removal	Shared Street (Woonerf)	High Visibility Crosswalk Marking	Advance Yield/Stop Lines	Curb Ramp	Raised Crossing	Pedestrian Refuge Island	Pedestrian-Scale Lighting	Standard Crosswalk	Pedestrian Undercrossing/ Overcrossing	Stop Sign/ Warrant Analysis	Rectangular Rapid Flashing Beacon (RRFB)	Pedestrian Hybrid Beacon/HAWK	Leading Pedestrian Interval	"Yield Here to Peds" Sign	Signalized	Unsignalized	Midblock	High Collision
1	St Joseph Avenue/ Foothill Expressway/Grant Rd	4						4	4	1	3		3	4	6		1							1		х			
2	St Joseph Avenue/ Eva Avenue												3		3												х		
3	Foothill Expressway/ El Monte Avenue							4	4		4		4	4										1		х			
4	Granger Avenue/ Loyola Avenue							2					5	4													Х		
5	Fremont Avenue/ Truman Avenue	2						1						2		1		1				2					х		Х
6	Jordan Avenue/ Marich Way																					2					х		
7	Jordan Avenue/ Portola	2													3	1											х		
8	Casita Way/ Cecila Way																										х		
9	San Antonio Road/ Main Street						1						5	5												х			
10	Covington Road/ Miramonte Avenue									1				4													х		
11	Miramonte Avenue/ Berry Avenue	3								1						1		1			2						х		
12	State Street/ Main Street	3											2	3							1						х		
13	Main Street/ Foothill Expressway										4		4		8		2									Х			
14	San Antonio Road/ Hillview Ave												2	3									1			х			

						Roadw	vay D	esign						(Crossi	ing Im	prove	ement	t			Signs	s & Sig	gnals			Categ	ory	
The number in intersection. the St. Joseph Project ID	n each cell indicates how many of each treatment is recommended at each For example four (4) curb extensions are recommended for Project ID 1 at Avenue, Foothill Expressway, and Grant Road intersection.	Curb Extension	Curb Radius Reduction	Construct Sidewalk or Ped Walkway	Modify Skewed Intersection	Neighborhood Traffic Circle	Modern Roundabout	Bike Skip Boxes Through Intersection	Bike Boxes/ Green Bike Lane Approach	Traffic Calming	Right-Turn Slip Lane Removal	Shared Street (Woonerf)	High Visibility Crosswalk Marking	Advance Yield/Stop Lines	Curb Ramp	Raised Crossing	Pedestrian Refuge Island	Pedestrian-Scale Lighting	Standard Crosswalk	Pedestrian Undercrossing/ Overcrossing	Stop Sign/ Warrant Analysis	Rectangular Rapid Flashing Beacon (RRFB)	Pedestrian Hybrid Beacon/HAWK	Leading Pedestrian Interval	"Yield Here to Peds" Sign	Signalized	Unsignalized	Midblock	High Collision
15	1st Street/ San Antonio Road/ Cuesta Drive	1							2		1		3	3	3											х			
16	Altos Oaks Drive/ Fremont Ave	2											1	1													х		
17	Covington Road / Riverside Avenue	2												1													х		
18	Covington Road/ Campbell Avenue																										х		
19	Cuesta Drive/ Gabilan Street													2	5							2					х		
20	Dolores Ave / Maple Lane		1	1	1									2													х		
21	Edith Avenue / Gordon Way	4												4					2								х		
22	El Monte Avenue / Almond Ave	3								1																	х		
23	El Monte Avenue / Cuesta Drive	3		1				4	4				4	4	4									1		х			
24	El Monte Avenue/ Clark Ave	1			1			1					1	2	1		1					2					х		
25	El Monte Avenue/ Springer Rd				1		1			1	2																х		
26	El Monte Ave / University Ave	4						4	4	1			4	4	4		4							1		х			
27	Fardon Avenue / Christ Drive		2		1	1																					х		
28	Foothill Expressway/ Arboretum Drive		4					4	4		4		2	2	3		2							1		х			

					1	Roadv	vay D	esign							Crossi	ing Im	prove	ement	:			Signs	& Sig	nals			Cate	gory	
The number in intersection. the St. Joseph Project ID	n each cell indicates how many of each treatment is recommended at each For example four (4) curb extensions are recommended for Project ID 1 at Avenue, Foothill Expressway, and Grant Road intersection. Location	Curb Extension	Curb Radius Reduction	Construct Sidewalk or Ped Walkway	Modify Skewed Intersection	Neighborhood Traffic Circle	Modern Roundabout	Bike Skip Boxes Through Intersection	Bike Boxes/ Green Bike Lane Approach	Traffic Calming	Right-Turn Slip Lane Removal	Shared Street (Woonerf)	High Visibility Crosswalk Marking	Advance Yield/Stop Lines	Curb Ramp	Raised Crossing	Pedestrian Refuge Island	Pedestrian-Scale Lighting	Standard Crosswalk	Pedestrian Undercrossing/ Overcrossing	Stop Sign/ Warrant Analysis	Rectangular Rapid Flashing Beacon (RRFB)	Pedestrian Hybrid Beacon/HAWK	Leading Pedestrian Interval	"Yield Here to Peds" Sign	Signalized	Unsignalized	Midblock	High Collision
29	Foothill Expressway/ Springer Rd				1			4	4		4		4	4										1		х			
30	Fremont Avenue/ Miramonte Ave							1	2		2		2	2										1		х			
31	Hawthorne Avenue/ El Monte Avenue		2		1			2					2		2												х		
32	Los Altos Square																												
33	Fremont Avenue/ A Street							3	3				3	2										1		х			
34	Loyola Drive/ Foothill Expressway/ Expressway Ramps								2				2	2													х		
35	Loyola Drive/ Frontero Avenue							2					3	3													х		
36	N San Antonio Drive/ Sherwood Avenue							2					1	2			1												
37	Springer Road/ Fremont Avenue		3		1			1					3	3				1						1		х			
38	Springer Road/ Cuesta Drive	1						2	2		1		4	4	4		2										х		
39	W Edith Avenue/ 4th Street				1			1					3	4	4							2					х		
40	Fremont Avenue/ Fallen Leaf Lane	4											3	4			2	1				4			4		х		
41	San Antonio Avenue/ Loucks Avenue							2					2	3	4		1					2					х		Х

						Road	way D	esign							Cross	ing Im	prov	emen	t			Signs	5 & Si	gnals			Cate	gory	
The number i intersection. the St. Joseph Project ID	n each cell indicates how many of each treatment is recommended at each For example four (4) curb extensions are recommended for Project ID 1 at Avenue, Foothill Expressway, and Grant Road intersection. Location	Curb Extension	Curb Radius Reduction	Construct Sidewalk or Ped Walkway	Modify Skewed Intersection	Neighborhood Traffic Circle	Modern Roundabout	Bike Skip Boxes Through Intersection	Bike Boxes/ Green Bike Lane Approach	Traffic Calming	Right-Turn Slip Lane Removal	Shared Street (Woonerf)	High Visibility Crosswalk Marking	Advance Yield/Stop Lines	Curb Ramp	Raised Crossing	Pedestrian Refuge Island	Pedestrian-Scale Lighting	Standard Crosswalk	Pedestrian Undercrossing/ Overcrossing	Stop Sign/ Warrant Analysis	Rectangular Rapid Flashing Beacon (RRFB)	Pedestrian Hybrid Beacon/HAWK	Leading Pedestrian Interval	"Yield Here to Peds" Sign	Signalized	Unsignalized	Midblock	High Collision
42	1st Street/ Main Street																							1		Х			х
43	Angela Drive/ Cody Lane	2		1									1	1	2												х		х
44	Merritt Road/ N Gordon Wy	2											2	3													х		х
45	Almond Avenue/ Fornway Court		1					2					1	3	2							2					х		х
46	Rosita Avenue/Rose Lane			1																							х		х
47	Altos Oaks Drive/ Miramonte									1			1														х		х
48	Grant Road/ Bryant Avenue		1					2	3				2	2	3		1	1						1		х			х
49	Grant Road/ Altamead Drive	2						2					2	3													х		х
50	Fremont Avenue/ East of Belleville Way							2		1																Х		x	х
51	Homestead Road/ Fallen Leaf Lane							2		1			3				1	1									х		х
52	Miramonte Avenue/ A Street	2		1				2			1		2														х		
53	Stonehaven Drive/ Sierra Ventura Drive									1																			
54	Woods Lane/ Via Huerta/ Citation Drive			1																									
55	Deodara Drive/ Near St Joseph Avenue			1						1																		Х	

					1	Roadı	way D	esign						(Crossi	ng Im	prove	ement	t			Signs	& Sig	gnals			Cate	gory	
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56	Portland Avenue/ Miramonte Avenue									1			3		5												Х		
57	Midblock between Edith and Hillview on San Antonio Rd																				1							Х	
58	2nd Street (Main Street to Plaza North)											1																	
59	3rd Street (State Street to Plaza South)											1																	
60	Foothill Expy/I-280 Off-Ramp											1										1							
61	146 Main Street (Mid-block crossing)	2											1																
62	Jardin Dr/Valencia Wy																					1							
63	State Street/ Second Street																					1							
64	Arboretum/Deodora																					1							
65	Fremont Avenue and Grant Road										1																		
66	Camellia Way/Clark Avenue																1												
67	Clark Avenue/Springer Terrace																				3								
68	Clark Avenue/Benvenue Avenue																				4								



Green Stormwater Infrastructure can take many forms such capturing water runoff from the road in curb extension planting beds shown in the image above.

GREEN STORMWATER INFRASTRUCTURE

Section C.3.j.i.(2)(h) of the Municipal Regional Stormwater Permit states that municipalities are expected to appropriately incorporate green infrastructure requirements into planning documents.

Urban development has traditionally involved replacing natural landscapes with solid pavements and buildings, and using storm drain systems to carry increased amounts of stormwater runoff and pollutants directly into local streams. Green stormwater infrastructure (GSI), however, uses plants and soils to mimic natural watershed processes, capture stormwater, and create healthier environments.

The City encourages incorporating Green Stormwater Infrastructure into private and public projects throughout the City, as applicable within this plan. The City encourages use of the following strategies and methods in planning and project decisions:

- Minimize adverse effects on groundwater and surface water quality
- Maximize stormwater infiltration
- Slow, retain, and/or treat stormwater runoff

Projects guided by this CSMP should incorporate appropriate stormwater treatment measures to achieve stormwater quality and quantity standards and objectives in accordance with the City's Green Stormwater Infrastructure Plan and in compliance with the City's National Pollutant Discharge Elimination System (NPDES) permit. The SCVURPPPP Green Stormwater Infrastructure Handbook may be referenced for technical guidance on design of GSI measures and integration of GSI with public or private streets, parking lots, parks, and other applicable areas.

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CHAPTER

PROGRAMS

Existing Programs

Programs help encourage new bicyclists and teach existing bicyclists how to ride safely. Programs are commonly categorized into the six"E's": education, encouragement, evaluation, engagement, equity, and engineering (i.e., the recommended infrastructure projects identified in this plan). There are a variety of existing bicycle and pedestrian related programs in Los Altos. The City administers or participates in programs that encourage bicycling and walking, teach safe bicycling techniques, enforce rules of the road for bicyclists and motorists, and maintain bicycle and pedestrian facilities. Regional agencies also implement similar bicycle and pedestrian programs.

Citywide Crossing Guard Programs

The crossing guard program is entirely funded by the City of Los Altos and is managed by Los Altos Police Department. Police Department works with the crossing guard agency ACMS to support the schools and evaluate areas where crossing guards are needed on a weekly or bi-weekly basis. Police officers help with areas crossing guards can't cover and make them a priority. There are twenty-eight (28) sites with crossing guards in Los Altos.

City of Los Altos/CUSD Strategic Partnership Meetings

The City of Los Altos, CUSD, and FUHSD meet regularly to share school districts' updates, City project updates that affect the schools, and SRTS updates. The City of Los Altos mayor, city staff, school district staff and board members, and school principals attend these meetings that are also open to the public.

Countywide SRTS Efforts

The County of Santa Clara has a Safe Routes to School program, led by Santa Clara County Public Health. The County can provide technical assistance (trainings, workshops, resource development) to SRTS Providers. Safe Routes to School Providers meet on a quarterly basis. Meetings are led by Santa Clara County Public Health Department and Santa Clara Valley Transportation Authority (VTA), and supported by Traffic Safe Communities Network.

EDUCATION

Traffic Safe Communities Network

The County of Santa Clara guides a collaborative effort of stakeholders to reduce motor vehicle collisions and increase bicycle and pedestrian safety through the Traffic Safe Communities Network (TSCN). TSCN members include representatives from law enforcement, engineering, public health, education, judicial system and advocacy groups. The TSCN Bicycle and Pedestrian Work group promotes walking and biking through education, encouragement and public policy. Previously funded by a Caltrans Safe Routes to School grant, the group worked with schools in Santa Clara County, including Santa Rita Elementary, to encourage walking and biking to school.

Youth Bicycle Education

Annually, the Police Department's Traffic Team sends letters to each school in September offering bicycle education services. During a bicycle rodeo, the Traffic Safety Team teaches students rules of the road and bicycle riding skills in a contained and safe environment, typically on a playground or blocked off school parking lot.

Adult Bicycle Education

The Police Department has a history of providing bicycle education. Holding presentations for high-school-aged youth (15-18) and for adult bicycle clubs. The Police Department hopes to hold future presentations in an effort to reduce bicycle/ motor vehicle conflicts. Residents may call the Police Department to request a presentation.

ENCOURAGEMENT

Suggested Routes to School Maps and Bike to School Posters

The City of Los Altos provides suggested routes to school maps for 17 schoolson the City's website and on <u>SchoolRoutes.org</u>, which is optimized for mobile devices. Suggested routes generally include recommended sidewalks and bikeways, and illustrate traffic control and facilitated crossing locations for school-aged children. The maps help encourage parents to let their child walk or bike to school safely.

International Walk (and Bike) to School Day

Many communities celebrate International Walk to School Day in October and Bike to School Day in May. These events encourage families to try walking and biking in a supportive way and as a safe, fun, and easy form of travel.

Bike to Work Day

Bike to Work Day is an annual San Francisco Bay Area event that is usually held on the third Thursday in May. Since 2006, the Los Altos Complete Streets Commission (CSC) has hosted energizer stations on Foothill Expressway at Main Street to help encourage people biking to work on event day. The CSC hands out snacks, coffee and literature
educating bicyclists about local bikeways. Los Altos Bike to Work Day has grown in popularity, as measured by the number of bicyclists passing the energizer station.

GreenTown Los Altos/Hills

GreenTown Los Altos/Hills is a grassroots initiative of residents and businesses working to make Los Altos and Los Altos Hills more environmentally friendly. GreenTown goals include reducing vehicle miles traveled in Los Altos.

 Walk or Wheel (WoW) Program: Through their program "School WoW!" GreenTown has engaged with LASD schools in many SRTS activities from 2009 to 2020. The organization provides support to the school PTA representatives, helps LASD with student travel data collection and analysis, and organizes and promotes walk and bike events several times during the school year. They help the school district to identify barriers and challenges to walking and biking to school and make recommendations for the district and the City.

Recommended Programs

This section presents recommended programs to address the needs of Los Altos bicyclists and pedestrians. Programs help encourage new bicyclists and teach existing bicyclists how to ride safely. Programs are commonly categorized into the six"E's": education, encouragement, enforcement, equity, evaluation, and engineering (i.e., the recommended infrastructure projects identified in this plan).

VISION ZERO INITIATIVE

The number of people killed or severely injured in traffic crashes is trending up across the country. Vision Zero is a public commitment and cross-department initiative to reduce traffic injuries to zero.

The U.S. Department of Transportation has adopted a Safe System approach as the guiding paradigm to address roadway safety in support of Vision Zero. Federal, state, and regional grant programs are also prioritizing local jurisdictions who share a commitment to Vision Zero. A Safe System approach incorporates the following principles:

1. Death and Serious Injuries are Unacceptable.

A Safe System approach prioritizes the elimination of crashes that result in death and serious injuries.

2. Humans Make Mistakes.

People will inevitably make mistakes and decisions that can lead or contribute to crashes. The transportation system can

be designed and operated with the intention of minimizing the risk of certain types and levels of human mistakes, to reduce the likelihood of a crash between a vehicle and a pedestrian, and reduce the likelihood of death and serious injury if a crash occurs.

3. Humans Are Vulnerable

Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is humancentric and accommodates physical human vulnerabilities.

4. Responsibility is Shared

All stakeholders – including government at all levels, industry, non-profit/ advocacy, researchers, and the general public – are vital to preventing fatalities and serious injuries on our roadways.

5. Safety is Proactive

Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.

6. Redundancy is Crucial

Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people. For more information, see: <u>https://www.</u> <u>transportation.gov/NRSS/SafeSystem</u>

The plan recommends the City consider a Vision Zero program that adheres to the above principles. To better understand how a Vision Zero program can be effective, the Vision Zero Network has developed 9 Components of a Strong Vision Zero Commitment that the City should consider. To learn more, see:

https://visionzeronetwork.org/

9 Components of a Strong Vision Zero Commitment

Based on the experiences of early-adopter cities in the United States, these nine components have proven to be an effective high-level framework for communities considering a Vision Zero commitment. While these are not the only factors to consider, they are critical aspects to ensure a strong and lasting commitment to Vision Zero.

POLITICAL COMMITMENT

The highest-ranking local officials (Mayor, City Council, City Manager) make an official and public commitment to a Vision Zero goal to achieve zero traffic fatalities and severe injuries among all road users (including people walking, biking, using transit, and driving) within a set timeframe. This should include passage of a local policy laying out goals, timeline, stakeholders, and a commitment to community engagement, transparency, & equitable outcomes.

MULTI-DISCIPLINARY LEADERSHIP

An official city Vision Zero Taskforce (or Leadership Committee) is created and charged with leading the planning effort for Vision Zero. The Taskforce should include, at a minimum, high-ranking representatives from the Office of the Mayor, Police, Transportation (or equivalent), and Public Health. Other departments to involve include Planning, Fire, Emergency Services,



Public Works, District Attorney, Office of Senior Services, Disability, and the School District.

ACTION PLAN

Vision Zero Action Plan (or Strategy) is created within 1 year of initial commitment and is implemented with clear strategies, owners of each

strategy, interim targets, timelines, & performance measures.

EQUITY

City stakeholders commit to both an equitable approach to Vision Zero by establishing inclusive and representative processes, as well as equitable outcomes by ensuring measurable benchmarks to provide



safe transportation options for all road users in all parts of the city.

COOPERATION & COLLABORATION

A commitment is made to encourage meaningful cooperation and collaboration among relevant governmental agencies & community stakeholders to establish a framework for multiple stakeholders to set shared goals and focus on coordination and accountability.

SYSTEMS-BASED APPROACH

City leaders commit to and prioritize a systems-based approach to Vision Zero — focusing on the built environment, systems, and policies that influence behavior — as well as adopting messaging that emphasizes that these traffic losses are preventable.



DATA-DRIVEN

City stakeholders commit to gather, analyze, utilize, and share reliable data to understand traffic safety issues and prioritize resources based on evidence of the greatest needs and impact.

COMMUNITY ENGAGEMENT

Opportunities are created to invite meaningful community engagement, such as select community representation on the Taskforce, broader community



input through public meetings or workshops, online surveys, and other feedback opportunities.

For more visit the Vision Zero Network at visionzeronetwork.org. Questions or ideas? Contact leah@visionzeronetwork.org.

TRANSPARENCY

The city's process is transparent to city stakeholders and the community, including regular updates on the progress on the Action Plan and performance measures, and a yearly report (at minimum) to the local governing board (e.g., City Council).

VISION-44: CONETWORK

SAFE ROUTES TO SCHOOL TASK FORCE

A Safe Routes to School Task Force provides the inter-organizational coordination necessary to implement a Safe Routes to School (SR2S) program. Some Los Altos schools have implemented SR2S programs. However, a school district-wide effort to implement all four "E's" is lacking. Successful implementation of SR2S programs in every Los Altos school requires commitment from the school district and support from the City in the form of assisting in the procurement of funds. The SR2S Task Force would facilitate this coordination by bringing together the following stakeholders:

- City Council (BPAC, TC)
- School District
- Community Development
- Police Department
- Parent Teacher Association(s)
- Traffic Safety Communities Network (TSCN) (Public Health)
- Greentown Los Altos/Hills

Program implementation requires partnerships between all of these stakeholders, whose involvement would vary by program and level of interest. Partners should also include certified instructors who teach bicycle riding skills through bicycle rodeos. A typical instructor certification is from the League of American Bicyclists.

The Task Force would also work in a coordinated effort in the procurement of

programmatic funding. Eligible applicants vary by funding source, but cities are typically eligible for most funding opportunities. The Task Force members would support the City (or other member responsible for fund procurement) in applying for funds. Potential funding sources for these programs include:

- State and Federal Safe Routes to School
- (California) Office of Traffic Safety (OTS) grants
- Valley Transportation Authority (VTA) Vehicle Emissions
- Reduction at Schools (VERBS) grant
- Traffic Safety Community Network (TSCN) Mini-Grants
- Caltrans Active Transportation Program (ATP)

Coordination with Neighboring Communities

Not all Los Altos residents attend Los Altos schools. Many attend schools outside of the City, particularly in Mountain View. The Task Force would work with neighboring school districts and Safe Routes to School Task Forces (Palo Alto) in an interjurisdictional effort to improve walking and bicycling to school.

The Palo Alto Task Force has been successful hosting League of American Bicyclistscertified instructors who teach bicycle rodeos and safety presentations at schools. Recently, VTA awarded the City a VERBs grant to expand the Task Force's existing efforts to all Palo Alto schools in an effort to increase equity in programmatic implementation. This Task Force can serve as a model for Los Altos.

EDUCATION

Providing bicycle skills and rules of the road education to students and adults is critical to encourage more people to walk and bike. Two organizations, the Police Department and the Traffic Safety Communities Network (TSCN), have been instrumental in providing educational opportunities in Los Altos. Both organizations solicit interest from schools, the Los Altos School District and the City.

Implementing the proposed programs described in this section requires schools, the Los Altos School District and the City to actively submit interest in the bicyclerelated programming offered by the Police Department and TSCN. This CSMP recommends the Los Altos School District actively coordinate with each district school Parent Teacher Association (PTA) to identify bicycle-related education needs. TSCN programs in particular require demonstrated support from parent volunteers and teachers to assist in implementing the programs.

Providing bicycle and pedestrian education at the school level requires a coordinated effort between many organizations. Assembling a Safe Routes to School Task Force is a critical component in implementing a comprehensive district-wide education program.

Elementary School Transportation Education

Elementary school curriculum that includes walking, biking and risk avoidance lessons lead to established active transportation habits among children. Such skills lessons should be tailored to each grade level, successively building on the previous classes.

Instructors can teach beginning bicycling, which teaches children in grades three and four how to properly wear and fit a helmet, the rules of the road and allows children to practice balance and control in car-free environments (bicycle rodeos). In grades five and six, instructors may take children out on the road to practice navigating intersections and interacting with vehicles.

This CSMP recommends that the City work with the school districts in developing and implementing a comprehensive active transportation education program. This effort may begin with identifying a "parent champion" who will organize a SR2S Task Force.

Bicycle Rodeos

The Police Department and Traffic Safety Communities Network (TSCN) have conducted bicycle rodeos in Los Altos schools. Both of these organizations conducted bicycle rodeos in response to school interest. This CSMP recommends that the Los Altos School District actively requests annual bicycle rodeos at each school. In addition to police officers, bicycle rodeos should be taught by certified bicycle skills instructors. A typical certification is from the League of American Bicyclists.

Bicycle Rules of the Road for Adults

The Police Department offers bicycle safety presentations upon request. This CSMP recommends for the City to work with an advocacy group, such as the Silicon Valley Bicycle Coalition, to identify locations and dates for the Police Department to hold future presentations at least twice a year. Presentation dates could coincide with Bike to Work Month (May), International Walk (and Bike) to School Day (first Wednesday in October) or Earth Day (April 22nd).

Traffic Safety Campaign

Developed by the City of San Jose, the StreetSmarts traffic safety campaign uses print media, radio spots and television spots to educate people about safe driving, bicycling, skateboarding, and walking behavior. More information about StreetSmarts can be found at www. getstreetsmarts.org. San Jose developed the Street Smarts program in mind for regional sharing so that interested agencies could adopt the Street Smart Campaign without paying any copyright fees. The only fees are those required to have the design firm rebrand the materials with the local agencies name and logo. Los Altos could easily rebrand relevant materials to focus on the local context.

Should Los Altos decide to not rebrand StreetSmarts materials, local resources for conducting a traffic safety campaign can be maximized by assembling a group of local experts, law enforcement officers, business people, civic leaders, and dedicated community volunteers. It may be necessary to develop creative strategies for successful media placement in order to achieve campaign goals. The Federal Highway Administration provides resources detailing elements of a successful local safety campaign.

Pedestrian Safety Workshops

Pedestrian safety resources and workshops are available through regional organizations like the Santa Clara County Department of Public Health. This Plan recommends the City work with CSC and/or allied non-profit organizations to develop safety materials and education, to host pedestrian safety workshops at City Hall, and encourage additional workshops in Los Altos. The workshops could include information encouraging walking as a safe, stressrelieving commute mode, as well as instruction about traffic laws for pedestrians and other road users.

Safe Routes for Seniors

Senior citizens and disabled community members are more vulnerable as pedestrians. A program targeting such groups could include information specific to the needs of the seniors and disabled. Presentations should be conducted at community centers, churches, clubs, senior citizen centers, physician offices, and hospitals.

Presentations should address issues of physical limitations when traveling to key destinations (e.g. medical appointments, food shopping, etc.).

The City can partner with national organizations like the Safe Routes for Seniors program in partnership with American Walks. This program focuses on pedestrian improvements in parts of the city where hospitals, senior centers, and areas that have a large number of senior residents. These improvements will be targeted towards the concerns of senior residents while also creating safer streets for all active transportation users in the city.

City Walking Map

City Walking Maps help make pedestrians more aware of existing pedestrian networks within Los Altos. The City can develop and provide a walking map that includes major destinations, trails, major hills, and approximate walking times between locations. The map could be made available on the City website and offered for free in local retail stores.

ENCOURAGEMENT

International Walk (and Bike) to School Day

Los Altos schools have previously participated in International Walk (and Bike) to School Day, which is typically the first Wednesday in October and coordinated by the PTA. This program has been very successful and this CSMP recommends Los Altos schools continue with its success.

Walk or Wheel

Initiated by GreenTown Los Altos/Hills, Walk or Wheel (WOW) is a program at Springer Elementary that promotes students walking and bicycling to school. The WOW program has resulted in notable walk and bicycle mode share increases at Springer Elementary. This CSMP recommends that schools continue implementation of this or similar programs that encourage students to bike and walk to school.

Walk to Work Programs

Walking to work has many benefits, including reducing the stress associated with driving in rush-hour traffic, reducing health costs by improving worker health and helping businesses market their environmental sustainability.

The City can share information with employers about alternative commute options, with the intention of reducing the number of Los Altos workers to drive alone to work. It also recommends that the City continue to promote alternative commute modes for City employees.

Street Closures & Programming

Festival Streets are public places or streets that are officially designated for repeated temporary closure to vehicular traffic and use by pedestrian-oriented special activities. Typically considered for non-arterial streets near parks, plazas, transit stations or commercial areas, Festival Streets might also include surface parking lots that already host special events.

During the spring and summer, the weekly Farmers' Market in downtown Los Altos demonstrates the popularity of repeated pedestrian and bike-friendly street closures. Likewise, the State Street Green, a temporary park on State Street and the smaller "Green" Streets on Third Street demonstrated the viability of pedestrian- and bicycle-oriented programming in concert with downtown retail.

The City can encourage recurring street closures for pedestrian- and bike-focused programming in Downtown Los Altos by expediting the permitting process for these events.

Bike Crawl

A bike crawl is an organized bike ride that stops at selected retail and restaurant establishments. The purpose of a bike crawl is to build awareness of bicyclists as patrons of local retail and restaurant establishments. Bike crawls are typically organized by grassroots organizations; however the City can also get involved.

The City can work with the Chamber of Commerce and local business owners in developing a time for the bike crawl and specials for bike crawlers. The City may also contact the Silicon Valley Bicycle Coalition for help organizing the event.

Walk Friendly Community Designation

Walk Friendly Communities (WFC) is a national recognition program for cities that have shown a commitment to improving walkability and pedestrian safety, mobility, access and comfort through comprehensive programs, plans and policies. An application for a WFC designation is estimated to take approximately 20-60 hours. Further information is available at <u>www.walkfriendly.</u> org. The WFC program is maintained by the University of North Carolina Highway Safety Research Center's Pedestrian and Bicycling Information Center, with support from a number of national partners.

Los Altos previously applied for WFC designation, but was not awarded recognition. The adoption of this Pedestrian Master Plan and the implementation of several projects recommended in this Plan will strengthen the Los Altos WFC application in the future.

The City can reapply to this program to demonstrate dedication to improving the pedestrian environment.

Bike Parking Ordinance

Adopting a bicycle parking ordinance will ensure that bicyclists will have somewhere secure and convenient to park their bicycle at their destination. Los Altos has installed bicycle parking at many bicycle attractors, e.g., downtown, parks and community centers. However, the City does not require new developments, including remodels, to install bicycle parking that meets the needs of the number and types of anticipated bicyclists.

Parking should meet the needs of different types of bicyclists. For example, recreational bicyclists make up the majority of observed patronage of the downtown coffee shop along State Street. Typically, recreational bicyclists prefer bicycle parking within sight. By contrast, family and commuting bicyclists are satisfied with parking conveniently located near their destination's entrance.

The duration of time bicyclists are anticipated to park should also be considered. Bicycle parking is generally categorized into short- and long-term parking. Short-term bicycle parking provides racks in convenient locations and with moderate security. Bicycle racks are intended to serve bicyclists running errands, shopping or out for recreation.

Long-term bicycle parking includes lockers, cages and bicycle stations and serves bicyclists parking for more than two hours. Lockers are typically provided at commercial buildings, multi-family residential buildings and transit stations, including Caltrain stations in Mountain View. Depending on the location, bicyclists may rent a locker for longterm personal use or an e-locker that rents by the hour. Cages provide controlled access to a shared parking location. Bicycle stations provide attended bicycle parking, typically at transit stations. Typically, attendants park and retrieve bicycles during commute hours. During non-commute hours, bicyclists use a key to access stations.

Cities throughout the San Francisco Bay Area have adopted bicycle parking ordinances based on a variety of criteria. For example, some cities base the number of bicycle parking stalls and bicycle parking facility types on land use.

The City could consider conducting a study to determine the appropriate factors from which to derive, and eventually adopt, a bicycle parking ordinance. The Association of Pedestrian and Bicycle Professionals provides sample bicycle parking ordinance requirements.

Bicycle Access Ordinance for Developments

Bicyclists often find accessing buildings difficult due to unsafe or inaccessible routes through parking lots or hard to find bike racks. This is especially common in large surface parking lots, which tend to serve shopping outlets – a bicyclist destination.

A Bicycle Access Ordinance would require land owners constructing new developments, including redevelopments or changes in tenants, to plan for bicycle access. The City could require the land owner/leasee to complete a Bicycle Access Form or develop a Bicycle Access Plan prior to development approval.

Transportation Demand Management

Transportation Demand Management refers to a set of programs aimed at reducing the demand for auto-oriented transportation, particularly targeting work commute trips. These programs can include employer based incentive programs that encourage employees to walk, bike, carpool, or take transit.

The City could continue to support TDM programs for City of Los Altos employees, encouraging carpools to meetings and to encourage employers in Los Altos to offer commuter benefit programs, providing incentives for employees to walk, bike, carpool, or take transit to work.

EVALUATION

Evaluation programs are essential in measuring the progress and success of Complete Streets and Safe Routes to School improvements. The overall vision is to increase the number and safety of walking and biking trips in Los Altos. In order to know the number of walking and biking trips made in Los Altos, pedestrians and bicyclists must be counted. In order to know if safety has improved, collisions must be analyzed. And in order to measure the progress of infrastructure implementation, the City must maintain a bikeways and facilities database.

Vehicle, Bicycle, and Pedestrian Data Collection Program

Vehicle, bicycle, and pedestrian counts provide the data necessary for measuring

the City's success in encouraging people to use active and sustainable modes of transportation. This data also strengthens competitive grant applications by demonstrating that the City is vested in tracking bicycle usage levels and has quantifiable data that supports future projects. Currently, the City counts 88 locations per year to gather vehicle, bicycle, and pedestrian counts.

Strategies for conducting counts vary by available resources. Automatic counters that use pneumatic tubes, sensors, or video cameras are expensive to install but provide continuous and accurate data. The City is already integrating this strategy at several signalized intersections.

Automatic counters, particularly loop detectors, provide years of continuous data throughout the City, but have a higher upfront cost than administering manual counts. The City may use the deep set of data generated by automatic counters for supporting policy changes that directly or indirectly support walking and bicycling.

Collision Analysis

Analyzing bicycle and pedestrian collision data provides insight into why some locations are dangerous for bicyclists and helps the City determine appropriate facilities that may reduce bicyclist and pedestrian risk. At the time of a collision or when a report is filed, police officers complete a form that includes, among other things, time, party at fault and the type of infraction that led to the collision.

While the Police Department has this data, it may be easier to request the data from the Statewide Integrated Traffic Records System (SWITRS), which is the State's clearinghouse for traffic collision data.

The City may consider analyzing bicycle and pedestrian collision data annually.

General Public Survey

A general public survey about bicycling and walking behavior and the challenges encountered while bicycling and walking can help the City identify the local needs of bicyclists and pedestrians. Bicycle shops, Bicycle and Pedestrian Advisory Committee, schools, libraries, community centers and the City's newsletter are possible venues for distributing the survey. Providing an online survey may save on materials and staff costs.

The City could administer a survey and analyze its results every five years. The National Bicycle and Pedestrian Documentation project provides sample questionnaires, recommended survey dates and administration instructions.

Student Hand Tally Survey

Every year, Los Altos elementary schools conduct hand tally surveys. Teachers ask students to raise their hand in response to the mode of transportation they used to get to school. Survey results are used to evaluate the effectiveness of SR2S programs. The City could encourage the School District to support the continuation of student hand tally surveys, which should be conducted in the fall and spring. Ideally, schools would conduct hand tallies twice in the fall in September and on International Walk and Bike to School Day. An analysis of these surveys would reveal the effectiveness of encouragement programs.

The National Center for Safe Routes to School provides hand tally forms and will analyze the results.

CHAPTER

IMPLEMENTATION

The adoption of this CSMP is the first step in moving projects toward construction and enjoyment by the community. The project delivery process is explained in the graphic below. Implementation of the proposed bicycle and pedestrian programs and improvements described in the previous chapters of the CSMP will require public and private funding from a combination of sources. Many regional connections will also require coordination with agencies outside the City such as Caltrans and Santa Clara County. To facilitate implementation efforts, this chapter presents the project prioritization methodology and tables of the prioritized projects, cost estimates, and potential funding sources.

This implementation approach is intended to establish a framework that guides implementation over time and can be adjusted to account for future opportunities. Prioritization results provide a framework for implementation and are not meant to be followed strictly or correlate to a timeline for construction. Over time as development occurs or other changes to land uses and the transportation network take place, this framework can be used to reevaluate remaining projects and continue pursuing implementation of this CSMP. For example, a low priority bikeway improvement may be completed ahead of a high priority spot improvement due to immediate funding opportunities as part of a redevelopment or larger project. A high priority project may require additional study and funding making it take longer to implement.



PROJECT DELIVERY PROCESS

Prioritizing Projects

PRIORITIZATION METHODOLOGY

The proposed Complete Streets improvements, when fully implemented, will provide a comprehensive active transportation network for Los Altos. The CSMP includes 200 projects that cover over 50 miles of new bicycle facilities, intersection and street crossing improvements and

walking paths. Recognizing that there are limited financial resources that can be devoted to these projects, it is necessary to establish a system for prioritizing the improvements that can provide the most effective use of available funds, and help direct effective grant writing in the future.

HOW SHOULD LOS ALTOS MEASURE SUCCESS?



The City's Complete Streets Commission participated in two sessions to provide input for the CSMP vision statement, goals, and prioritization strategy. The sessions were held online and used interactive polling to collect feedback along with group discussion.

Category	Weight	Measurement
		 Projects that close gaps in the existing network/fill a gap in the pedestrian network, or create cross-town connections.
Connectivity & Access	25%	 Projects that ensure connectivity to new and planned developments, including schools.
		• Projects that connect people to a major transit stop, school, trail, park, library, community center, retail area, or large employer.
		Project is along at least one Suggested Route to School.
Safe Routes to School	20%	 Project provides bicycle- or pedestrian facilities along a Suggested Route to School that do not currently exist.
Community- Identified Need	15%	 Projects that were identified through multiple engagement efforts with unique stakeholders.
	10%	 Projects that are within close proximity (250 feet) of at least one bicycle/ pedestrian-involved collision.
Collision Reduction		 Projects that provide facilities on or alternative routes to locations where severe or fatal collisions have occurred.
		• Projects with a high crash reduction factor.
		 Projects that provide greater physical separation from vehicles on high speed, high volume arterials and collectors.
Comfort	10%	 Projects that help to reduce vehicle speeds on streets with demonstrated speeding issues.
		 Projects that improve crossing opportunities across higher speed and volume streets.
Foosibility	100/	• Projects that have a lower cost relative to all planning-level cost estimates.
Feasibility	10%	• Projects in which no additional right of way is required.
Fauity	10.9/	 Projects that expand the geographic coverage of the city's Complete Streets network.
Equity	10%	 Projects that benefit both more than one alternative travel mode (i.e., pedestrians, bicyclists, and transit)
TOTAL	100%	

Table 8 Proposed Prioritization Criteria, Weighting, and Measurements

PRIORITIZATION CRITERIA

Table 8 presents the proposed prioritizationcriteria, weighting, and measurementsfor future projects in the CSMP. Thesecriteria were developed with input fromthe City's Complete Streets Commission.Recommendations developed through this

planning process will be assessed using this prioritization framework. The resulting list of prioritized projects will help guide the City in implementation of the CSMP. Similarly, this framework will be used to help the City evaluate Complete Street improvements identified during future planning efforts.

PRIORITY PROJECTS

Each of the 200 projects were scored based on the criteria listed in **Table 8**. The bikeway network, pedestrian walkway network, and spot improvements were scored separately and ranked within those three categories. Projects that scored in the top 10 percent for their category are listed as High Priority projects. Medium Priority projects scored in the top 50% (excluding the top 10 percent). Low Priority projects scored in the bottom 50% based on the criteria. **Table 9** shows a summary of theprioritization results based on each type ofimprovement. For detailed Bikeway Networkprioritization results, see **Appendix B**. Fordetailed Pedestrian Network prioritizationresults, see **Appendix C**. For detailed SpotImprovement prioritization results, see**Appendix D**.

Table 9	Prioritization	Results	Summary
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	Number of Projects	Miles
High Priority		
Bike Network	22	14.4
Pedestrian Network	5	2.8
Spot Improvements	12	N/A
Medium Priority		
Bike Network	34	13.7
Pedestrian Network	11	3.3
Spot Improvements	26	N/A
Low Priority		
Bike Network	51	14.9
Pedestrian Network	13	3.9
Spot Improvements	31	N/A
Total	205	53

Cost Estimates

Planning-level per unit cost estimates for the recommended bikeway types, walkway improvements, and a range of possible intersection improvements are presented in Tables 10, 11, and 12 respectively. These costs cover the majority of facility types, but does not reflect the full range of all possible options that could be considered for implementation. Some projects may cost more due to specific site conditions and other factors not known at this time. Other projects could be implemented using various treatments, including basic methods such as with paint, and therefore cost significantly less; but would not incorporate the types of infrastructure options (pavement, curbs, or landscaping, for example) included in these cost estimates. Some projects could be

installed in phases using simple treatments initially with upgrades to more permanent infrastructure later as funding becomes available. The cost estimates are based on the design and construction costs for comparable projects in nearby jurisdictions and do not include maintenance and operations costs. The City will have to budget funding for annual maintenance costs, as well as replacement costs for the end of the useful life of each improvement. A summary of cost estimates by recommendation category is presented in **Table 13**. Cost estimates by prioritization category is shown in **Table 14**. Individual project cost estimates can be found in the **Appendix**.

Bikeway Type	Mileage	Cost Estimate Per Mile Low	Cost Estimate Per Mile High	Assumptions
Class I Shared Use Path	1.25	\$750,000	\$1,500,000	Includes asphalt path and minor crossing improvements. Does not include signal modification or right of way acquisition.
Class IV Separated Bikeway	8.69	\$311,000	\$887,000	Low cost assumes signage, striping, and a painted buffer with flexible delineators. High cost assumes green conflict marking, traffic signal modification including bike signal detection, and a raised concrete buffer.
Class II Buffered Bike Lane	3.06	\$172,000	\$420,000	Low cost assumes signage, striping, and a painted buffer. High cost assumes green conflict marking, traffic signal modification including bike signal detection, and wayfinding signage.
Class II Bicycle Lane	2.92	\$132,000	\$387,000	Low cost assumes signage, striping. High cost assumes green conflict marking, traffic signal modification including bike signal detection.
Class III Bike Route/ Boulevard	22.2	\$290,000	\$640,000	Low cost assumes signage, striping, and minor traffic calming such as speed humps, and up to 3 other elements such as medians, diverters or a raised crosswalk. High cost assumes low cost items plus traffic circles, curb extensions, traffic signal modification including bike signal detection, and wayfinding signage.

Table 10Bikeway Network Unit Costs

Table 11 Pedestrian Network Unit Costs

Bikeway Type	Mileage	Cost Estimate Per Mile	Assumptions
Dedicated Walkways	5.47	\$500,000	This assumes \$15 per square foot and 6 feet wide completely rebuilt concrete sidewalks. This estimate is conservative as some segments can be implemented with slightly less expensive materials such as asphalt or crushed gravel.
Walkway Enhancement & Major Maintenance	4.45	\$500,000	This assumes \$15 per square foot and 6 feet wide completely rebuilt concrete sidewalks. This estimate is conservative as some segments can be implemented with slightly less expensive materials such as asphalt or crushed gravel. This type of recommendation may also require less material.

Improvement	Notes	Unit	Low	High
Curb Extension	Per corner. No utility or strorm drain relocations. Cost depends on size of intersection, whether regrading of intersection required.	Each (EA)	\$10,000	\$50,000
Curb Radius Reduction	Per corner. No utility or storm drain relocations. Cost depends on size of intersection, whether regrading of intersection required.	EA	\$10,000	\$50,000
Construct Sidewalk or Ped Walkway	Assumes 150 linear feet of new or reconstructed six feet wide concrete sidewalks	EA	\$14,250	\$14,250
Modify Skewed Intersection	Varies by intersection	EA	\$10,000	\$750,000
Neighborhood Traffic Circle	Includes floating chanelizer islands	EA	\$60,000	\$150,000
Modern Roundabout		EA	\$250,000	\$500,000
Bike Skip Boxes Thru Intersection		EA	\$5,000	\$5,000
Bike Boxes		EA	\$5,000	\$10,000
Traffic Calming		N/A	Varies	Varies
Right-Turn Slip Lane Removal	No utility or storm drain relocations	EA	\$10,000	\$50,000
Shared Street (Woonerf)		N/A	Varies	Varies
High Visibility Crosswalk Marking	High Visibility Crosswalk - medium (4-5 lanes)	EA	\$10,000	\$25,000
Advance Yield/Stop Line	Thermoplastic paint	EA	\$500	\$2,000
Curb Ramp	No utility or storm drain relocations	EA	\$5,000	\$5,000
Raised Crossing	Varies by length of crossing. No utility or storm drain relocations.	EA	\$5,000	\$15,000
Pedestrian Refuge Island	No utility or storm drain relocations. Cost varies with size of crossing.	EA	\$10,000	\$50,000

Table 12 Spot Improvement Unit Costs

Improvement	Notes	Unit	Low	High
Pedestrian Scale Lighting		EA	\$6,000	\$6,000
Pedestrian Undercrossing/ Overcrossing	Varies by location	EA	\$5,000,000	\$20,000,000
Stop Sign Warrant Analysis	Covers warrant analysis and cost of sign installation	EA	\$3,200	\$3,200
Rectangular Rapid Flashing Beacon		EA	\$60,000	\$60,000
Pedestrian Hybrid Beacon/HAWK		EA	\$500,000	\$800,000
Leading Pedestrian Interval	Per intersection. Costs vary by type of change and equipment required.	EA	\$0	\$3,500

Table 12 Spot Improvement Unit Costs (Continued)

Table 13Cost Estimates byRecommendation Category

Recommendation Category	Cost Estimates
Bikeway Network	\$12,461,000
Pedestrian Network	\$9,928,000
Spot Improvements	\$23,063,000
Total	\$45,452,000

Table 14Cost Estimates by PrioritizationCategory

	Cost Estimates
High Priority	
Bike Network	\$4,219,000
Pedestrian Network	\$2,798,000
Spot Improvements	\$7,348,000
Sub Total	\$14,365,000
Medium Priority	
Bike Network	\$4,194,000
Pedestrian Network	\$3,252,000
Spot Improvements	\$7,069,000
Sub Total	\$14,515,000
Low Priority	
Bike Network	\$4,048,000
Pedestrian Network	\$3,878,000
Spot Improvements	\$8,646,000
Sub Total	\$16,572,000
Total	\$45,452,000

Potential Funding Sources

There are a variety of potential funding sources including local, regional, state, and federal. The City should also take advantage of private contributions in developing the proposed system. This could include requiring development to construct adjacent recommendations as a condition of development approval where there is a nexus with traffic impacts. The funding sources considered most relevant for Los Altos described below and listed in **Table 15**.

LOCAL AND REGIONAL GRANT PROGRAMS

2016 MEASURE B

Santa Clara voters approved a half-cent sales tax in 2016 to fund transportation infrastructure investments. Measure B is expected to raise \$6.3 billion (2017 dollars) over 30 years to fund nine program categories. The Local Streets and Roads Program returns funds to the cities and the County on a formula basis to be used to repair and maintain the street system. The allocation is based on the population of the cities and the County of Santa Clara's road and expressway lane mileage. Cities and the County will be required to demonstrate that these funds would be used to enhance and not replace their current investments for road system maintenance and repair. The program would also require that cities and the County apply Compete Streets best practices in order to improve bicycle and pedestrian elements of the street system. If a city or the County has a Pavement Condition Index score of at least 70, it may use the funds for other congestion relief projects. \$250 million has been allocated towards the Bicycle and Pedestrian Program. Within the Bicycle and Pedestrian Program, funds are divided between capital projects (80 percent), education and encouragement programs (15 percent) and planning studies (5 percent). The education and encouragement funds will be allocated to cities based on a population formula with a \$10,000 annual minimum

allocation per city; \$250,000 will be reserved for countywide programs.

Funds are programmed by VTA.

VEHICLE REGISTRATION FEE

Senate Bill 83 (Hancock), signed into law in 2009, authorized countywide transportation agencies such as the Santa Clara Valley Transportation Authority (VTA) to implement a Vehicle Registration Fee (VRF) of up to \$10 on motor vehicles registered within the county for transportation programs and projects. The statute requires that the fees collected be used only to pay for programs and projects bearing a relationship or benefit to the owners of motor vehicles paying the fee. In order to implement the fee, the voters within the county are required to approve the VRF and expenditure plan by a simple majority.

On June 3, 2010, the VTA Board of Directors (Board) adopted a resolution placing 2010 Santa Clara County Measure B on the ballot. The measure authorized a \$10 increase in the VRF for transportation-related projects and programs. Voters in Santa Clara County approved the VRF on November 2, 2010.

The expenditure plan dedicates 80% of the VRF revenues to the Local Road Improvement and Repair Program, in which the revenue is returned directly to VTA Member Agencies (the cities, towns and county of Santa Clara County) based on each city/town's population and the County of Santa Clara's road and expressway lane mileage.

Funds are programmed by VTA.

TRANSPORTATION FUND FOR CLEAN AIR COUNTY PROGRAM MANAGER FUND

The Bay Area Air Quality Management District (BAAQMD) administers funds to the VTA for projects that reduce vehicle emissions including bicycle projects. These funds come from a \$4 vehicle registration surcharge in Bay Area counties and can be used as a match for competitive state or federal programs.

Funds are programmed by VTA.

ONE BAY AREA GRANT

The One Bay Area grant program (OBAG) emphasizes funding for projects within Priority Development Areas (PDAs) in the region that are in-line with housing and land use goals. Projects that are within or provide access to these PDAs could qualify for OBAG grants.

Funds are programmed by the Metropolitan Transportation Commission (MTC) and the Santa Clara Valley Transportation Authority (VTA).

TRANSPORTATION DEVELOPMENT ACT ARTICLE 3

Transportation Development Act Article 3 (TDA 3) provides funding annually for bicycle and pedestrian projects. Two percent of TDA funds collected within the county are used for TDA 3 projects. MTC policies require that all projects be reviewed by a Bicycle and

Pedestrian Advisory Committee or similar body before approval.

Funds are programmed by VTA.

TRANSPORTATION FOR LIVABLE COMMUNITIES PROGRAM

Designed to support community-based transportation projects that bring "new vibrancy" to downtown areas, commercial cores, neighborhoods, and transit corridors. The projects resulting from these grants are intended to provide for a range of transportation choices including bicycling, should support connections between transportation and land use, and should be developed through an inclusive community planning process.

Funds are programmed by MTC.

VEHICLE EMISSIONS REDUCTION BASED AT SCHOOLS PROGRAM

The Vehicle Emissions Reduction Based at Schools (VERBS) program receives funds from MTC's Climate Initiative SRTS Program. The goals of this include reducing greenhouse gases by promoting walking, biking, transit, and carpooling to school. These federal CMAQ funds are allocated to each county based on school enrollment. The VERBS Program places an additional focus on safety and reducing collisions.

Funds are programmed by VTA.

BICYCLE FACILITIES GRANT PROGRAM

Throughout the nine-county Bay Area, the Bicycle Facilities Grant program strives to reduce emissions from on- road vehicles and improve air quality by helping residents and commuters shift to bicycling and walking as alternatives to driving for short distances and first- and-last mile trips. The Bay Area Air Quality Management District (BAAQMD) has grant programs that fund both on-street facilities and bicycle parking facilities. Funding comes from the BAAQMD's Transportation Fund for Clean Air.

Funds are programmed by BAAQMD or the VTA.

STATE AND FEDERAL GRANT PROGRAMS

AFFORDABLE HOUSING AND SUSTAINABLE COMMUNITIES PROGRAM

The Affordable Housing and Sustainable Communities Program (AHSC) funds land use, housing, transportation, and land preservation projects that support infill and compact development that reduces greenhouse gas (GHG) emissions. Projects must fall within one of three project area types: transit-oriented development, integrated connectivity project, or rural innovation project areas. Fundable activities include affordable housing developments, sustainable transportation infrastructure, transportation-related amenities, and program costs.

Funds are programmed by the Strategic Growth Council and implemented by the Department of Housing and Community Development.

HIGHWAY SAFETY IMPROVEMENT PROGRAM

Caltrans offers Highway Safety Improvement Program (HSIP) grants every one to two years. Projects on any publicly owned road or active transportation facility are eligible, including bicycle and pedestrian improvements. HSIP focuses on projects that explicitly address documented safety challenges through proven countermeasures, are implementation-ready, and demonstrate cost-effectiveness.

Funds are programmed by Caltrans.

OFFICE OF TRAFFIC SAFETY GRANT

The Caltrans Office of Traffic Safety (OTS) makes grants available to local and state public agencies for programs that help them enforce traffic laws, educate the public in traffic safety, and provide varied and effective means of reducing fatalities, injuries, and economic losses from collisions. Funding can be used for safety trainings, bike helmets, and traffic safety campaigns, among other activities.

Funds are programmed by OTS.

OTHER STATE PROGRAMS

ROAD MAINTENANCE AND REHABILITATION PROGRAM

Senate Bill 1 (SB1) created the Road Maintenance and Rehabilitation Program (RMRP) to address deferred maintenance on state highways and local road systems. Program funds can be spent on both design and construction efforts. On-street active transportation related maintenance projects are eligible if program maintenance and other thresholds are met. Funds are allocated to eligible jurisdictions.

Funds are programmed by the State Controller's Office with guidance from the CTC.

Local Source	Formula Grants (Federal/State)	Formula Grants (Regional)	Competitive Grants (Federal/ State)	Competitive Grants (Regional)
Los Altos Capital Improvement Plan (CIP)	Local Streets and Roads Program (SB1)	Measure B (2016) Local Streets and Roads	Highway Safety Improvement Program (HSIP)	One Bay Area Grant Program (OBAG)
Traffic Impact Fees		Measure B (2016) Safe Routes to School Education & Encouragement	Affordable Housing Sustainable Communities (AHSC)	Measure B (2016) Bicycle and Pedestrian Capital Projects
		Vehicle Registration Fee Program (VRF)	Office of Traffic Safety (OTS)	Measure B (2016) Bicycle and Pedestrian Planning Projects
		TDA Article 3		Transportation Fund for Clean Air (TFCA)
				Vehicle Emissions Reductions Based at Schools

Table 15Funding Sources by Type

Implementation Strategies

STRATEGY 1: ALIGN THE CITY'S STREET RESURFACING PROJECTS WITH THE CSMP

The City of Los Altos utilizes a Pavement Management Program (PMP) to maintain its 112 miles of streets. The current overall condition of its street network meets the Metropolitan Transportation Commission (MTC) regional goal, which allows the City to compete for State and Federal Transportation Funds. The City's current overall Pavement Condition Index (PCI) is 71 out of 100. The City currently makes decisions about which street segments receive funding for street resurfacing or repairs based on the PCI score. The City could augment its decision-making framework by also looking at adjacent CSMP recommendations that can be accomplished concurrently. This will create a cost-savings and can speed up the implementation of inexpensive recommendations that may only require striping and minimal signage. The City may also explore implementing street resurfacing in zones. When aligned with implementing CSMP recommendations, this strategy can help create connected bikeway networks instead of standalone projects.

STRATEGY 2: THE LOS ALTOS LOOP

This Plan recommends the implementation of a 16-mile long, high priority, crosstown corridor network to form the "Los Altos Loop." This concept is inspired by the "Cupertino Loop Trail." When complete, the Los Altos Loop will provide access around Los Altos on low stress streets and high-quality bikeways. The Loop knits together different bikeway categories such as off-street shared use paths, separated bikeways on high traffic streets, and traffic calmed bike routes on low-speed residential streets. The City could create distinctive signage or pavement markings to brand bikeways that make up the Los Altos Loop. The Los Altos Loop will directly connect to every school located in Los Altos along with commercial districts in Downtown, Loyola Corners, and El Camino Real. A map of the Los Altos Loop is shown in **Figure 15**.

LOS ALTOS LOOP BY THE NUMBERS

Class I Shared Use Path	0.37 miles
Class II Bike Lane	0.5 miles
Class II Buffered Bike Lane	0.5 miles
Class III Bike Boulevard/Routes	7.0 miles
Class IV Separated Bikeway (Cycletrack)	5.2 miles
Los Altos Avenue – Bikeway type to be determined following a corridor stud	0.6 miles
Total Mileage	16.42 miles
Low Cost Estimate	\$4,500,000
High Cost Estimate	\$11,200,000

Figure 20 Los Altos Loop Map



REGIONAL CONNECTORS

While the Los Altos Loop serves destinations internal to the city, the following "Regional Connectors" provide access to destinations in neighboring communities:

Corridor	Recommendation	Location	Partnership
El Camino Real	Class IV Separated Bikeway	City Boundary with Mountain View	Caltrans, Mountain View
Foothill Expressway	Class IV Separated Bikeway	Full length within City boundaries	Santa Clara County
Stevens Creek Trail	Class I Shared Use Path	Outside City jurisdiction	Mountain View, Sunnyvale
Downtown Los Altos – Downtown Mountain View	Combination	Los Altos City Hall, Edith Avenue, Camellia Way, Marilyn Drive, Castro Street	Mountain View
El Monte Ave	Combination	Los Altos, Los Altos Hills	Los Altos Hills

These regional bikeway projects will require coordination and partnership with other agencies and neighboring jurisdictions.

STRATEGY 3: KEEP IT FRESH

The City should perform a targeted updated every 5-7 years. This update would give the City the opportunity to map progress made in implementing the CSMP and evaluate new opportunities. A comprehensive update should be made every 10-12 years. A comprehensive update reviews progress made in implementing the CSMP and evaluates new opportunities by collecting and analyzing new data and conducting extensive outreach. The timing will depend on staff availability and City resources.

STRATEGY 4: COMPLETE STREETS DESIGN GUIDELINES

The CSMP includes the follow design guidelines to demonstrate how the City can transform typical streets into Complete Streets. The guidelines include a generic arterial, neighborhood collector, and local residential street to show how context changes what elements should be considered. This plan recommends the City reference the following guidelines when resurfacing streets or altering City streets. The City may also want to reference these guidelines during the design review/land use entitlement process.

ARTERIAL

- 4 Travel lanes
- Landscaped median (optional)
- Class IV Bikeways
- · Sidewalks on both sides of the street
- *Treatments are interchangeable across typologies

CURB EXTENSIONS*

Curb extensions (at select locations) enhance pedestrian safety by increasing visibility and reducing crossing length

RECTANGULAR RAPID FLASHING BEACONS (RRFB)*

RRFBs (at select locations) assist pedestrians at unsignalized intersections or mid-block crossings

LANDSCAPED MEDIAN

11/8/1/11

CLASS IV BIKEWAY

vehicles

Class IV separated bikeways provide

a 2 ft - 3 ft striped buffer and

vertical separators/bollards to separate people on bikes from

Landscaped medians create an attractive buffer between directions of travel, and provide a pedestrian refuge at marked crossings that shorten the crossing distance, allow people to identify gaps in traffic, and cross in multiple stages if necessary

Design elements shown are for illustrative purposes only

Min 5'

10-11' 10-11' 4-16' 10-11

SIDEWALKS

Minimum 5 ft wide raised

with landscaped buffer or

furnishing/utility buffer

sidewalks on both sides of street

COLLECTOR

- 2 Travel Lanes
- Class II Buffered Bike Lanes
- Paved sidewalk on one side of the street
- Walkway/shoulder/parking on one side of the street
- * Treatments are interchangeable across typologies

GREEN SKIP BOXES*

Green skip boxes are used to indicate the path of travel for people on bikes through intersections and draw attention to potential conflict locations such as driveways or turn bays



Design elements shown are for illustrative purposes only

LOCAL COLLECTOR

- 2 Travel lanes
- Class II Buffered Bike Lanes
- Street-level pedestrian lane one side of the street
- · Raised walkway/shoulder/parking on one side of the street
- *Treatments are interchangeable across typologies

TRAFFIC SIGNALS*

Traffic signals coordinate the movement of people walking, biking, and driving at intersections of Local Collectors and Local Collectors/Collectors/Arterials

YELLOW CROSSWALK

MARKINGS*

Yellow crosswalk markings and optional raised crossings near schools and along school routes

> WALKWAY/SHOULDER/ PARKING

8 ft - 11 ft wide flexible space for pedestrians, deliveries, drop-off/pick-up, and/or short-term parking

PEDESTRIAN LANE

Minimum 5 ft wide street-level paved pedestrian lane with optional red pavement marking

CLASS II BUFFERED BIKE LANES

Class II buffered bike lanes provide a 2 ft - 3 ft striped buffer to separate people on bikes from vehicles

Design elements shown are for illustrative purposes only

Min

5' 5-7

10-11'

2-3'

10-11'

5-7' 8-11'

2-3'

LOCAL

streets.

• 2 Travel lanes (undivided)

MARKED CROSSWALKS*

Continental crosswalk markings

provided high-visibility crossing locations for pedestrians along local

- Optional traffic calming and Class III Bike Boulevard treatments
- \cdot On-street parking on both sides of the street
- Raised sidewalk and landscaped buffer on one side of street
- *Treatments are interchangeable across typologies

STOP SIGNS*

Stop signs and stop lines control the movement of people walking, biking, and driving at intersections of Local streets with Local Streets/Local Collectors/Collectors/Arterials





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APPENDIX

COMMUNITY SURVEY RESULTS












Los Altos SRTS/Complete Streets Plan - Community Survey

ANSWER CHOICES	RESPONSE	ES
I don't have school-aged children OR my children currently walk/bike to school	63.50%	207
If our school was closer	7.98%	26
If it was safer (traffic-related)	27.30%	89
If it was safer (crime-related)	3.99%	13
If they were older and more independent	6.75%	22
If there were safer ways to cross the street along their route	21.47%	70
If there was slow traffic along their route	16.87%	55
If myself, my partner, or another adult could accompany them while they walk, roll, or bike	8.59%	28
If my children owned or knew how to ride a bike/scooter/skateboard	1.53%	5
Other (please specify)	11.04%	36

Total Respondents: 326

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Los Altos SRTS/Complete Streets Plan - Community Survey

ANSWER CHOICES	RESPONS	ES
Sidewalks/paths are in poor condition	35.09%	113
I'm worried about being hit by a car	39.13%	126
There are no lights at night	31.37%	101
Crossing the street is stressful	16.77%	54
I'm worried about crime and personal safety	5.28%	17
I don't have enough time / my destinations are too far	16.46%	53
There is no culture of walking in my community	4.66%	15
I cannot walk much or at all due to a physical disability, health concerns, or fitness concerns	3.42%	11
I have no concerns	24.22%	78
Other (please specify)	19.25%	62
Total Respondents: 322		

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Los Altos SRTS/Complete Streets Plan - Community Survey

ANSWER CHOICES	RESPONS	ES
There are no bike lane or paths to bicycle	30.16%	95
Pavement quality is poor	20.32%	64
Cars drive too fast on residential streets	45.71%	144
Crossing the street or turning is stressful	23.81%	75
I'm worried about being hit by a car	48.57%	153
There are no lights at night	18.41%	58
There is no secure bike parking at my destination(s)	20.32%	64
I don't have enough time / my destinations are too far	9.84%	31
There is no culture of biking in my community	4.13%	13
I cannot walk much or at all due to a physical disability, health concerns, or fitness concerns	4.13%	13
I have no concerns	14.60%	46
Other (please specify)	17.46%	55
Total Respondents: 315		

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BIKEWAY NETWORK RECOMMENDATIONS

Bikeway Toolbox



Shared-Use Path (Class I) Paths shared by people walking and biking that are completely separated from motor vehicle traffic. Caltrans classifies Shared Use Paths or Bike Paths as Class I bikeways.



Bike Lane (Class II) Dedicated lane for bicycle travel adjacent to traffic. Caltrans classifies Bike Lanes as Class II bikeways.



Buffered Bike Lane (Class II) Dedicated lane for bicycle travel separated from traffic by a painted buffer. Caltrans classifies Buffered Bike Lanes as Class II bikeways.



Bike Route (Class III)

Signed bike routes on slow speed residential streets where bicyclists share the roadway with motor vehicles. Caltrans classifies Bike Routes as Class III bikeways.



Separated Bikeway (Class IV)

On-street bike lane separated from motor vehicle traffic by curb, median, planters, parking, or other physical barrier. The bikeway could be on either side of the street or combined to one side. These facilities are also known as Cycle Tracks. Caltrans classifies Separated Bikeways as Class IV bikeways.

Table 16 Bikeway Network Recommendations Table

📃 High Priority 📃 Medium Priority 📃 Low Priority						
On Street	On Street From		Recommendation	Length (mi)	Cost Estimate	
North San Antonio	Almond	El Camino Real	Class IV	1.13	\$353,000	
Foothill	Edith	Saint Joseph	Class IV	3.45	\$1,073,000	
Covington	El Monte	Grant	Class IIB	1.90	\$327,000	
El Monte	Jardin	Foothill	Class IV	1.87	\$581,000	
Miramonte	Portland	Fremont	Class IIB	0.25	\$188,000	
San Antonio	Edith	Almond	Class I	0.23	\$39,000	
El Camino Real	Throughout Los Altos	Throughout Los Altos	Class IV	1.29	\$401,000	
Newcastle	Fremont	Grant	Class II	0.76	\$101,000	
А	Miramonte	Fremont	Class II	0.04	\$5,000	
Edith	Cielito	End Of Edith	Class III	0.69	\$200,000	
Loucks	Los Altos	San Antonio	Class III	0.40	\$116,000	
1st	Edith	San Antonio	Class III	0.30	\$225,000	
2nd	Edith	Lyell	Class III	0.06	\$9,000	
3rd	Edith	Whitney	Class III	0.61	\$178,000	
В	Fremont	Miramonte	Class III	0.47	\$138,000	
Dolores	Fremont	Miramonte	Class III	0.33	\$96,000	
Grant	Covington	El Sereno	Class IV	0.08	\$23,000	
Jordan	Los Altos	El Camino Real	Class III	0.13	\$39,000	
Main	San Antonio	State	Class II	0.06	\$19,000	
State	Main	1st	Class III	0.24	\$69,000	

On Street	From	То	Recommendation	Length (mi)	Cost Estimate
Whitney	3rd	1st	Class III	0.13	\$39,000
Altos Oaks	Golden	Miramonte	Class III	0.20	\$58,000
Golden	Lincoln	Berry	Class III	0.15	\$44,000
Rosita	Campbell	Springer	Class III	0.33	\$96,000
Distel	Marich	El Camino Real	Class III	0.20	\$151,000
Eleanor	Edith	Marvin	Class III	0.14	\$42,000
Hillview	Eleanor	Gordon	Class III	0.34	\$100,000
City Hall Property	San Antonio	Celito	Class I	0.12	\$36,000
Almond	Gordon	El Monte	Class IV	0.26	\$76,000
Altamead	Carmel	Grant	Class III	0.58	\$169,000
Arboleda	Cuesta	Springer	Class III	0.53	\$154,000
Clark	El Monte	Cuesta	Class III	0.25	\$72,000
Golden	Berry	Altos Oaks	Class III	0.34	\$100,000
Mercedes	Portola	End Of Road	Class III	0.09	\$26,000
Muir	Eastwood	End Of Road	Class III	0.53	\$154,000
Panchita	Jardin	Marich	Class III	0.56	\$173,000
Fremont	Foothill	Lisa	Class IIB	0.50	\$378,000
Miramonte	Eastwood	Portland	Class I	0.34	\$58,000
Oak	Grant	Truman	Class II	0.50	\$67,000
Alvarado	San Antonio	Casita	Class III	0.09	\$17,000
Arboretum	Grant	End Of Road	Class III	0.50	\$146,000

On Street	From	From To R		Length (mi)	Cost Estimate
Campbell	Cuesta	Fremont	Class III	0.60	\$173,000
Fallen Leaf	Homestead	Fremont	Class III	0.67	\$194,000
Fremont	Springer	Altos Oaks	Class IIB	1.10	\$320,000
Lyell	San Antonio	End Of Road	Class III	2.11	\$613,000
Main	State	1st	Class III	0.34	\$100,000
Pepper	San Antonio	Eleanor	Class III	0.26	\$77,000
Hawthorne	San Antonio	Eleanor	Class III	0.24	\$71,000
Alicia	Almond	Casita	Class III	0.25	\$73,000
Casita	Jardin	Marich	Class III	0.42	\$122,000
Gordon	Hawthorne	Almond	Class III	0.16	\$47,000
Oak	Truman	Ravenswood	Class III	0.26	\$77,000
Portola	Jordan	Dixon	Class III	0.14	\$41,000
Truman	Oak	Fremont	Class III	0.32	\$94,000
Valencia	Almond	Jardin	Class III	0.26	\$75,000
Hawthorne	Clark	End Of Road On East Side Of Clark	nd Of Road n East Side Of Class III lark		\$70,000
Holt	Middleton	Fallen Leaf	Class II	0.04	\$6,000
Jones	Crist	Fallen Leaf	Class III	0.50	\$146,000
Louise	Victoria / Fallen Leaf	Fallen Leaf	Class III	0.42	\$122,000
Loyola	Fremont	City Limit	Class II	0.24	\$70,000
Marich	Jordan	City Limit	Class III	0.46	\$134,000
Middleton	Morton	Holt	Class III	0.24	\$70,000
Riverside	Covington	Berry	Class III	0.18	\$52,000
San Martin	Springer	End Of Road	Class III	0.10	\$29,000

On Street	From	То	Recommendation	Length (mi)	Cost Estimate
Seena	Covington	Edge Lane/ Connector)	Class III	0.19	\$55,000
Camellia	Clark	Springer	Class III	0.48	\$64,000
Granger	Larnel	Saint Joseph	Class II	0.27	\$47,000
Higgins	El Monte	Almond	Class III	0.25	\$73,000
Jordan	San Antonio	Marich	Class III	0.19	\$56,000
Saint Joseph	Noel	Scott / Laver	Class IIB	0.32	\$93,000
Saint Joseph	Scott / Laver	City Limit	Class III	0.52	\$151,000
Santa Rita	Van Buren	Los Altos Ave	Class III	0.14	\$40,000
Stonehaven	Saint Joseph	Sierra Ventura	Class III	0.25	\$73,000
Cherry	Sylvian	Pine	Class III	0.24	\$42,000
Crist	Jones	Grant	Class III	0.38	\$109,000
Fallen Leaf	Fremont	Ravenswood	Class III	0.22	\$64,000
Fremont	Lisa	To City Limit	Class IV	0.42	\$124,000
Gabilan	Lyell	Giffin	Class III	0.22	\$65,000
Portland	Miramonte	Grant	Class IIB	0.51	\$148,000
Miramonte	City Limit	Eastwood	Class IIB	0.35	\$103,000
Oakhurst	Portland	Fremont	Class III	0.50	\$146,000
Pine	San Antonio	Torwood	Class III	0.36	\$105,000
Solana	Almond	Jardin	Class III	0.25	\$73,000
University	El Monte	Quinnhill	Class III	0.15	\$43,000
Mount Hamilton	Los Altos	San Antonio	Class III	0.05	\$16,000
Spencer Way	Covington	Spencer Ct	Class III	0.95	\$297,000
Concord	Portland	Eureka	Class III	0.23	\$31,000

On Street	From	То	Recommendation	Length (mi)	Cost Estimate
Cristo Rey	Foothill	Kring	Class II	0.27	\$37,000
Eastwood	Covington	Miramonte	Class III	0.13	\$37,000
Eureka	Grant	End Of Eureka On West Side Of Grant	End Of Eureka On West Side Of Class III Grant		\$61,000
Eureka	Concord	End Of Eureka On East Side Of Concord	Class III	0.17	\$49,000
Eva	Granger	Saint Joseph	Class II	0.06	\$19,000
Giffin	Gabilan	El Monte	Class III	0.09	\$27,000
Gordon	Hawthorne	End Of Road	Class III	0.50	\$147,000
Hawthorne	Eleanor	Clark	Class III	0.13	\$38,000
Jardin	Solana	Avalon	Class III	0.05	\$14,000
Linden	Pine	Portola	Class III	0.13	\$38,000
Morton	Grant	Past Fallen Leaf	Class III	0.69	\$199,000
Portola	Jordan	Delphi	Class III	0.76	\$221,000
Ravenswood	Oak	Fallen Leaf	Class III	0.05	\$15,000
Richardson	Grant	Austin	Class III	0.21	\$62,000
Richardson	Kensington	Grant	Class III	0.26	\$77,000
Saint Joseph	Foothill	Noel	Class IV	0.18	\$52,000
Sylvian	San Antonio	Cherry	Class III	0.20	\$59,000
Thurston	Peninsular	Grant	Class III	0.12	\$35,000
Tomi Lea	Pine	Belden	Class III	0.39	\$113,000
University	Quinnhill	Anita	Class III	0.10	\$31,000

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PEDESTRIAN NETWORK RECOMMENDATIONS

Pedestrian Corridor Toolbox





ASPHALT WALKWAY

ASPHALT BERM



CONCRETE SIDEWALK

Dedicated Walkways

This recommendation calls for new dedicated walkways. In Los Altos, a dedicated space for pedestrians can take many different forms that preserves the local rural character. They can be at the same level as the street marked with paint or separated with an asphalt berm between motor vehicle lanes. Dedicated walkways can also be elevated from the roadway and made out of concrete or asphalt (see Los Altos example images above). Dedicated walkways must adhere to ADA standards.

Walkway Enhancement & Major Rehabilitation

This recommendation repairs or widens existing dedicated walkways to create a more comfortable experience and brings the sidewalk into compliance with ADA standards.

Туре	Street	Start	End	Length (mi)	Cost Estimates	Priority	Project Notes
A	San Antonio Rd	Almond Ave	El Camino Real	1.13	\$1,133,000	High	Generally minimum ADA accessibility is met, but opportunities vegetation maintenance should be explored. Extents may be re
A	El Camino Real	Palo Alto border	Mountain View border	1.28	\$1,285,000	High	Widen sidewalks to conform with proposed BRT station improv
B	Jordan Ave	250' from El Camino	115' from El Camino	0.17	\$170,000	High	Single property frontage; opposite side of street also has multi
B	San Antonio Rd	Sherwood Ave	El Camino Real	0.18	\$184,000	High	Intermittent existing sidewalk; angled parking on private prope significant changes to parking.
B	Sherwood Ave	San Antonio Rd	El Camino Real	0.03	\$26,000	High	Intermittent existing sidewalk non-compliant; gap closure likel
A	El Monte Ave	Edith Ave	Hawthorne Ave	0.32	\$324,000	Medium	Repair and widen asphalt sidewalk south of Riconada Ct; Study sidewalk
A	Cuesta Dr	San Antonio Rd	Tyndall St	0.06	\$60,000	Medium	Widen sidewalk approaches into downtown and consider lands crossing at San Antonio.
A	Clark Ave	El Monte Ave	Cuesta Dr	0.53	\$530,000	Medium	Repair and widen existing sidewalk / berm-protected walkway.
B	Fremont Ave	Permanente Creek	Lisa Lane	0.38	\$378,000	Medium	Connects Loyola Corners area with Marymeade Park and propo feasible with minimal investment / vegetation clearance.
B	Springer Rd	Berry Ave	Los Altos city limit (N of Covington Rd)	0.28	\$282,000	Medium	Close sidewalk gap.
A	El Monte Ave	Cuesta Dr	Foothill Expy	0.30	\$299,000	Medium	Widen sidewalk on east side of street, or relocate utility poles,
B	Campbell Ave	Rosita Ave	Covington Rd	0.32	\$319,000	Medium	Sidewalk gap, south of Covington, pathway on west side
B	Alicia Way	Almond Ave	Jardin Dr	0.24	\$239,000	Medium	Close sidewalk gap.
B	N Gordon Way	Edith Ave	Almond Ave	0.32	\$322,000	Medium	North-South corridor that serves multiple school routes; Gordo driveways; east side seems preferred.
B	Truman Ave	Oak Ave	Fremont Ave	0.25	\$248,000	Medium	Close sidewalk gap.
A	Portola Ave	San Antonio Rd	Jordan Ave	0.25	\$251,000	Medium	Repair and widen existing sidewalk / berm-protected walkway.
B	Grant Rd	Preston Dr	Foothill Expy	0.16	\$158,000	Low	Sidewalk on east side. Include bus stop and ADA upgrade.
B	Springer Rd	Todd St	Cuesta Ave	0.82	\$817,000	Low	Requires coordination with City of Mountain View. Preliminary i
A	Fremont Ave	Lisa Ln	Grant Rd	1.24	\$1,241,000	Low	Widen sidewalk on north side along Marymeade Park.
B	Altamead Dr	School	Grant Rd	0.17	\$170,000	Low	Connection to school.
B	Oak Ave	Grant Ave	50' west of Marinovich Way	0.09	\$89,000	Low	North side of street. Requires tree preservation; may be impler walkway.

A Recommended Walkway Enhancement & Major Maintenance

B Recommended Locations of Dedicated Walkways

High Priority

Medium Priority Low Priority

for opportunistic sidewalk widening, tree root repair, and evised based on feedback.

ement and improve transit and commercial/retail access.

iple gaps north of Portola Court

erty; likely to occur with redevelopment and/or with

y to occur with redevelopment

removal of parking lane north of Riconada Ct to widen

scaping/street trees to match cross section to east. Improve

. Supports access to Covington Elementary School.

osed Stevens Creek Trail. Lisa Ln to Oakhurst Ave appears

during next repaving sidewalk.

on Wy has supportive land uses with wide/deep lots and few

investigation indicates east side is likely preferred location.

mented as traffic calming project without dedicated

					Cost		
Туре	Street	Start	End	Length (mi)	Estimates	Priority	Project Notes
B	St Joseph Ave	Robles Ranch Rd	Granger Ave	0.09	\$92,000	Low	Close sidewalk gap.
B	Carmel Ter	500' North of Portland Ave	Portland Ave	0.12	\$119,000	Low	Gap closure, SRTS route.
B	Jordan Ave	Marich Way	Portola Ct	0.30	\$303,000	Low	310' sidewalk gap on west side of street.
B	Los Altos Ave	Mariposa Ave	Yerba Santa Ave	0.18	\$184,000	Low	Santa Rita Elementary school route. Minor impact to existing sh
B	Portland Ave	Carmel Ter	200' east of Carvo Ct	0.25	\$250,000	Low	Close sidewalk gap.
A	Hawthorne Ave	El Monte Ave	Eleanor Ave	0.08	\$84,000	Low	Repair existing sidewalk and fill gaps. Supports access to Los Al
A	S El Monte Ave	Bay Tree Ln	225' south of Woodstock Ln	0.09	\$95,000	Low	Rebuild curb.
B	Cristo Rey Dr	Foothill Blvd	City Limit	0.28	\$276,000	Low	Close sidewalk gap.

houlder/bike lane

Altos High School, and pedestrians traveling to downtown.



SPOT IMPROVEMENTS RECOMMENDATIONS

Table 18 Spot Improvements Recommendations Table

Note: A full description of each recommendation can be found in Chapter 5: Recommended Improvements (Table 7: Spot Improvements Recommendations).

📃 High Priority 📃 Medium Priority 📃 Low Priority

Project ID	Location	Priority	Cost Estimate
41	San Antonio Avenue/ Loucks Avenue	High	\$306,000
57	Midblock between Edith and Hillview on San Antonio Rd	High	\$50,000
9	San Antonio Road/ Main Street	High	\$685,000
52	Miramonte Avenue/ A Street	High	\$275,000
11	Miramonte Avenue/ Berry Avenue	High	\$219,000
13	Main Street/ Foothill Expressway	High	\$490,000
14	San Antonio Road/ Hillview Ave	High	\$606,000
28	Foothill Expressway/ Arboretum Drive	High	\$483,000
29	Foothill Expressway/ Springer Rd	High	\$1,172,000
36	N San Antonio Drive/ Sherwood Avenue	High	\$139,000
39	W Edith Avenue/ 4th Street	High	\$1,028,000
42	1st Street/ Main Street	High	\$54,000
12	State Street/ Main Street	Medium	\$260,000
15	1st Street/ San Antonio Road/ Cuesta Drive	Medium	\$266,000
16	Altos Oaks Drive/ Fremont Ave	Medium	\$177,000
20	Dolores Ave / Maple Lane	Medium	\$819,000
30	Fremont Avenue/ Miramonte Ave	Medium	\$233,000
34	Loyola Drive/ Foothill Expressway/	Medium	\$124,000
37	Springer Road/ Fremont Avenue	Medium	\$896,000

Project ID	Location	Priority	Cost Estimate
58	2nd Street (Main Street to Plaza North)	Medium	Varies
59	3rd Street (State Street to Plaza South)	Medium	Varies
60	Foothill Expy/I-280 Off-Ramp	Medium	\$135,000
61	146 Main Street (Mid-block crossing)	Medium	\$175,000
32	Los Altos Square	Medium	\$50,000
33	Fremont Avenue/ A Street	Medium	\$178,000
35	Loyola Drive/ Frontero Avenue	Medium	\$141,000
63	State St and 2nd St	Medium	\$54,000
66	Camellia Way / Clark Avenue	Medium	\$100,000
65	Fremont Avenue and Grant Road	Medium	\$100,000
3	Foothill Expressway/ El Monte Avenue	Medium	\$422,000
5	Fremont Avenue/ Truman Avenue	Medium	\$285,000
23	El Monte Avenue / Cuesta Drive	Medium	\$406,000
25	El Monte Avenue/ Springer Rd	Medium	\$1,400,000
26	El Monte Ave / University Ave	Medium	\$642,000
40	Fremont Avenue/ Fallen Leaf Lane	Medium	\$679,000
47	Altos Oaks Drive/ Miramonte	Medium	\$75,000
48	Grant Road/ Bryant Avenue	Medium	\$219,000
56	Portland Avenue/ Miramonte Avenue	Medium	\$150,000
1	St Joseph Avenue/ Foothill Expressway/Grant Rd	Low	\$627,000
10	Covington Road/ Miramonte Avenue	Low	\$58,000
19	Cuesta Drive/ Gabilan Street	Low	\$179,000
22	El Monte Avenue / Almond Ave	Low	\$200,000
24	El Monte Avenue/ Clark Ave	Low	\$1,059,000

Project ID	Location	Priority	Cost Estimate
31	Hawthorne Avenue/ El Monte Avenue	Low	\$871,000
38	Springer Road/ Cuesta Drive	Low	\$408,000
44	Merritt Road/ N Gordon Wy	Low	\$206,000
45	Almond Avenue/ Fornway Court	Low	\$222,000
49	Grant Road/ Altamead Drive	Low	\$216,000
50	Fremont Avenue/ East of Belleville Way	Low	\$60,000
51	Homestead Road/ Fallen Leaf Lane	Low	\$191,000
62	Jardin Dr/ Valencia Wy	Low	\$54,000
2	St Joseph Avenue/ Eva Avenue	Low	\$140,000
4	Granger Avenue/ Loyola Avenue	Low	\$193,000
6	Jordan Avenue/ Marich Way	Low	\$57,000
7	Jordan Avenue/ Portola	Low	\$165,000
8	Casita Way/ Cecila Way	Low	\$50,000
17	Covington Road / Riverside Avenue	Low	\$152,000
18	Covington Road/ Campbell Avenue	Low	\$50,000
21	Edith Avenue / Gordon Way	Low	\$258,000
27	Fardon Avenue / Christ Drive	Low	\$1,050,000
43	Angela Drive/ Cody Lane	Low	\$202,000
46	Rosita Avenue/Rose Lane	Low	\$65,000
53	Stonehaven Drive/ Sierra Ventura Drive	Low	Varies
54	Woods Lane/ Via Huerta/ Citation Drive	Low	\$65,000
55	Deodara Drive/ Near St Joseph Avenue	Low	\$65,000
64	Arboretum and Deodora	Low	\$54,000
67	Clark Avenue / Springer Terrace	Low	\$60,000
68	Clark Avenue / Benvenue Avenue	Low	\$63,000

CONCEPT PLAN LINE DRAWINGS

What is the purpose of creating Concept Plan Line Drawings?

The City developed the following Concept Plan Line Drawings to gather feedback from the public about potential Complete Street designs. The Concept Plan Line Drawings illustrated how different traffic calming, bicycle, and pedestrian infrastructure would look. Apart from St. Joseph Avenue, there is no funding to advance any Concept Plan Line Drawing into construction. Their function is to start a conversation about future scenarios. If there was strong public interest, the City could continue to refine the Concept Plan Line Drawings with additional community involvement and seek funding for future phases.

How were streets selected for Concept Plan Line Drawings?

The corridors selected for Concept Plan Line Drawings included streets chosen by City Council near Los Altos High School, streets that overlapped with street resurfacing projects, and streets nominated by City Staff near future development sites. The map on the following page depicts the locations of the Concept Plan Line Drawings developed during the Complete Streets Master Plan process.





How did Concept Plan Line Drawings inform recommendations in the Complete Streets Master Plan?

The City hosted three online workshops to gather feedback on conceptual plans. The City sent a citywide mailer to all residents at the start of the project and shared the project website. The City noticed each meeting in the Town Crier newspaper, the City's social media channels, and placed A-frame posters along streets being studied in advance of each meeting. Over fifty members of the public participated in each of the meetings.

Based on the feedback the City heard from residents at Community Workshops and by email and phone messages, select elements from Concept Plan Line Drawings were included in recommendations in the CSMP. If there was not strong public support, no features moved into the recommendations. The table below documents when each Concept Plan Line Drawing was presented to the community and if there was strong public support for the designs. Corridors with strong public support were included in the CSMP recommendations. Corridors that did not receive strong public support were not included in the CSMP recommendations. The City could revisit any corridor in the future if public opinion and interest is desired.

Concept Plan Line Location	Community Meeting Date	Strong Public Support	
Jardin Dr	Workshop #3- 3/31/21	Yes	
Clark Ave	Workshop #1- 1/27/21	Yes	
Covington Rd	Workshop #1- 1/27/21	Yes	
El Camino Real	Workshop #2- 2/24/21	Yes	
Gordon Way	Workshop #1- 1/27/21	Yes	
Grant Rd	Workshop #3- 3/31/21	Yes	
Loyola Corners	Workshop #2- 2/24/21	Yes	
Berry Ave & Miramonte Ave	Workshop #1- 1/27/21	Yes	
St. Joseph Avenue	Workshop #2- 2/24/21	Yes	
Alicia Way	Complete Streets Commission Meeting- 5/19/21	Yes	
Alvarado Ave	Workshop #2- 2/24/21	No	
Casita Way	Workshop #2- 2/24/21	No	
Distel Dr	Workshop #3- 3/31/21	No	
Jordan Ave	Workshop #2- 2/24/21	No	
Los Ninos Way	Workshop #3- 3/31/21	No	
Marich Way	Workshop #1- 1/27/21	No	
Panchita Way	Workshop #3- 3/31/21	No	
Valencia Dr	Workshop #3- 3/31/21	No	


Los Altos Complete Streets Master Plan: An Active Transportation Framework | Appendix E















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	Proposed Sidewalk or Pathway Expansion			
	Proposed Crosswalks			
	Proposed Greenback Blke Lane Stendls			
Î	Proposed Bicycle Boulevard Stencils			

Proposed All-Way STOP Intersection Controls



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