City of Santa Cruz

ACTIVE TRANSPORTATION PLAN

FINAL February 28, 2017

CITY OF SANTA CRUZ

Active Transportation Plan

City of Santa Cruz

Executive Summary

Purpose

The purpose of this Active Transportation Plan is to act as a guide for active mobility within and around the City of Santa Cruz. Active Transportation refers to non-motorized forms of transportation, in particular walking and bicycling. The Active Transportation Plan (ATP) will identify an integrated network of walkways and bikeways that connect the City of Santa Cruz neighborhoods and communities to employment, education, commercial, recreational and tourist destinations. This Plan prioritizes a set of connected projects that, when fully implemented, will increase active transportation opportunities and make it safer and more convenient for people to walk, bike and use active modes in the City of Santa Cruz.

This Active Transportation Plan:

- Assesses the needs of bicyclists and pedestrians in Santa Cruz in order to identify a set of local improvements and implementation strategies that will encourage people to use active transportation modes for more of their daily trips
- Identifies a list of programs and projects to support and enhance bicycling and walking in Santa Cruz
- Identifies a methodology for financing and implementation of identified active transportation projects
- Coordinates planning and project implementation for all active modes within Santa Cruz and with adjacent jurisdictions
- Positions the City to better compete for various grant funding program

Development

The Active Transportation Plan was developed through the Planning and Public Works Departments. Coordination with other City Departments occurred throughout the development of the plan. Stakeholder input and broad community participation was gathered through an iterative public process. A more detailed account of the community participation campaign is included in Chapter 1.

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Introduction

Background and Purpose

The City of Santa Cruz has a long history of promoting active transportation. To date, the City has had separate Bicycle and Pedestrian Plans; the last update to the Bicycle Plan was in 2008 and to the Pedestrian Master Plan was in 2003. This Active Transportation Plan will be the first time that the bicycle and pedestrian planning process is integrated in a single document.

Since the 2008 Bicycle Transportation Plan and 2003 Pedestrian Master Plan were adopted, legislative and funding scenarios have changed significantly. Program changes at the state level consolidated multiple alternative transportation programs to one umbrella program known as the Active Transportation Program. California's Active Transportation Program was created by State Senate Bill 99 (Chapter 359, Statutes of 2013) and Assembly Bill 101 (Chapter 354, Statutes of 2013) to encourage increased use of active modes of transportation, such as biking and walking. The Active Transportation Program consolidates various federal and state transportation programs, including the Transportation Alternatives Program, Bicycle Transportation Account, and State Safe Routes to School, into a single program with a focus to make California a national leader in active transportation.

The Active Transportation Plan is intended to guide and influence transportation improvements for both bicyclists and pedestrians. The purposes of the Plan are to:

- Assess the needs of bicyclists and pedestrians in Santa Cruz in order to identify a set of local improvements and implementation strategies that will encourage people to use active transportation modes for more of their daily trips
- Identify a list of programs and projects to support and enhance bicycling and walking in Santa Cruz
- Identify a methodology for financing and implementation of identified active transportation projects
- Coordinate planning and project implementation for all active modes within Santa Cruz and with adjacent jurisdictions
- Position the City to better compete for grant funding programs

Coordination and Consistency with Existing Plans and Policies

There are a number of federal, state, regional, and local plans, policies and standards that guide and govern bikeway development and pedestrian connectivity. Preparation of

the Active Transportation Plan included a review of pertinent planning documents and policies. Brief summaries of these relevant efforts are provided in Appendix A: Existing Planning Framework and Appendix B: General Plan Active Transportation Policies. The Active Transportation Plan was undertaken in the context of the policies and standards of the following local, regional, and statewide planning and legislative documents:

- General Plan 2030
- Climate Action Plan (2012)
- Bicycle Transportation Plan (2008)
- Pedestrian Master Plan (2003)
- Santa Cruz Master Transportation Study
- Santa Cruz City Schools Complete Streets Master Plan(2015)
- Regional Transportation Plan (2014)
- Monterey Bay Sanctuary Scenic Trail Master Plan (2014)
- Complete Streets Act of 2008
- City of Santa Cruz Parks Master Plan (underway)

Particularly important to this is that the Active Transportation Plan will supersede both the 2008 Bicycle Plan and the 2003 Pedestrian Master Plan. This plan supports a guiding principle of the General Plan 2030 to "provide an accessible, comprehensive, and effective transportation system that integrates automobile use with sustainable and innovative transportation options—including enhanced public transit, bicycle, and pedestrian networks throughout the community."[1]

Regulatory Setting

A number of local, regional and state agencies are involved with transportation planning and implementation of transportation programs and improvements within the City of Santa Cruz. The City maintains local roadways and bike and pedestrian facilities. The California Department of Transportation (Caltrans) has jurisdiction over State highway segments that traverse the City, including portions of Highways 1, 9, and 17.

In addition to the City and Caltrans, other local and regional agencies responsible for transportation services and/or transportation planning include:

- *The Association of Monterey Bay Area Governments* (AMBAG) is the federally designated Metropolitan Planning Organization (MPO) for transportation planning activities in the tri-county Monterey Bay Region. It is the lead agency

[1] General Plan 2030, page 8

responsible for developing and administering plans and programs to maintain eligibility and receive federal funds for the transportation systems in the region. AMBAG develops the Metropolitan Transportation Plan (MTP) and the Metropolitan Transportation Improvement Program (MTIP).

- *The Santa Cruz Metropolitan Transit District* (SCMTD) provides transit services throughout Santa Cruz County.
- *The Santa Cruz Regional Transportation Commissio*n (SCCRTC) is the Regional Transportation Planning Agency (RTPA) for Santa Cruz County. The SCCRTC oversees planning and funding programs for local and regional projects within Santa Cruz County using state and federal transportation funds. The SCCRTC develops the Regional Transportation Plan (RTP) and Regional Transportation Improvement Plan (RTIP). Many City transportation projects are funded through grant programs administered by the SCCRTC.
- *The University of California at Santa Cruz (UCSC)* implements a transportation systems management and parking program that provides a comprehensive package of commute options for university students and staff, including carpools, bicycles, and transit; free bus passes; and shuttle buses and bike shuttles serving all areas of the campus.

Caltrans Compliance

The State's Active Transportation Program (ATP) was created by State Senate Bill 99 (Chapter 359, Statutes of 2013) and Assembly Bill 101 (Chapter 354, Statutes of 2013) to encourage increased use of active modes of transportation, such as biking and walking.

The ATP consolidates various federal and state transportation programs, including the Transportation Alternatives Program, Bicycle Transportation Account, and State Safe Routes to School, into a single program with a focus to make California a national leader in active transportation. The goals of the ATP are to:

- Increase the proportion of trips accomplished by biking and walking.
- Increase the safety and mobility of non-motorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals.
- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

To maintain eligibility with Caltrans's adopted guidelines, this plan has been prepared consistent with the 2014 Active Transportation Program Guidelines adopted March 20, 2014 (Table 1).

Table 1 Required Active Transportation Plan Elements

	Location within this Plan (page #)
a. The estimated number of existing bicycle trips and pedestrian trips in the plan area, both in absolute numbers and as a percentage of all trips, and the estimated increase in the number of bicycle trips and pedestrian trips resulting from implementation of the plan.	Existing:21 114
b. The number and location of collisions, serious injuries, and fatalities suffered by bicyclists and pedestrians in the plan area, both in absolute numbers and as a percentage of all collisions and injuries, and a goal for collision, serious injury, and fatality reduction after implementation of the plan.	61, 59, 63, 64
c. A map and description of existing and proposed land use and settlement patterns which must include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, major employment centers, and other destinations.	17, 19
d. A map and description of existing and proposed bicycle transportation facilities. Including a description of bicycle facilities that serve public and private schools and, if appropriate, a description of how the five Es (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of bicycling to school.	Existing: 28 Proposed: 98
e. A map and description of existing and proposed end-of-trip bicycle parking facilities.	Existing: 32 Proposed: 101
f. A description of existing and proposed policies related to bicycle parking in public locations, private parking garages and parking lots and in new commercial and residential developments.	Existing: 32, 33 Proposed: 104, 101
g. A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These must include, but not be limited to, bicycle parking facilities at transit stops, rail and transit terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.	Existing: 34 Proposed:Multimodal Connections 80

h. A map and description of existing and proposed pedestrian facilities, including those at major transit hubs and those that serve public and private schools and, if appropriate, a description of how the five E's (Education, Encouragement, Enforcement, Engineering, and Evaluation) will be used to increase rates of walking to school. Major transit hubs must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	29, 35, 80
i. A description of proposed signage providing way-finding along bicycle and pedestrian networks to designated destinations.	56, 59, 59
j. A description of the policies and procedures for maintaining existing and proposed bicycle and pedestrian facilities, including, but not limited to, the maintenance of smooth pavement, ADA level surfaces, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	106
k. A description of bicycle and pedestrian safety, education, and encouragement programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the law impacting bicycle and pedestrian safety, and the resulting effect on collisions involving bicyclists and pedestrians.	69
l. A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.	12
m. A description of how the active transportation plan has been coordinated with neighboring jurisdictions, including school districts within the plan area, and is consistent with other local or regional transportation, air quality, or energy conservation	7
n. A description of the projects and programs proposed in the plan and a listing of their prioritizations for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	72, 74, 108
o. A description of past expenditures for bicycle and pedestrian facilities and programs, and future financial needs for projects and programs that improve safety and convenience for bicyclists and pedestrians in the plan area. Include anticipated revenue sources and potential grant funding for bicycle and pedestrian uses.	109
p. A description of steps necessary to implement the plan and the reporting process that will be used to keep the adopting agency and community informed of the progress being made in implementing the plan.	108
q. A resolution showing adoption of the plan by the city, county or district. If the active transportation plan was prepared by a county transportation commission, regional transportation planning agency, MPO, school district or transit district, the plan should indicate the support via resolution of the city(s) or county(s) in which the proposed facilities would be located.	(to come after Council adoption)
Source: Caltrans Local Assistance Program Guidelines, Chapter 22	

Public Participation

The Active Transportation Plan was developed in 2015/2016. The Plan was prepared by City Staff with extensive input from a stakeholder group, bicycle and pedestrian advocacy organizations, and interested citizens. Public participation was instrumental in the development of the Active Transportation Plan. The public participation process is summarized below:

Figure 1 Community Meeting

- Presentation at Transportation and Public Works Commission on March 16, 2015, May 16, 2016, and July 18, 2016
- Agenda item for City Council on April 14, 2015
- Stakeholder Group- representatives from a broad cross section of active transportation representatives. The Stakeholder Group holds ongoing meetings throughout the planning process
- Community Workshops on August 22,2015, September 9, 2015, September 15, 2015, and September 22, 2015- Average of 60 people at each meeting
- Community Outreach at the Museum of Art and History's Third Friday event on August 21,2015- Approximately 40 people gave feedback
- Outreach to the Bike Santa Cruz Member Party on August 19, 2015- Approximately 50 people gave feedback

- Presentation to the SCCRTC Elderly and Disabled Transportation Advisory Committee on August 11, 2015
- Presentation to the SCCRTC Bicycle Advisory Committee on August 10, 2015
- Outreach at Open Streets Santa Cruz on October 11, 2015- Approximately 30 people gave feedback
- Presentation at Transportation and Public Works Commission on October 19, 2015
- Interactive online mapping tool- Received 238 comments on desired projects
- City Hall to YOU on February 25, 2016

Coordination with Neighboring Jurisdictions

This Active Transportation Plan was coordinated with neighboring jurisdictions, including the County of Santa Cruz and the Santa Cruz County Regional Transportation Commission.

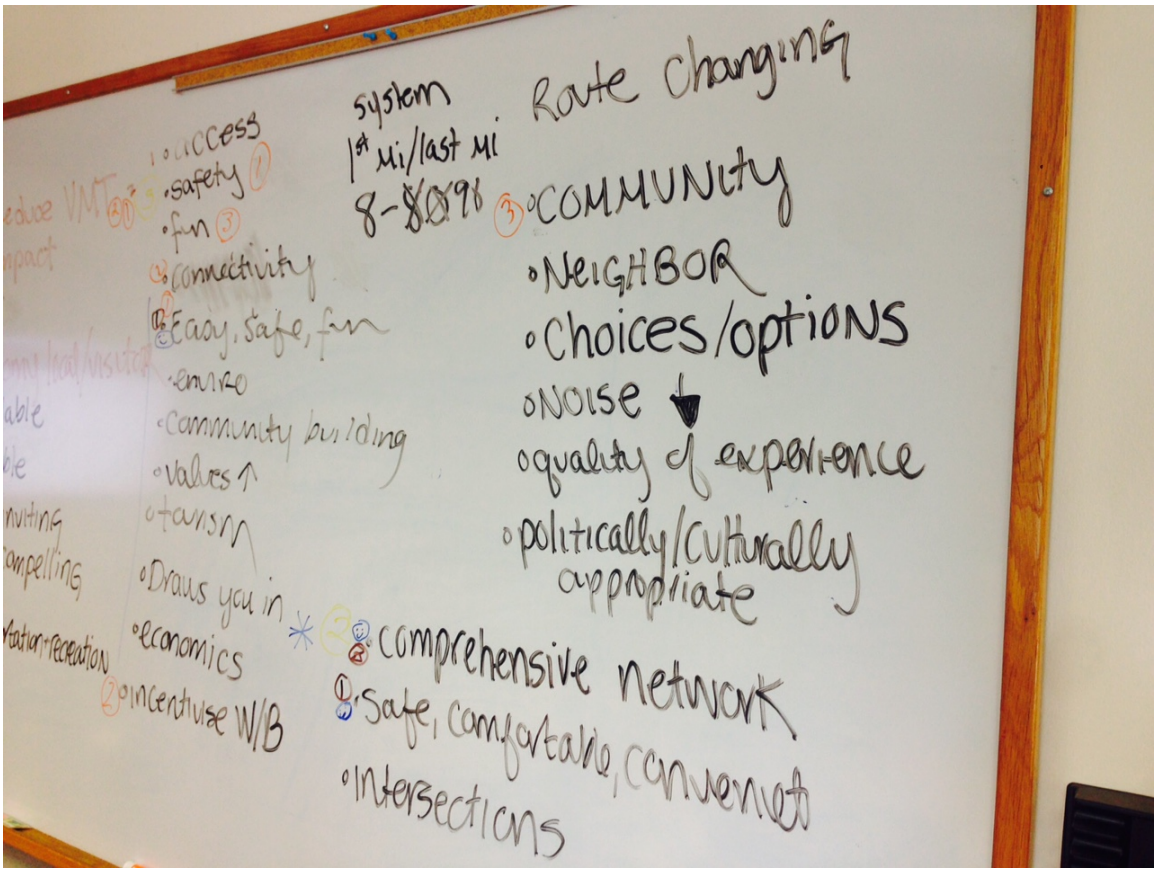


Figure 2 Stakeholder Group Visioning

Existing Conditions

The following chapter describes the existing conditions in the City of Santa Cruz, including land use, demographics, and current mode split characteristics.

Setting

The City of Santa Cruz is located in Santa Cruz County, California. The City limits encompass a total land area of 12.7 square miles. Santa Cruz is generally bounded by the Monterey Bay, the Santa Cruz Mountains, and public open space areas.

The City is known for its natural setting, vibrant tourism base, cultural amenities, diverse community, great weather, and high quality of life. These amenities distinguish Santa Cruz as one of the most livable and sought-after communities in the Monterey Bay Area, and make Santa Cruz an ideal community to use active modes of transportation.

The City of Santa Cruz is home to the University of California at Santa Cruz (UCSC), founded in 1965. While the UCSC campus has many on campus housing options, many students and faculty live in the City Santa Cruz. The culture and community of UCSC has a large impact on the city.

Community Profile

Santa Cruz is a coastal community of approximately 61,245 residents. Nearly equal numbers of males (30,809) and females (30,436) live in the City of Santa Cruz[2]. According to the Census 2009-2013 American Community Survey, the median age in the City is 29.3, a younger median than the state (35.4), the County (36.9), the surrounding cities of Capitola (41.5) and Scotts Valley (39.5). The young median age in the City of Santa Cruz is partially attributable to the UCSC student body. A population pyramid for the City of Santa Cruz is shown in Figure 3, showing the age distribution by sex.

[2] American Community Survey 2009-2013 5-year estimate

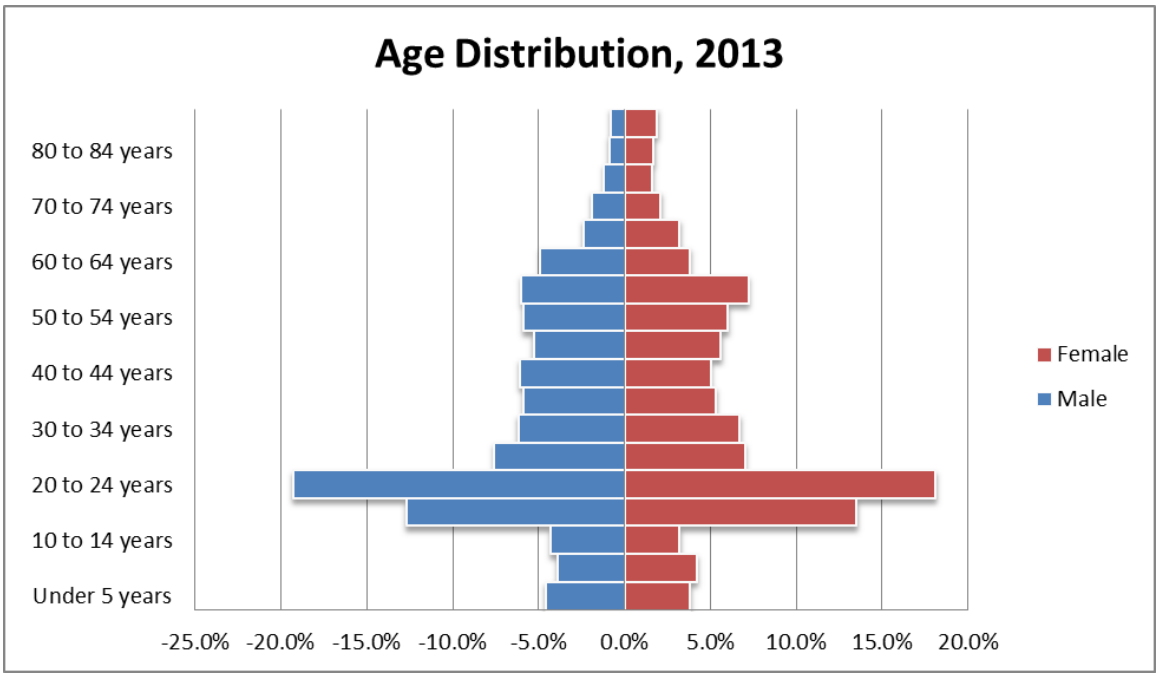


Figure 3 Age Distribution by Sex, 2013. Source: U.S. Census Bureau, 2009-2013 5-Year American Community Survey

Existing and Proposed Land Use

The City of Santa Cruz General Plan 2030 expresses the city's development goals and embodies public policy relative to the distribution of future land uses. It identifies county's land use, circulation, environmental, economic, and social goals and policies as they relate to land use and development. It provides a basis for local government decision making and informs citizens, developers, and decision-makers of the ground rules that guide development within the county. The City adopted the most recent General Plan in June 2012.

The General Plan Land Use Element addresses distribution, location, and extent of the use of land for housing, business, industry, open space, natural resources, and recreation. The Land Use element includes land use designations, which define the characteristics and intensity of each land use category. The 2030 General Plan Land Use Designations map is shown in Figure 4.

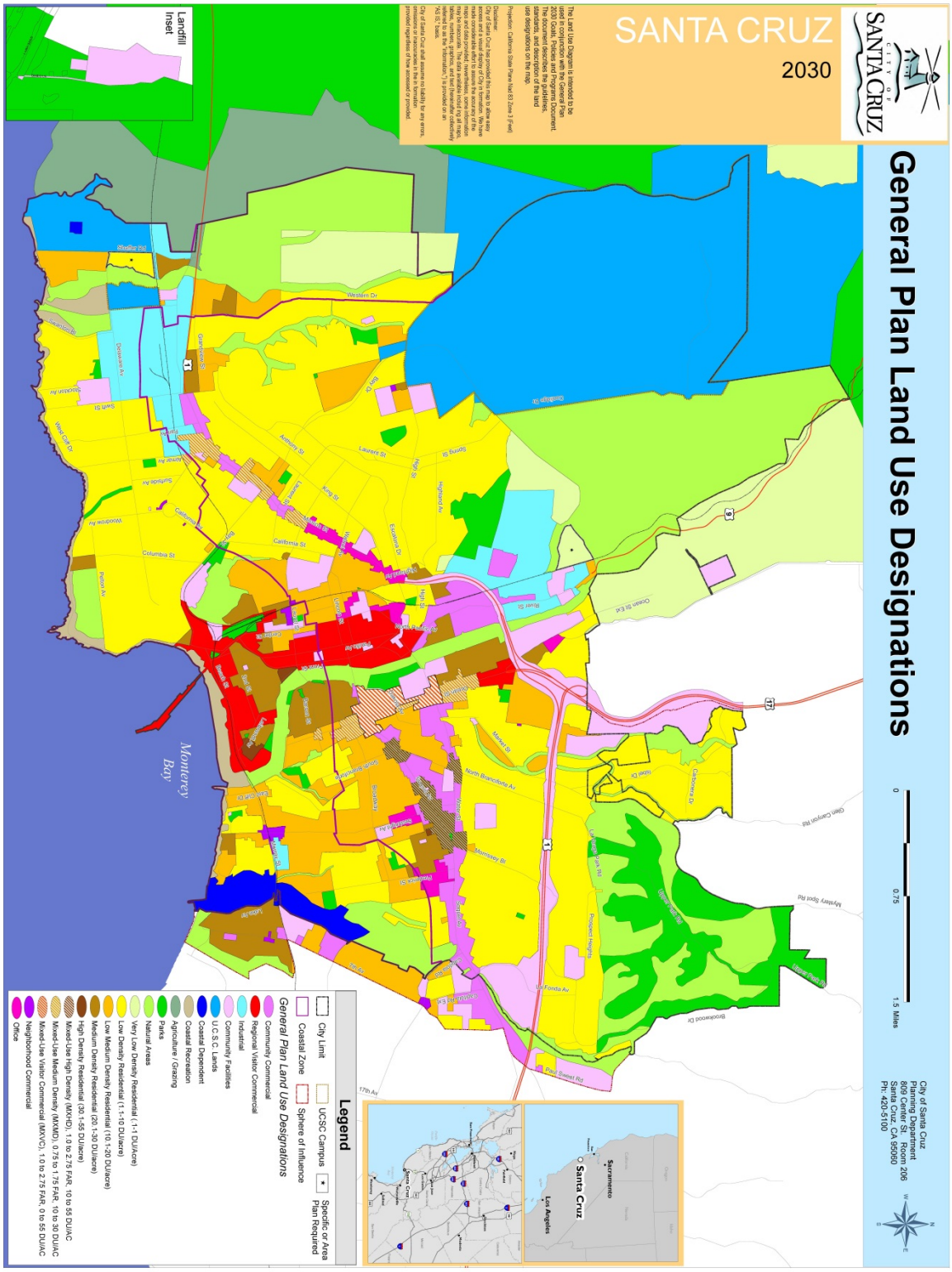


Figure 4 General Plan Land Use Map

Urban Form

The City of Santa Cruz is intentionally not growing in outward land area. The General Plan 2030 calls for future growth in the City to be centered around activity centers and mixed use infill development along multimodal transportation corridors, building upon the same framework used in the Master Transportation Study (MTS). This type of land use pattern emphasizes sustainable development patterns, limiting urban sprawl and protecting the City's greenbelts and natural resources.

In deciding to grow internally, creating better opportunities for active transportation will be ever more important. In directing new growth to multimodal corridors, many more residents will be within a shorter walk or bike ride to access many of their daily needs. The activity centers identified in the General Plan and MTS are areas that support active transportation modes: they are walkable, mixed-used, transit-oriented areas with a distinct focus, identity, function, and sense of place. These areas are where the city's economic, educational, recreational, cultural, and social life is concentrated. In the General Plan and MTS, seven activity centers were identified: Harvey West area, Downtown area, Soquel Avenue Eastside Business District, Mission Street commercial area (Westside), UCSC, the Beach and Ocean Street. Most major commercial and employment centers in the City are focused in activity centers (Figure 5).

Santa Cruz City Schools, the public school district in Santa Cruz, serves over 7,000 students in preschool through high school at 13 school sites. While the district primarily serves families living in the City of Santa Cruz, families from adjacent neighborhoods within the County also attend Santa Cruz City School District Schools. Additionally, there are 8 private schools in the city limits. The areas surrounding each of these school campuses are particularly important for active transportation because of the higher number of young active transportation users.

Figure 5 Activity Centers. Source: Master Transportation Study

Who is Using Active Transportation? The Current Commute Profile

In order to better understand who is using active transportation Demographic and travel information were analyzed to identify a baseline for alternative transportation commute characteristics. Journey to work data was gathered from the Census Bureau's American Community Survey (ACS) 2010-2014 5-year estimates, shown in Table 2. This baseline data provides a starting point to develop improvement plans and priorities and be able to measure the progress towards increasing active transportation usage.

The ACS Journey to Work data is considered the most reliable source of transportation mode choice data available, providing information on mode, travel time, commute flows, vehicles available, and departure times. While the data available is an excellent resource, it isn't without limitations. Because the data set is about workplace bound travel, it only captures commute data for employed persons over the age of 16. This leaves out school trips and trips by retired individuals, and trips for shopping, recreation, and other purposes. To gather Journey to Work data for the ACS, the Census Bureau asks "how did you usually get to work last week?" Respondents that use more than one mode are instructed to choose the mode that they used for the most distance. As such, the data gathered from the ACS does not reflect trips that use more than one mode, such as walking to the bus stop then taking the bus, and doesn't capture any non-work trips. While the Journey to Work data does not provide the complete picture of travel patterns in the City of Santa Cruz, it does represent the most comprehensive dataset available to assess how Santa Cruz commutes to work.

The ACS Journey to Work data shows that the City of Santa Cruz has a significant portion of commuters who use active modes of travel, and that the rate of active transportation use is increasing. Rates of cycling in the City of Santa Cruz have more than doubled since the 2008 Bicycle Transportation Plan, where Census data from 2000 showed that 4.7 percent of the population (1,282 individuals) commuted by bike. The ACS 2010-2014 5-year estimates show that the cycling rate in the City of Santa Cruz is now 9.7 percent (2,916 individuals). This rate is higher than both the County and the State at 3.5 percent and 1.1 percent respectively.

Rates of walking in the City of Santa Cruz are similarly higher than in the County and the State. Approximately 9.9 percent (2,976 individuals) of commute trips in the City of Santa Cruz are made on foot, compared to 4.3 percent in the County and 2.7 percent in the State.

Also important to discussing active transportation is discussing driving. The ACS 2010-2014 shows that 58.7% (17,644) of workers in the City of Santa Cruz "drive alone" to work. While 59.5% is a high percentage, it is significantly lower than the County of Santa Cruz (70.3%) and the state of California (73.2%).

Rates of walking and biking in the City of Santa Cruz, County of Santa Cruz, and state of California are shown in Table 2.

Table 2 Journey to Work

	City of Santa Cruz		**County of Santa Cruz**		**California**	
Total Population	62,045		267,203		38,066,920	
Employed persons ≥ 16 years	30,058		126,431		16,529,777	
Means of Transportation	**Percent**	**Number**	**Percent**	**Number**	**Percent**	**Number**
Drove alone	58.70%	17,644	70.30%	88,881	73.20%	12,099,797
Carpooled	7.00%	2,104	9.40%	11,885	11.10%	1,834,805
Public transportation	6.00%	1,803	2.70%	3,414	5.20%	859,548
Walked	***9.90%***	***2,976***	*4.30%*	*5,437*	*2.70%*	*446,304*
Bicycle	***9.70%***	***2,916***	*3.50%*	*4,425*	*1.10%*	*181,828*
Taxicab/motorcycle /other	2.20%	661.276	2.80%	3,540	1.30%	214,887
Worked at home	6.50%	1,954	7.00%	8,850	5.30%	876,078
TOTAL	100%	30,058	100%	126,431	100%	16,513,247
Source: 2010-2014 American Community Survey 5-Year Estimates						

Visitors and Tourism

Besides residents, visitors are another important demographic. Santa Cruz is a world renowned tourist destination. Popular tourist destinations in Santa Cruz include the beaches and waterfront, Santa Cruz Beach Boardwalk, local and regional wineries, redwood forests, and restaurants and shopping areas. Adding to the appeal of Santa Cruz is the temperate climate, making it an ideal location for walking and biking. To provide an additional draw, some local hotels have begun to provide their guests with branded loaner bikes to make it easier to see the attractions.

Types of Active Transportation Users:

Just as there are many types of active transportation facility types, there are different types of active transportation users. Each user has different needs, different abilities, and different comfort levels. Active transportation users are different ages and genders, have different family types and trip purposes. Needs of bicyclists and pedestrians are sometimes different. Despite all these differences, active transportation users do have shared goals for their transportation network: they want their journey to be safe, connected, comfortable, and efficient.

It is important to plan for bicyclists and pedestrians of all skill levels, ages, and abilities when crafting a new plan or project. Active transportation infrastructure should accommodate as many different user types as possible, from children on training wheels to competitive cyclists to seniors out for a stroll.

We have a varied roadway network in Santa Cruz. While we have many streets that are low speed and volume, other corridors carry very large volumes of vehicles at real or perceived higher speeds. Research has shown us that in order to encourage new users, these roadways must feel safe and comfortable for active transportation users.

Different types of Active Transportation users are detailed below:

Cycling:

A framework for understanding the characteristics, attitudes, and infrastructure preferences of different bicyclists in the US population as a whole was developed in Portland, Oregon and is now widely used throughout the United States. This breaks

cyclists in to four types, detailing where they will ride and what their barriers to riding may be. This framework is seen below in Table 3.

Table 3 Types of Bicyclists

Strong and Fearless (approximately 1% of population)
Characterized by bicyclists that will typically ride anywhere regardless of roadway conditions or weather. Cycling is a strong part of their identity. These bicyclists can ride faster than other user types, prefer direct routes and will typically choose roadway connections -- even if shared with vehicles -- over separate bicycle facilities such as shared use paths.
Enthused and Confident (5-10% of population)
This user group encompasses bicyclists who are fairly comfortable riding on all types of bikeways but usually choose low traffic streets or multi-use paths when available. These bicyclists may deviate from a more direct route in favor of a preferred facility type. This group includes all kinds of bicyclists such as commuters, recreationalists, racers and utilitarian bicyclists.
Interested but Concerned (approximately 60% of population)
This user type comprises the bulk of the cycling population and represents bicyclists who typically only ride a bicycle on low traffic streets or multi-use trails under favorable weather conditions. These people are open to the idea of cycling and curious about cycling more, but may be afraid to try. These bicyclists perceive significant barriers to their increased use of cycling, specifically traffic and other safety issues. This group may ride more if they felt safer on roadways- if cars were slower and less frequent, if there were more quiet streets or bicycle and pedestrian paths. These people may become "Enthused & Confident" with encouragement, education and experience.
No Way, No How (approximately 30% of population)
Persons in this category are not bicyclists, and are not interested in becoming bicyclists. Their reasons may be safety, topography, inability, or just lack of interest. A significant portion of these people will not ride a bicycle under any circumstances.

Source: Four Types of Cyclists. (2009). Roger Geller, City of Portland Bureau of Transportation

Intuitively, we understand these grouping because we experience them every day. We see the *Strong and Fearless* riders along busy arterials in their coordinated spandex outfits. We pass by the *Enthused and Confident* riders running errands along slower streets. We see the *Interested but Concerned* riders on weekend recreational rides on

our separated paths, such as West Cliff, the San Lorenzo Riverwalk, and Arana Gulch. If we know someone in the *No Way, No How* group, hear it from them because they are vocal in their opposition.

The City of Santa Cruz bicycle mode split aligns with the four types of bicyclists. With 9.5% of all work trips happening on bike, we likely have captured all of the *Strong and Fearless* and almost all of the *Enthused and Confident* riders. It is not likely that we will capture the 30% of the population that are *No Way, No* How, and that's okay. We now must look to the *Interested but Concerned* riders, the estimated 60% of our community who would like to ride their bikes more, if only they felt safer. It is this 60% is who we must keep in mind while planning our future bicycle network.

Pedestrians:

While bicyclists are grouped according to comfort and attitudes, pedestrian characteristics and abilities are primarily broken down by age group and physical ability. The Federal Highway Administration has grouped pedestrians in age groups and defined certain characteristics of each, seen in Table 4.

Table 4 Categories of Pedestrians by Age

Infants and Toddlers (ages 0 to 4)
At this age, walking skills are just being developed and the children require constant parental supervision. Infants and toddlers are very limited in ability and are: • Learning to walk. • Developing peripheral vision and depth perception. • Impulsive and unpredictable.
Young Children (ages 5 to 12)
At a young age, children have unique abilities and needs. Since children this age vary greatly in ability, it is important for parents to supervise and make decisions on when their child is ready for a new independent activity. Children in this age range tend to be: • Impulsive and unpredictable. • Limited in their peripheral vision (a sound source is not easily located). • Limited in training/lacking in experience. • Thrilled or excited by close calls. • Short and hard to see by drivers. • Susceptible to darting or dashing out into the intersection. • Likely to copy the behavior of older people.
Preteens (ages 13 to 14)

By middle school years, children have many of their physical abilities but still lack experience and training. Now there is greater desire to take risk. Preteens generally:

- Lack experience.
- Walk and bicycle more and at different times (have a higher crash exposure).
- Ride more frequently under risky conditions (in high traffic).
- Lack positive role models.
- Walk across more risky roadways (collectors and above).
- Get involved in more intersection dash collisions.
- Have a sense of invulnerability that makes them more willing to take chances.

High School Aged (ages 15 to 18)

By high school and college age, exposure changes and new risks are assumed. Many walk and bicycle under low light conditions. Other characteristics of this age group are that they:

- Are very active, can go long distances, and visit new places.
- Feel invincible.
- Still lack experience and training.
- Are capable of traveling at higher speeds.
- Will overestimate their abilities on hills, curves, etc.
- Attempt to use bicycles, in-line skates, etc., based on practices carried over from youth.
- Are willing to experiment with alcohol and drugs.

Adults (19 to 40)

These adults are highly competent in traffic and capable of perceiving and dealing with risk in most circumstances. This group generally:

- Is active and fully aware of the traffic environment.

Middle-Aged Adults (41 to 65)

During this stage of life, many pedestrians experience a slowing of the reflexes necessary to observe, assess, and respond to traffic conditions.

Senior Adults (65+)

Senior adults, ages 65 and up, begin a gradual decline in physical and physiological performance, with a rapid decline after age 75. Many are incapable of surviving serious injuries. These changes affect their performance. Seniors:

- Walk more in older years, especially for exercise/independence.
- May have reduced income and therefore no car.
- All experience some reduction in vision, agility, balance, speed, and strength.
- May have further problems with hearing, extreme visual problems, and concentration.
- Have the tendency to focus on only one object at a time.
- Have difficulty hearing vehicles approaching from behind.
- All have greatly reduced abilities under low light/night conditions.

• May overestimate their abilities. • Have a higher fatality rate than other pedestrians involved in collisions with motor vehicles
Source: Federal Highways Administration. University Course on Bicycle and Pedestrian Transportation, July 2006. http://www.fhwa.dot.gov/publications/research/safety/pedbike/05085/chapt8.cfm

Planning for facilities that meet the needs of our local population is critical. In Santa Cruz, we have a large population of young adults 15-24, but we know that we will have a growing senior population as the baby boomers age. We must use this data and guidance to build out a pedestrian network that meets the needs of our varied population.

Existing Bicycle and Pedestrian Network

The following chapter describes the existing active transportation network, including bike infrastructure, pedestrian infrastructure, end of trip bike facilities, connections to transit, and progress made since the last Bicycle and Pedestrian Plans.

Bike Network

Existing bike facilities in the City of Santa Cruz consist primarily of multi-use paths, striped Class II on-street bike lanes, signed and marked Class III bike routes. The City has also constructed contraflow lanes and cycletracks in limited locations to improve connectivity, safety, and access.

Major advances in the bike lane network were made as a result of past Bicycle Plans, beginning with the 1980 Bikeway Study. More recent Bike Plans have focused on completing large-scale bicycle lane projects on the major commute corridors, including Bay Street, Beach Street, High Street, Soquel Avenue, Water Street, and Ocean Street. Significantly, Soquel Avenue and Ocean Street still do not have a complete, continuous bike lane network.

The 2008 Bike Plan emphasized completing smaller connector projects, adding signed and marked Class III bike routes, and creating a more detailed network of routes to give a more diverse group of cyclists a range of facility choices.

While the City of Santa Cruz has made significant progress in the bicycle network, there are still many areas identified where more progress can be made. These are outlined in the Recommendations chapter**.** Gaps in the network, speed, and traffic volume can all serve as deterrents to riding. While bicycle riders are legally allowed to travel on all general purpose roadways along with motor vehicles unless expressly prohibited (e.g., freeways), many bike riders do not feel comfortable taking the lane or sharing the roadway with motorists.

A map of the existing bike network is shown in Figure 6**.**

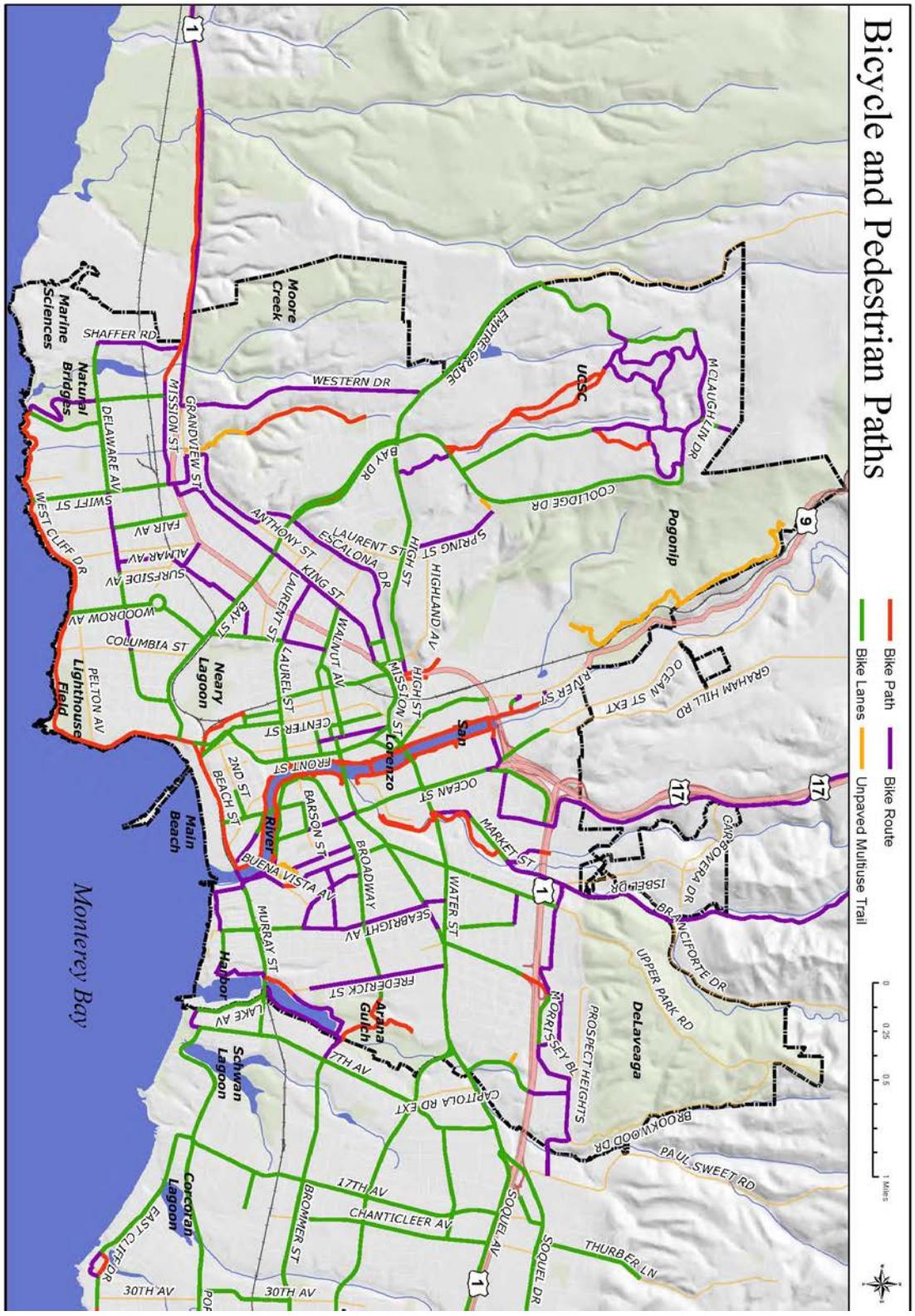


Figure 6 Existing Bike Facilities

Existing Pedestrian Network and Facilities

The existing pedestrian network is primarily sidewalks and multi-use pathways. Despite ongoing improvements in the pedestrian realm, extensive gaps and other deficiencies in the pedestrian network still exist. While much of the City was constructed with sidewalks, there are large areas of the upper Westside, Prospect Heights, and East Morrissey neighborhoods that were constructed without sidewalks. Many other areas in the City have discontinuous sidewalk networks, missing curb ramps, or sidewalks in disrepair. The condition of a sidewalk can constitute a barrier, particularly if there are cracks, lifts, vegetation or other obstructions.

Property owners, not the City, are responsible for maintaining sidewalks in front of their properties and are often unaware or slow to make needed repairs. Groups such as the RTC Elderly and Disabled Transportation Advisory Committee (E&D TAC) Pedestrian Safety Work Group have been actively providing outreach about maintenance responsibilities to counteract the lack of understanding about state utilities codes that designate maintenance responsibilities to the adjacent property owner.

Figure 7 Pedestrian Crossing

Recent larger scale pedestrian improvements implemented by the City have mainly occurred through targeted grant programs, particularly Safe Routes to School funding. Recent Safe Routes to School projects have focused on constructing continuous sidewalks between neighborhoods and schools to encourage more students to use active

transportation to school. These projects have been completed at DeLaveaga Elementary School, Gault Elementary School, Bay View Elementary School, and Westlake Elementary School. A Safe Routes to School Crossing Improvement project has received Caltrans funding and will improve intersections and active transportation facilities at 24 locations surrounding eight Santa Cruz City Schools.

Recommended improvements to the pedestrian network are outlined in the Recommendations Chapter.

A map of the existing sidewalk network is shown in Figure 8.

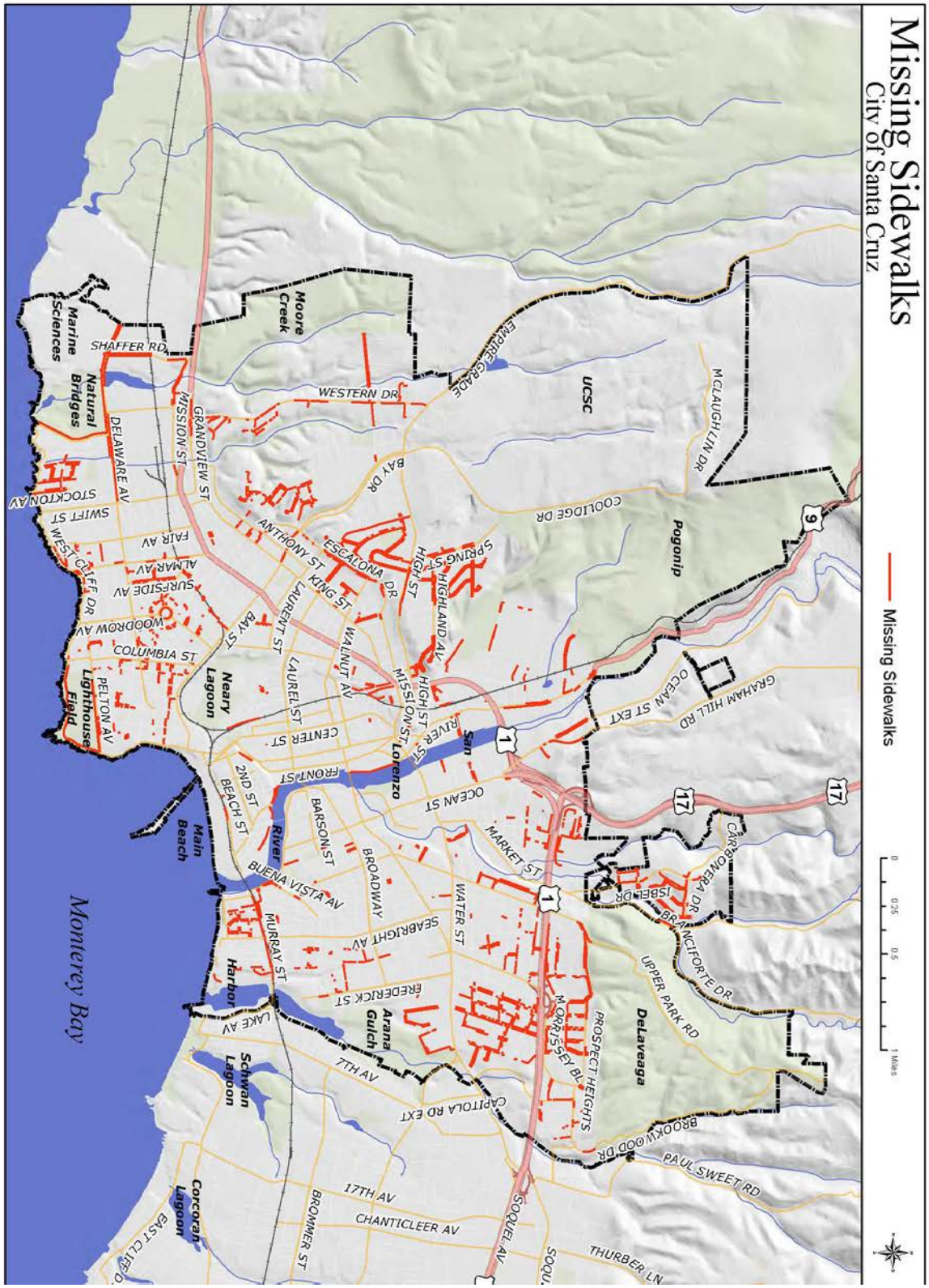


Figure 8 Missing Sidewalks

End-of-Trip Bicycle Parking

Among the necessary supports for bicycle transportation, bike parking stands out for being both vital and a fairly inexpensive piece of infrastructure. Still, it requires some attention to get it right. Bike parking may go unused if it's not more appealing to users than the nearest sign post or tree. A minor mistake in installation can make a quality rack unusable. The variety of bicycle sizes, shapes, and attachments continues to increase, and good bike parking should accommodate all types. The Association of Pedestrian and Bicycle Professionals is the leading guide on best practices in bike parking.

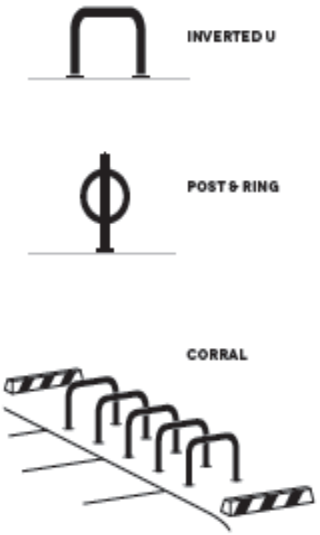


Figure 9 Class II Bike Parking Examples. Source: Essentials of Bike Parking: Selecting and Installing Bicycle Parking that Works, Association of Pedestrian and Bicycle Professionals

Generally, there are two types of bike parking: short-term and long-term.

Short Term: What you think of as the typical bike rack. Short-term parking is designed to meet the needs of people visiting businesses and institutions, and others with similar needs—typically lasting up to two hours. Short-term users may be infrequent visitors to a location, so the parking installation needs to be readily visible and self-explanatory. Examples are shown in Figure 9.

Long Term: Users of long-term parking generally place high value on security and weather protection. Long-term parking is designed to meet the needs of employees, residents, public transit users, and others with similar needs. These users typically park either at home or at a routine destination such as a workplace. They often leave their bicycles unmonitored for a period of several hours or longer, so they require security and weather protection that let them park without unreasonable concern for loss or damage.

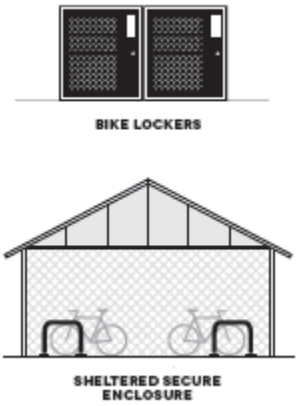


Figure 10 Class II Bike Parking Examples. Source: Essentials of Bike Parking: Selecting and Installing Bicycle Parking that Works, Association of Pedestrian and Bicycle Professionals

Long-term parking can take a variety of forms, including a room within a residential building or workplace, a secure enclosure within a parking garage, or a cluster of bike lockers. Some long-term parking is open to the public—such as a staffed secure enclosure at a transit hub—and some of it is on private property with access limited to employees, residents, or other defined user groups. An example is shown in Figure 10.

Existing Bike Parking and Shower Requirements

The City has an existing Bicycle Parking Ordinance included in Section 24.12.250 of the Municipal Code that meets the Association of Pedestrian and Bicycle Professionals recommended best practices. The current code requires both long term (class I) and short term (class II) bicycle parking to be installed as a condition of a building permit for a remodel or new building or for a change in occupancy. Additionally, by the existing code, new building development, or addition or enlargement of an existing building of a minimum size are required to provide shower and locker facilities to promote active transportation. Highlights of the Bike Parking and Shower Facility requirements are included below. The complete Bike Parking Requirements and Shower Facility Requirements from the Municipal Code are included in Appendix C: Bike Parking Requirements.

- Class II facilities must provide that the user can use either a U-lock or cable lock, that bikes are supported with two-points of contact, and that wheel-only type racks are not acceptable.
- Bicycle parking should be located in close proximity to the building's entrance and clustered in lots not to exceed sixteen spaces each.
- Bicycle parking facilities should be located in highly visible, well-lighted areas to minimize theft and vandalism.
- Racks must be usable; not be placed so close to a wall or other obstruction so as to make use difficult.
- Within auto parking areas, bike parking shall be separated by a physical barrier to protect bicycles from damage by cars
- New and preexisting developments may convert up to 10% of their auto spaces to unrequired additional bike parking, as long as the spaces are conveniently located near the entrance and at least 6 new bicycle spaces per auto space are installed.
- Industrial, manufacturing, and medical, general business office or financial service must install showers in all buildings 12,500 square feet or greater. Retail,

eating and drinking and personal service must install showers in all buildings 25,000 square feet or greater. The number required increases based on size.
- Shower facilities are required to include at least one personal locker for every twenty employees.

The existing code is a good one, but leaves room for improvement. It distinguishes different types of facilities needed by different types of bicyclists, and intends to link the type of use to the quantity of facilities provided. That being said, there are improvements that can be made. These are outlined in the Recommendations Chapter.

Multimodal Connections

Transit can serve to increase the distance active transportation users can travel without relying on a car. Convenient multi-modal connections that are well-integrated into the transportation system are a vital component of a balanced transportation network and can serve to extend trip distances. In the City of Santa Cruz, there are multiple transit options available to travel both within and outside of the city:

- Santa Cruz Metropolitan Transit District (SCMTD) provides transit services throughout Santa Cruz County and commuter service to Santa Clara County.
- Monterey Salinas Transit (MST) operates limited service between Santa Cruz and Monterey.
- UCSC operates two Bike Shuttles to the university from downtown Santa Cruz and the Westside as well as shuttle service on campus.
- Major employers from Silicon Valley offer private bus service for their employees from Santa Cruz to their campuses.

The active transportation network offers numerous connections to transit. The downtown transit center, Pacific Station, at 920 Pacific Avenue, is the primary transit hub for the City and County of Santa Cruz. Pacific Station is located in the downtown core, and the existing sidewalk network is complete in the blocks surrounding the transit center. Pacific Station has on-site class 2 bike racks provided by Santa Cruz METRO. These racks are patrolled by Santa Cruz METRO security staff 24 hours a day. The City of Santa Cruz has a carousel of 16 Class 1 bicycle lockers in the City parking lot adjacent Pacific Station.

A map of the existing transit network is shown in Figure 11.

Bikes and Buses

All of the Santa Cruz METRO buses are equipped with three-position front-mounted bicycle racks. Bikes may be loaded/unloaded at posted stops in the transit system. Folding bicycles are allowed inside the bus if they can be folded and stored out of the aisle and controlled by the passenger. Standard bicycles are allowed inside the bus on selected routes if there is sufficient space available inside. If the space is needed for seniors or people with disabilities, the bicycle will not be allowed inside the bus.

The University of California operates two Bike Shuttles to the university. The Bike Shuttles serve to transport bicycles up the hill to the University, enabling students, faculty, and staff to avoid the uphill ride to campus while still being able to bring their bicycle to campus for other trips during the day. The Westside Bike Shuttle operates from Olive/Mission Streets during Fall, Winter, and Spring quarters and from the Mission Street CVS during Summer quarter. The Downtown Bike Shuttle departs Pacific/Cathcart Streets during Fall, Winter, and Spring quarters. The Downtown Bike Shuttle does not run during Summer quarter.

Pedestrians and Buses

Santa Cruz METRO bus stops are located in the public right-of-way. The majority of bus stops are connected to the existing sidewalk network, and some provide passenger amenities including transit shelters, benches, and trashcans. All Santa Cruz METRO buses are ADA accessible.

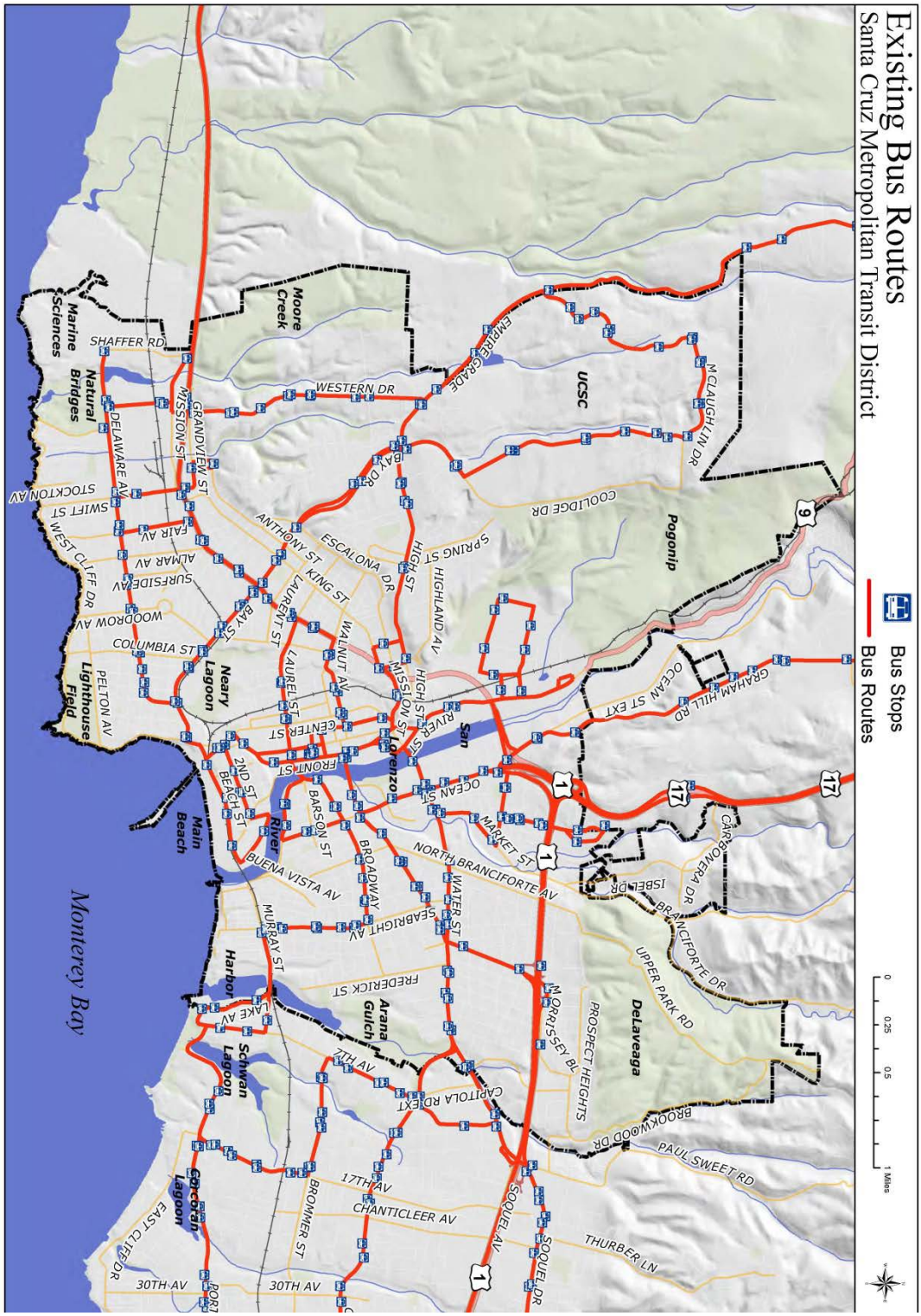


Figure 11 Existing Transit Facilities

Park and Ride Lots:

Park and Ride lots in Santa Cruz County are managed by the Santa Cruz County Regional Transportation Commission (SCCRTC). Park and Ride lots are intended to be centrally located pick up spots where commuters can park their cars during the work or school day to meet a carpool, vanpool, bus, or use active transportation modes for the remainder of their trip. Parking is free for public use during specified hours, but no overnight parking is allowed.

Within the City of Santa Cruz, there is one Park and Ride lot. This Park and Ride lot is located at the Quaker Meetinghouse, 225 Rooney St (between Highway 1 and Morrissey). There are twelve designated Park and Ride spaces. This Park and Ride lot is not served by any Santa Cruz METRO fixed route transit service, but is connected to the sidewalk network and the bike network.

Progress since the 2008 Bicycle Master Plan and 2003 Pedestrian Plan

The City of Santa Cruz has been a leader in promoting active transportation modes as a safe, viable, and efficient alternative to the personal automobile. The City has made strides in both traditional and emerging trends and practice in active transportation projects, including sidewalk infill, rectangular rapid flashing beacons (RRFB), bike lanes, sharrows, green lanes, contraflow lanes, and multi-use paths.

While the Bicycle Plans in 2000 and 2004 Bicycle Transportation Plans emphasized large-scale bicycle projects on major commute corridors, the 2008 Plan focused upon connector projects, creating and building out a detailed network of routes to give bicyclists a greater range of choices. The 2008 Bicycle Transportation Plan included an extensive list of projects to achieve this network in the city. Table 5 details the projects by project number from the 2008 Bicycle Transportation Plan which have been completed. Table 6 shows additional bike projects that were not included in the 2008 Bike Plan that have been completed. Of note, many of these projects are also mutually beneficial to pedestrians.

Table 5 Completed Projects from 2008 Bicycle Transportation Plan

Project #	Location	Limits	Method of Achievement	Length
1	Arana Gulch Connection	Agnes St to Arana Gulch path	Multi-Use Path	1400'
2	Arana Gulch Path	East end of Broadway to west end of Brommer St.	Multi-Use Path/bridge	1800'
3	Arroyo Seco Trail (partial)	Grandview St. to Meder St.	Path/bridge	1 mi.
10	Harbor High Connection	La Fonda to Park Way	Acquire easement; improve path	300'
17	San Lorenzo River Bicycle/Pede	West levee at Gateway Plaza to east levee at Felker	Bridge	330'

	strian Bridge	St.		
19	Tannery Arts Connection	Encinal St to current end of levee path at SR1 bridge	New path	800'
21	Trestle Bridge Connection	Beach St to railroad bridge	Path/ramp	150'
29	Delaware Avenue	Swift St to Almar Ave	Sharrows (recommended interim treatment)	1600’
30	Delaware Avenue	Almar Ave to Surfside	Sharrows (recommended interim treatment)	500’
31	Delaware Avenue	Woodrow St to Columbia St	Sharrows (recommended interim treatment)	1150’
34	Fairmont Ave	Branciforte Ave to Morrissey Blvd	Sharrows (recommended interim treatment)	2000’
44	La Fonda Ave	SR1 Bridge	New bridge. Sidewalks and bike lanes in both directions on the La Fonda Bridge	150’
38	Goss Ave	Market St to N. Branciforte Ave	“Bikes May Use Full Lane” sign (recommended interim treatment)	600’
39	Goss Ave	N. Branciforte Ave to Elk St	Sharrows (recommended interim treatment)	1650’
42	King St	Entire	Sharrows (recommended interim treatment)	1.4 mi

46	Laurel St	King St to California St	Sharrows (recommended interim treatment)	1700’
48	Market St	Water St to beyond Curtis St	Sharrows (recommended interim treatment)	1000’
49	Market St/ Branciforte Dr	Avalon St to City Limits	Partial southbound bike lane and “Bikes May Use Full Lane” sign (recommended interim treatment)	2500’
52	Morrissey Blvd	Melrose Av to Water St, SB only	Bike lanes	475’
53	Morrissey Blvd	Pacheco Ave to Marnell Ave	Bike lanes	800’
56	North Pacific Ave	River St to Water St	Sharrows (recommended interim treatment)	600’
61	Rooney St	Gilbert Ln to Pacheco Ave	Partial bike lanes between Elk and Pacheco	725’
63	Soquel Ave	North Branciforte to Ocean St	“Bikes May Use Full Lane” sign (recommended interim treatment)	1150’
71	Acadia Ave	Seaside St to California St	Bike route signs and sharrows	655’
81	Seaside St	Rankin St to Acacia St	Sharrows	
89	Harbor Dr	Harbor Drive to Broadway Extension	Arana gulch pathway cut-through	10’
91	Mission St Ext			

In addition to the projects that were included in the 2008 Bike Plan, many other bike projects have been completed since Plan adoption. Many of these projects were opportunity projects that were coupled with a repaving project, where strategic improvements in the bike network could be made for relatively little additional cost.

The 2003 Pedestrian Master Plan did not include a specific project list; rather it included different guidelines and principles for enhancing pedestrian facilities and amenities. The Pedestrian Master Plan included seven priorities for improvements to the pedestrian system. Each of these priorities is listed below with a summary of progress and projects since the 2003 Pedestrian Master Plan.

Complete and maintain the City sidewalk system: The 2003 Pedestrian Master Plan included a map of missing sidewalks and highlighted the density of missing sidewalks in the Upper Eastside and Westlake areas. City has completed significant sidewalk infill projects in both the Upper Eastside and Westlake neighborhoods through Safe Routes to School state and federal grant programs. Additionally, the City has completed many other sidewalk projects.

Improve safety for specific problem areas: The Pedestrian Master Plan called for safety improvements at locations with high volumes of pedestrian collisions.

Adopt pedestrian friendly street design: this goal directed urban design features of the built environment to be oriented towards the pedestrian area and at a pedestrian scale.

Create pedestrian priority areas: Place an extra emphasis on pedestrian facilities in major activity centers, concentrated employment uses, neighborhood stores, K-12 schools, parks. This emphasis includes complete sidewalk and ramps, removal of barriers, more frequent and protected crossings, and pedestrian amenities.

Enhance key pedestrian connections: Give high priority to completing and maintaining walkable connections which link Major Activity Centers, Activity Centers, and

neighborhoods. This emphasis should focus on supporting walking through safety, connectivity, and aesthetic design.

Create special pedestrian-only zones: Experiment with limited car access and car-free pedestrian zones. These zones may be for a limited duration on an ongoing or one-time basis.

Initiate programs to encourage walking: Take advantage of our existing pedestrian resources, and make small changes to make them shine. These changes include better signage and wayfinding, reclaiming the alley network as a pedestrian resource, provide pedestrian education and encouragement activities, and improve sidewalk maintenance.

Specific projects in support of these guidelines and principles include:

- The Westlake neighborhood sidewalk infill and pedestrian safety project targeted to Westlake Elementary School was completed in 2015 using Federal Safe Routes to School Cycle 3 (2011) funding.
- DeLaveaga Elementary School Neighborhood Sidewalk improvement project: This sidewalk infill project targeted DeLaveaga Elementary School in the Upper Eastside neighborhood was completed using state Safe Routes to School Cycle 5 (2004) funding.
- Branciforte Elementary School Water Street Sidewalk Improvement Project: Installation of 7.5' wide sidewalks on both sides of Water Street between Branciforte Avenue and Reed Way. Completed in 2005.
- Gault Elementary School sidewalk infill project: This project was funded through state Safe Routes to School Cycle 9 (2010) funding.
- The Santa Cruz County Regional Transportation Commission (SCCRTC) online and in-print Hazard Report Form. The community can fill in and submit a Hazard Report form to the RTC for any area of the County to notify the public agency of a sidewalk or bicycle maintenance issue. The City receives and responds to these reports under its jurisdiction. The Hazard Report is available on the SCCRTC's website at: http://www.sccrtc.org/services/hazard-reports/
- Targeted safety grant programs, including the Highway Safety Improvement Program, have been used to construct bike and pedestrian infrastructure in specific problem areas

- Safe Routes to School Crossing Improvement Program will install intersection improvements, including new and emerging tools, at high volume crossing near Santa Cruz City Schools.
- Policy language in support of pedestrian oriented design is included in the General Plan 2030, Ocean Street Area Plan, Mission Street Urban Design Plan, and pending updates to the Downtown Plan.
- Draft language in the Corridor Planning and Rezoning project will codify pedestrian oriented design along Mission Street, Ocean Street, Water Street, and Soquel Avenue.
- Complete sidewalk network on all major arterials
- Targeted Safe Routes to School programs to install *at minimum* continuous sidewalk on one side of a defined SRTS route.
- Recent crossing improvement programs focused on improving unprotected crossings connecting neighborhoods to commercial areas and enhance safety based upon neighborhood feedback.
- Twice hosted Santa Cruz Open Streets on West Cliff Drive. This event closed the entirety of West Cliff to cars, transforming in to an active transportation corridor.
- Through a partnership with Ecology Action, all second graders at Gault, DeLaveaga, Bay View, and Westlake Elementary Schools will participate in WalkSmart!, an in classroom and on the pavement walking education program.
- Initiated a Wayfinding program through the Economic Development Department, including pedestrian scale wayfinding.

Safe Routes to School and The Five E's: Education, Encouragement, Enforcement, Engineering, and Evaluation

Safe Routes to School (SRTS) is a national and international movement to create safe, convenient, and fun opportunities for children to bicycle, walk, skate, scooter, and use other modes of active transportation to and from school. SRTS can also play a role in reversing the nationwide trend toward childhood obesity and inactivity. Safe Routes to Schools programs are an essential component of successful efforts to make walking and bicycling to school safer, increase the number of children walking and bicycling to school, improve children's health and fitness, and educate students and parents about the health, transportation and environmental benefits of walking and bicycling. Successful SRTS programs incorporate the "Five E's": Engineering, Education, Encouragement, Enforcement, and Evaluation.

Engineering: Creating operational and physical improvements to the infrastructure surrounding schools that reduce speeds and potential conflicts with motor vehicle traffic, and establish safer and fully accessible crossings, walkways, trails and bikeways.

Education: Teaching children about the broad range of transportation choices, instructing them in important lifelong bicycling and walking safety skills and launching driver safety campaigns in the vicinity of schools.

Encouragement: Using events and activities to promote walking and bicycling and to generate enthusiasm for the program with students, parents, staff and the community.

Enforcement: Partnering with law enforcement to ensure that traffic laws are obeyed in the vicinity of schools (including enforcement of speeds, yielding to pedestrians in crosswalks and proper walking and bicycling behaviors) and initiating community enforcement such as crossing guard programs and student safety patrols.

Evaluation: Monitoring and documenting outcomes, attitudes and trends through the collection of data before and after the intervention(s).

The City of Santa Cruz has completed Safe Route to School projects at Bay View Elementary, DeLaveaga Elementary, Gault Elementary, and Westlake Elementary schools. These projects have included sidewalk and crossing improvements, signage, curb cuts, mapping, network expansion, education, encouragement, and enforcement activities.

Development of this Active Transportation Plan was heavily influenced by the recently adopted ***Santa Cruz City Schools Complete Streets Master Plan (SCCSCSMP)***. The SCCSCSMP was a two-year community based planning process that identified infrastructure and non-infrastructure active transportation improvements surrounding the ten city schools. The City of Santa Cruz partnered with local non-profit Ecology Action to develop the SCCSCSMP, which included an in-depth analysis of current student mode share, documented existing conditions, examined crash data and conducted extensive participation efforts, including walking audits and parent and student surveys.

This planning process resulted in a recommended project list including 160 infrastructure projects around the 10 school sites for a total cost of over $18 million. While this project list will take many years to complete, the City has already received

funding from the Caltrans Active Transportation Program Cycle 2 to implement 24 infrastructure projects and non-infrastructure programming at 8 schools as identified in this plan.

This Active Transportation Plan has incorporated many of the relevant infrastructure projects from the SCCSCSMP, but the SCCSCSMP remains the guiding Safe Routes to School planning document in the City of Santa Cruz.

Vision, Goals, Objectives and Policies

The following vision, goal, objectives, and policies are meant to function an agreed upon framework for a bicycle and pedestrian system in the City of Santa Cruz. The policies are designed to guide the development and maintenance of bicycle and pedestrian systems, to enhance bicycle mobility and pedestrian connectivity, and to improve safety, access, and the quality of life in the City.

As projects advance and/or are developed, these goals, objectives, and policies should be referenced to guide both private development and public projects to ensure that plans and projects in Santa Cruz implement the full measures and intention of the Plan elements.

Vision:

The Active Transportation Plan envisions the City of Santa Cruz with a comprehensive active transportation system that is easy, safe, fun, and serves people of all ages and abilities.

Principal Goal:

To develop and maintain a safe, comprehensive, and connected bicycle and pedestrian network. The policies, programs and projects in this Plan provide safe, connected, high quality, well maintained facilities for bicyclists and pedestrians of all types, ages, and abilities.

Objectives and Policies

Objective 1. Comprehensive Bicycle and Pedestrian Network

Establish a comprehensive bicycle and pedestrian transportation system that is integrated with the existing City network and connected to the countywide network.

Policies

1.1. Provide a complete bicycle and pedestrian network among residential areas, downtown and major activity centers.

1.2. Complete and maintain the City's sidewalk system

1.3. Require new development to implement the planned bicycle and pedestrian network.

1.4. Determine appropriate locations for bicycle and pedestrian access to and along the Monterey Bay Sanctuary Scenic Trail. Access shall comply with California Public Utilities Commission rules and regulations.

1.5. Build on Santa Cruz's existing partnership with the Santa Cruz County Regional Transportation Commission (SCCRTC) to ensure that the City's Active Transportation Plan is consistent with countywide transportation planning efforts, including the Regional Transportation Plan, the Monterey Bay Sanctuary Scenic Trail, and the Bike Route Signage Program.

1.6. Where marked crosswalks exist, install crossings on all legs.

1.7. Increase the city's walking and bicycling trips, in accordance with Climate Action Plan goals.

1.8. Work toward addressing and improving challenging intersections and physical barriers, and consider pedestrian and bicycle movement in the planning stages for new or reconstructed facilities.

1.9. Reduce implementation costs by including bicycle facilities as appropriate in all new and rehabilitation street projects

1.10. Investigate alternative funding mechanisms for constructing and repairing sidewalk, including a requirement for cost sharing or "sidewalk upon sale" of a property.

Objective 2. Utilize Best Practices and Design Standards, including Emerging Standards

Utilize accepted Complete Streets design standards and "best practices" for the development of bicycle and pedestrian facilities.

Policies

2.1 Utilize the California Highway Design Manual, the California Manual of Uniform Traffic Control Devices, the American Association of State Highway Transportation Officials Guide for the Development of Bicycle Facilities and Guide for the Planning, Design, and Operation of Pedestrian Facilities, the National Association of City Transportation Officials Urban Bikeway Design Guide and Urban Street Design Guide, and the Caltrans Class IV Guidelines for the development of bicycle and pedestrian facilities.

2.2 Where compliance with minimum bike lane standards is infeasible, use signs, shared lane markings, or other route enhancements to improve conditions for bicyclists, wherever feasible.

2.3 Install active transportation scale way-finding signage where appropriate to improve wayfinding for bicyclists and pedestrians, and heighten motorists' awareness of active users.

2.4 Provide safety features with proven counter measures at uncontrolled pedestrian crossings. Consider curb extensions to shorten crossing distance and increase pedestrian visibility, daylighting,

2.5 Study, pilot, test, and implement best practices and designs that have been found successful in other communities to respond to the rapidly changing state of bicycle and pedestrian practices. Implementation of this plan should allow flexibility to include new projects and techniques that are highly consistent with the plan goals.

2.6 Ensure compliance with accessibility guidelines in the installation or upgrade of traffic signals.

2.7 Sidewalks shall have the appropriate width for their use. Commercial districts require wider sidewalks designed as part of the public space and foreground for the buildings.

2.8 Accommodate all types, ages, and abilities of users in a comfortable manner throughout the system, while recognizing that all modes of travel and/or level of user ability may not necessarily be accommodated on every road or path.

Objective 3. Comprehensive End of Trip and Support Facilities

Encourage the development of comprehensive support facilities for walking and bicycling in future development.

Policies

3.1 Ensure the provision of adequate bicycle parking at important public facilities, schools, commercial areas and other locations with high bicycle-parking demands.

3.2 Consider revising the existing bicycle parking requirements to ensure higher quality bicycle parking.

3.3 Continue to require the provision of showers by large employers.

Objective 4. Enhanced Safety and Security for Active Transportation Users

Create pedestrian and bicycle networks that are, and are perceived to be, safe and secure.

Policies

4.1 Review collision data annually to identify problem areas involving bicyclists and pedestrians and to prioritize projects and program activities using collision history as one metric.

4.2 Focus on improving bike and pedestrian safety at intersections using best practices and emerging tools.

4.3 Give high priority to safety improvements in the vicinity of schools, public transit, commercial corridors, and other high use pedestrian destinations.

4.4 Improve pedestrian safety and security with high-visibility crossing treatments, pedestrian-scale lighting, and other pedestrian amenities with proven safety countermeasures.

4.5 Continue to implement Safe Routes to School program improvements including infrastructure improvements and partnerships with non-infrastructure providers.

4.6 Where free right turns exist, utilize high visibility crosswalks, green lane conflict zone treatments, or other enhanced safety measures to increase the visibility of active transportation users.

4.7 Advocate minimizing the number of driveways for new developments to reduce automobile and pedestrian/bike conflicts.

Objective 5. Continued Progress and Investment

Plan, design and construct bicycle and pedestrian facilities in new development and through publicly funded projects. Maximize the amount of funding for bicycle and pedestrian projects and programs, with an emphasis on implementation of this Plan.

Policies

5.1 Incorporate applicable and appropriate provisions and projects of this Plan into all new development projects.

5.2 Seek all possible funding sources to implement programs and projects in this Plan. Work with federal, state, regional and local agencies and any other available public or private funding sources to secure funding for the bicycle and pedestrian system.

5.3 Proactively seek new opportunities for acquisition of abandoned rights-of-way, natural waterways, utility rights-of-way, and other lands for the development of new active transportation facilities that integrate with the planned system.

5.4 Support multi-jurisdictional funding applications to implement the regional bicycle and pedestrian system, including the entirety of the Monterey Bay Sanctuary Scenic Trail network.

5.5 Lobby for the availability of adequate regional, state and federal funding sources for bicycle and pedestrian transportation projects.

Objective 6. Education and Promotion

Promote bicycling and walking for a variety of trip purposes for people of all ages and abilities.

Policies

6.1 Continue to partner on the school based education and encouragement activities, utilizing partnerships with Ecology Action, Santa Cruz County Health Services Agency, law enforcement, bicycle advocates and other appropriate groups and organizations.

6.2 Develop and maintain a safety campaign for drivers, cyclists and pedestrians. Where appropriate, utilize existing materials and education campaign materials.

6.3 Encourage events that introduce residents to walking and bicycling, such as walk/bike-to-work days, walk/bike-to-school days, Open Streets events, and recreational walks.

6.4 Encourage major employment centers and employers to promote commuting by bicycle, including the use of flex-time work schedules to support non-rush hour bicycle commuting. Reference policies and programs in the General Plan 2030.

6.5 Encourage participation in Bicycle Traffic School for Vehicle Code infractions involving bicyclists.

Objective 7. Ongoing Maintenance

Maintain or improve the quality of bicycle and pedestrian infrastructure. (j)

Policies

7.1 Maintain pavement surface condition, debris removal, markings, and signage on Class II and Class III bikeways.

7.2 Require that road construction projects minimize their impacts on bicyclists and pedestrians to the greatest extent possible by utilizing the Santa Cruz County Health Services Agency's Community Traffic Safety Coalition guidelines.

7.3 Require that routine maintenance of local roads consider bicycle and pedestrian safety.

7.4 As staffing allows, perform periodic sidewalk inspections to ensure adequate pedestrian clearance and to address maintenance issues that could present a tripping hazard. Utilize existing property owner notification process to remedy any issues found.

7.5 Prior to construction of new bike and pedestrian facilities, consider and plan for the ongoing maintenance needs of those facilities.

7.6 Provide regular sweeping and other necessary maintenance to clear entire roadway of dirt, glass, gravel, and other debris and maintain the integrity of the bicycling network.

7.7 Continue program to periodically restripe bicycle lanes and replace other bicycling markers to ensure that they remain clearly visible to motorists.

7.8 Use pavement marking materials that are least slippery and skid-prone.

7.9 Continue program to maintain vegetation adjacent to or overhanging areas where bicycles and pedestrians travel and require private property owners to keep their landscaping trimmed where it can interfere with cyclist or pedestrian travel.

Wayfinding

Wayfinding is an important component of this Active Transportation Plan. Good bike and pedestrian facilities are most useful when people know they actually exist. Santa Cruz has a multitude of great bike and pedestrian facilities and shortcuts that decrease distance and increase ease of use for active mode users, but they aren't always the most well-known and are seldom identified via signage.

Wayfinding serves to familiarize active transportation users with the network, shows the best routes between destinations, and helps to overcome perceived barriers to use by less frequent users. Additionally, identification of lower speed, lower volume or separated routes via wayfinding signage may help newer and less confident active transportation users feel more comfortable walking and cycling.

City Wayfinding Program

In 2010 the City launched a wayfinding effort to evaluate and improve upon the experience of navigating around Santa Cruz. This program has funding and the design of signage is currently underway.

The main goals and objectives of the Wayfinding project include the following:

1. To create and implement a user-friendly and visible navigational system that will guide visitors and residents to and from City of Santa Cruz destinations
2. To market Santa Cruz assets, including entertainment, cultural, historical, outdoor, and other venues and activities
3. Support unified messaging for the City of Santa Cruz that can be reflected in the Wayfinding signage and carried throughout other aspects of the City's marketing efforts

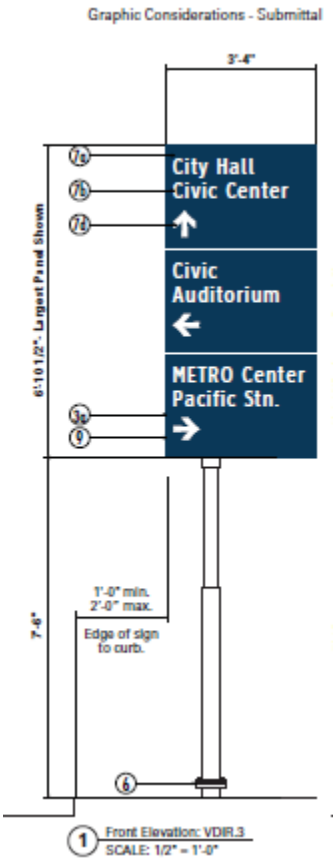


Figure 12 Potential Future City Wayfinding Sign

4. To enhance the success and market potential for arts, entertainment, outdoor recreation, and other tourist sectors that build on core Santa Cruz assets.
5. To help direct visitors to Downtown, the Boardwalk, UCSC, the Harbor and other destinations from Santa Cruz's major arteries as well as ease their wayfinding with the downtown core.

Specific bike and pedestrian "first priority projects" identified in the Wayfinding Plan include developing pedestrian signage between the Downtown and Beach Area and developing bicycle signage for the West Cliff and San Lorenzo River Levee loops.

Bicycle Wayfinding Program

The Santa Cruz County Regional Transportation Commission (SCCRTC) has adopted the *Santa Cruz County Bicycle Route Signage Program* as a guiding document for cyclist wayfinding in Santa Cruz County. This program includes multiple routes within the City of Santa Cruz that were identified in conjunction with City staff. The *Bicycle Route Signage Program* uses wayfinding signage to direct cyclists to preferred bicycle routes that link popular origins and destinations using signage with direction, distance, and destination. The program aims to increase traffic safety increase bicycling by reducing conflicts, educate motorists and bicyclists about shared roadways, and increase awareness of bicycling as a viable transportation option.

Figure 13 Example Bicycle Route Signage

The Bicycle Route Signage Program establishes a hierarchy of three route types, Regional Bicycle Routes, Local Bicycle Routes, and Neighborhood Bicycle Routes. Generally:

- *Regional Bicycle Routes* connect several communities and are designed to prioritize route directness over low traffic stress. Routes are typically cross-county routes between five and twenty-miles and link to local and neighborhood routes. Routes may appeal to more experienced bicycle riders or be categorized as advanced riders according to FHWA. Routes are typically composed of Class II bicycle facilities.
- *Local Bicycle Routes connect* between three or four common origins and destinations that support a local community's needs and connect adjacent jurisdictions and neighborhoods. Routes are designed to balance route directness with traffic stress. Routes are between five and eight miles in length and link with

other local route and neighborhood routes. Routes may appeal to bicycle riders with less experience integrating with traffic and fall into the category of basic adult riders according to FHWA. Routes are typically composed of Class II and Class I bicycle facilities, and shared local roadways.

- *Neighborhood Bicycle Routes*- Connect two or more common neighborhood origins and destinations. Routes prioritize low traffic stress over route directness. Routes are designed for new bicycle riders with little or no experience negotiating traffic and bicycle riders who fall into the category of children riders according to FHWA. Routes are designed to provide a comfortable separation from motor vehicle traffic. Routes are between two and three miles in length and link with other local and regional routes. Routes are typically Class I bicycle facilities and shared local roadways. Class II bicycle facilities may provide connections along the route.

The program identifies four Regional Routes, six Local Routes, and six Neighborhood Routes within the City of Santa Cruz and connecting the City of Santa Cruz to neighboring jurisdictions. Any example sign is shown in Figure 13.

Public Input on Wayfinding

During the public outreach for this Plan, many participants talked about their favorite "secret" short-cuts, pathways, and routes and identified these locations as areas that would benefit from wayfinding signage as part of a larger wayfinding program. These locations are listed in Table 6 and a map of these locations is shown in Figure 14**.**

These recommended wayfinding improvements are identified as a future program in the Recommendations Chapter.

Table 6 Priority Wayfinding Recommendations

Location	**Recommendation**
Bay Street Path	Directional signage on Bay Street Median.
Bethany Curve crossings	Street signs and curb cuts. Sign path ends.
Branciforte Creek Path	Wayfinding at path entrances
Cardiff Court to Moore Street	Public access signs from Cardiff to Moore.

Chace Street between Swift and Fair	Consider traffic calming on this corridor
Cliff Street at Third St	Add signage to indicate through pedestrian access via stairway to existing "Not a Through Street" sign.
Goss to Allerton through Church- SRTS signage	Enhanced Safe Routes to School signage at both ends of the church
Grandview St	Arroyo Seco Trail entrances at Grandview, Escalona, and Meder and trail fork to Escalona.
Harvey West Park Connection: Evergreen St to Harvey West Blvd	Sign existing pathway
Maple Alley at Front St	Add "Except Bicycles" to "do not enter" sign.
Meder Street at park	Wayfinding
Mission St to Stairway	Sign on steps on Mission leading to Louden Nelson plaque.
Monterey Bay Sanctuary Scenic Trail	Wayfinding
Mora Street at path to High Street	Wayfinding
Nobel Drive to Meder Street	Public access signs behind apartments from Nobel to Meder
Ocean View Park to East Cliff	Signage from Ocean View Park to East Cliff.
Pathway between High Street and Nobel Drive	Wayfinding
Pedestrian path on Darwin Street between Hanover and Gault	Add wayfinding signage to direct users to pedestrian path
Pine Place to Rincon St	Sign on both ends of Locust St walkway from Pine Place to Chrystal Terrace.
Plymouth St near Ocean Street	Install "No Parking" signs on shoulder

Reed Way	Install "except for bicyclists" sign under the Do Not Enter Sign and allow two way bike travel.
San Lorenzo Riverwalk	Wayfinding signage to direct users on distance and nearby destinations
School Street to N Pacific Ave	Sign on both ends of stairway from School Street to North Pacific Ave.
Soquel at N. and S. Branciforte	Install additional advance signage showing that cyclists will be taking the lane.
Soquel Avenue at Park Way	Wayfinding to lead to Arana Gulch
South Branciforte Avenue near Buena Vista pathways	Wayfinding
Walnut St to Town Terrace	Sign on both ends of pathway from Walnut to Town Terrace

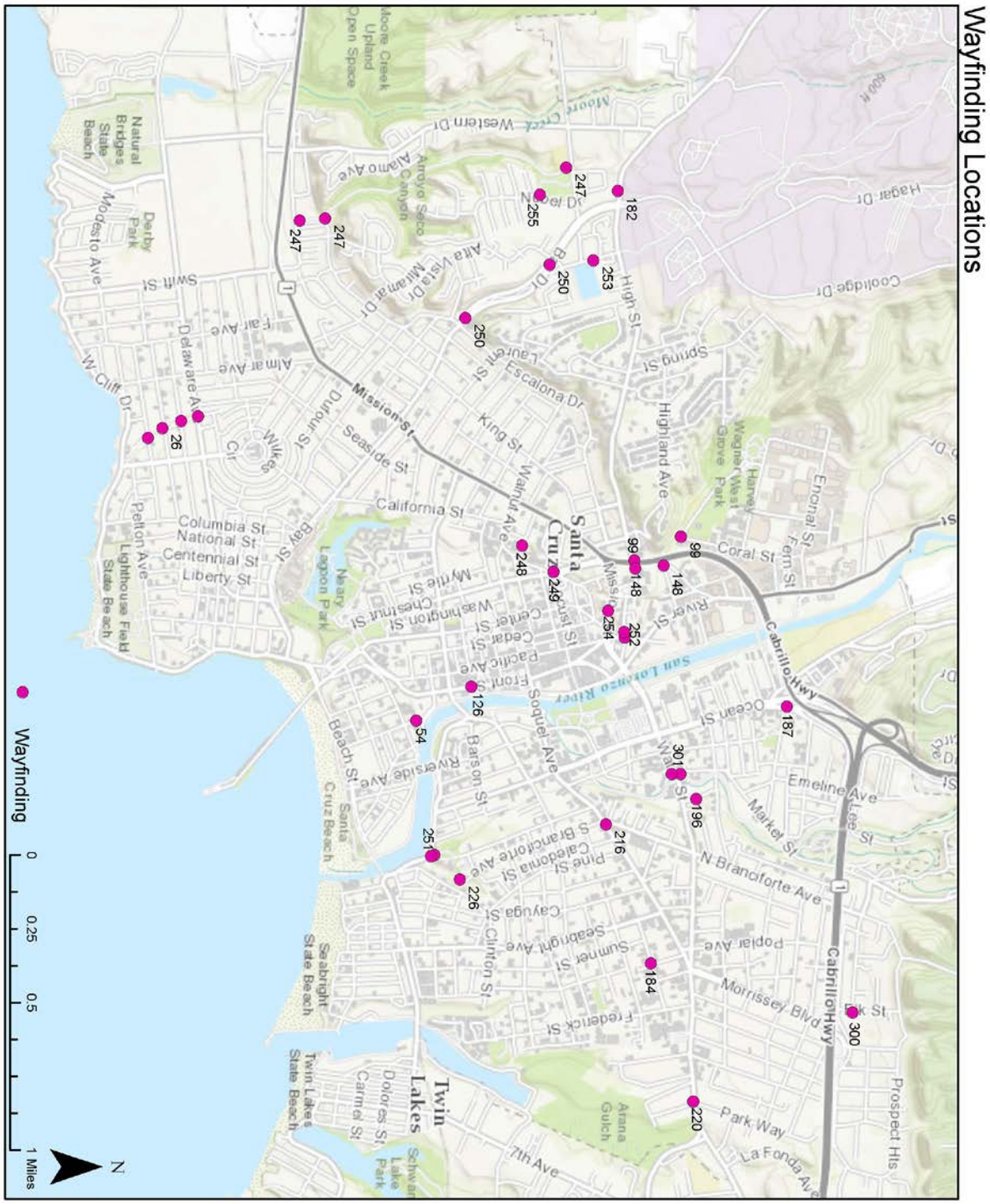


Figure 14 Wayfinding Locations

Safety

Safety is a major concern for both existing and potential bicyclists and pedestrians. Perceived lack of safety was one of the most frequently cited reasons for not bicycling or walking during the public outreach process to develop this Plan. Identifying collision sites can draw attention to locations which may be in need of improved safety treatments, particularly if multiple collisions occur at the same location.

The following section addresses safety conditions for bicyclists and pedestrians in Santa Cruz. To examine collision history and trends, we reviewed data from both the California Office of Traffic Safety (OTS) and the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS) over the five-year period from 2009-2013, the most recent time period with complete data available. It should be noted that only reported collisions are recorded; at times where there are no injuries or damage, or if the incident involved only a single bicyclist or pedestrian, the collision is sometimes not reported and therefore there is no record. Despite this, the OTS and SWITRS data is the most complete data set available.

This section includes a summary of collisions findings, rates of bicycle and pedestrian collisions relative to all collisions, summary of OTS collision rankings, mapping of all bicycle and pedestrian collisions and goals for collision reduction after implementation of the plan.

Collisions, Injuries, and Fatalities

During the five-year period from 2009-2013, **OTS Data shows that pedestrians and bicycle collisions account for 45.7% of all reported collisions in the City of Santa Cruz.** During this time period, there were a total of 1,178 reported collisions in the City, 135 (11.5%) of these involved a pedestrian and 402 (34.2%) involved a bicyclist.

From 2009-2013, 66% of all traffic fatalities in the City of Santa Cruz were bicyclists and pedestrians (4 of the 6 total). In this time period, there was 1

(16.7%) bicyclist killed and 3 (50%) pedestrians killed in traffic collisions. This data is shown in Table 7.

Table 7 Injuries and Fatalities 2009-2013: Bicycle, Pedestrian, and All Modes

	2009	2010	2011	2012	2013	Total 2009-2013
a. Total Collisions All Modes	232	217	218	244	265	1176
Injury Collisions- All Modes	228	217	218	243	265	1171
Fatal Collisions- All Modes	4	0	0	2	0	6
b. Total Pedestrian Collisions	32	25	30	20	28	135
Pedestrians Injured	29	25	30	20	28	132
Pedestrians Killed	3	0	0	0	0	3
c. Total Bicyclist Collisions	69	56	73	91	114	403
Bicyclist Injured	69	56	73	90	114	402
Bicyclists Killed	0	0	0	1	0	1
Total Involving Bicyclists or Pedestrians (b + c)	101	81	103	111	142	538
Source: Statewide Integrated Traffic Records System 2009-2013						

What does this mean?

Active transportation users in the City of Santa Cruz are disproportionately more likely to be injured or killed in traffic collisions than those in automobiles (Figure 15). Crashes involving bicyclists and pedestrians are under-

reported, so the number of individuals involved in and possibly injured in bicycle or pedestrian collisions is likely even higher than what is shown on record. These numbers show the prevalence and severity of pedestrian and bicycle crashes in Santa Cruz and highlight a significant public safety issue in our community:

- 9.7% of roadway users are bicyclists, but 34.2% of injury collisions are bicyclists and 16.7% of traffic fatalities are bicyclists.
- 9.9% of roadway users are pedestrians, 11.5% of injury collisions are pedestrians and 50% of traffic fatalities are pedestrians.
- 58.7% of roadway users are motorists, 54.3% of injury collisions are motorists, and 33.3% of traffic fatalities are motorists.

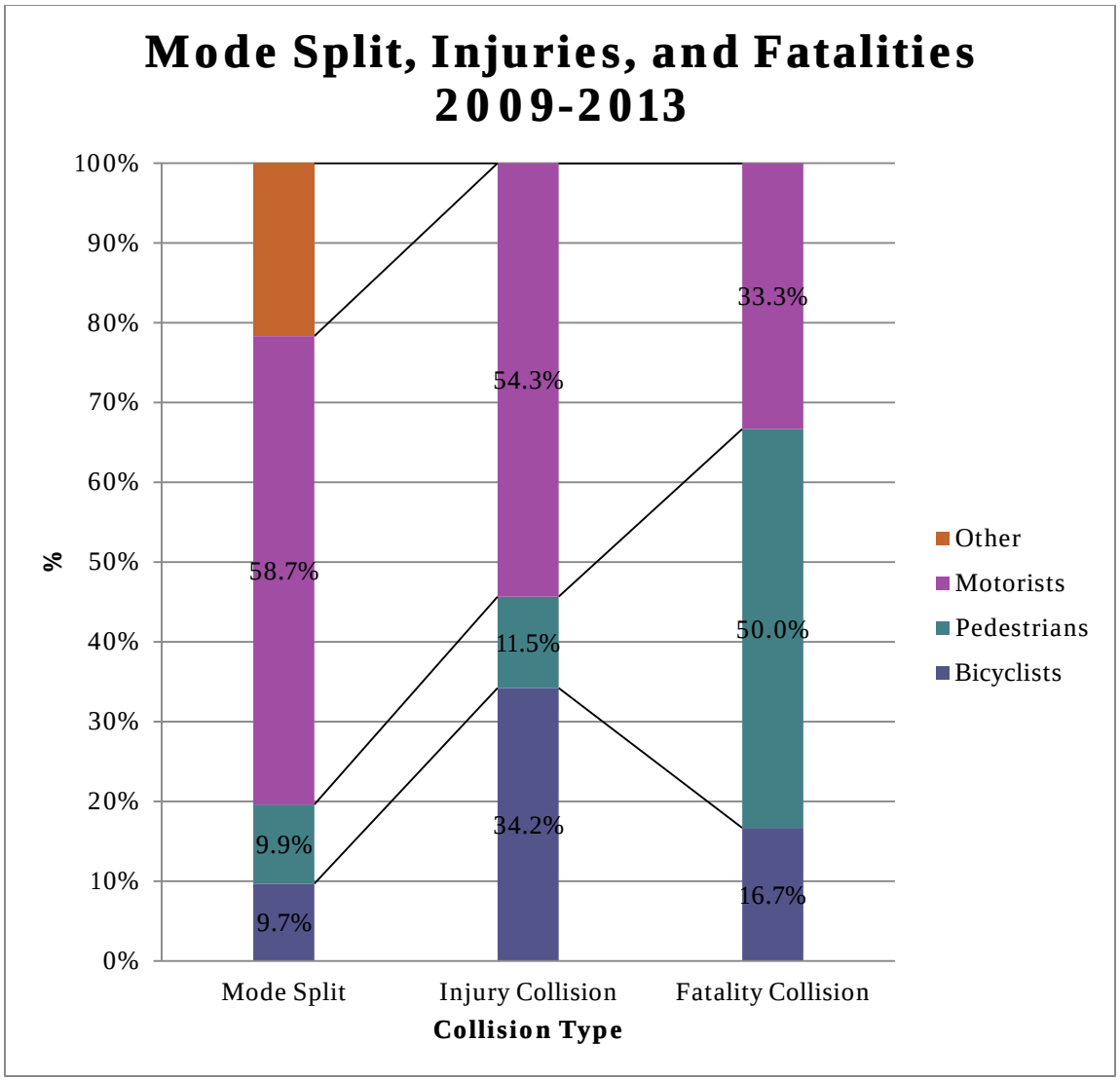


Figure 15 Mode Split, Injuries, and Fatalities. Source: Statewide Integrated Traffic Records System (SWITRS) 2009-2013

A map of Pedestrians is included in Figure 16. A map of Bicycle Collisions is included in Figure 17.

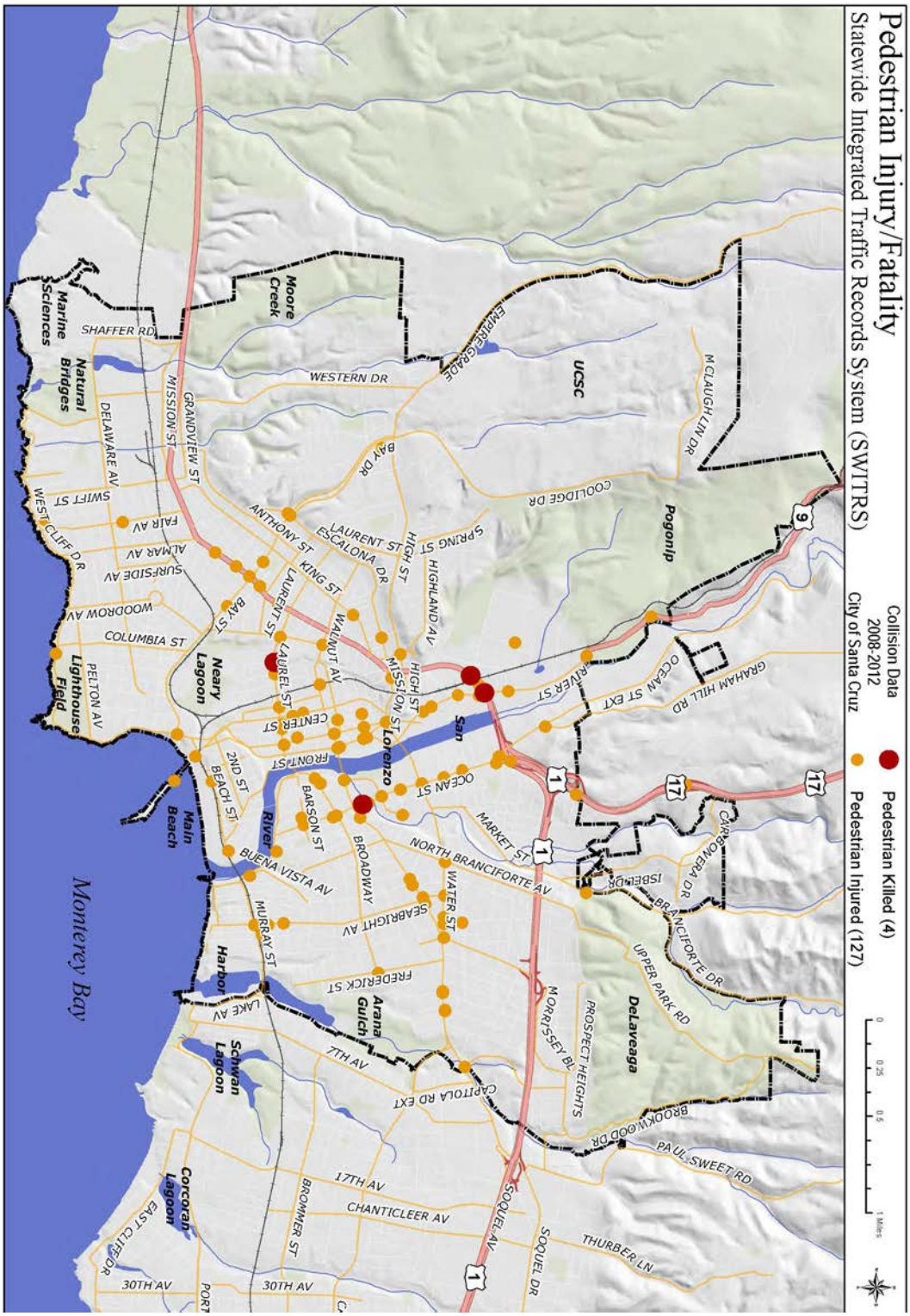


Figure 16 Pedestrian Collision Map

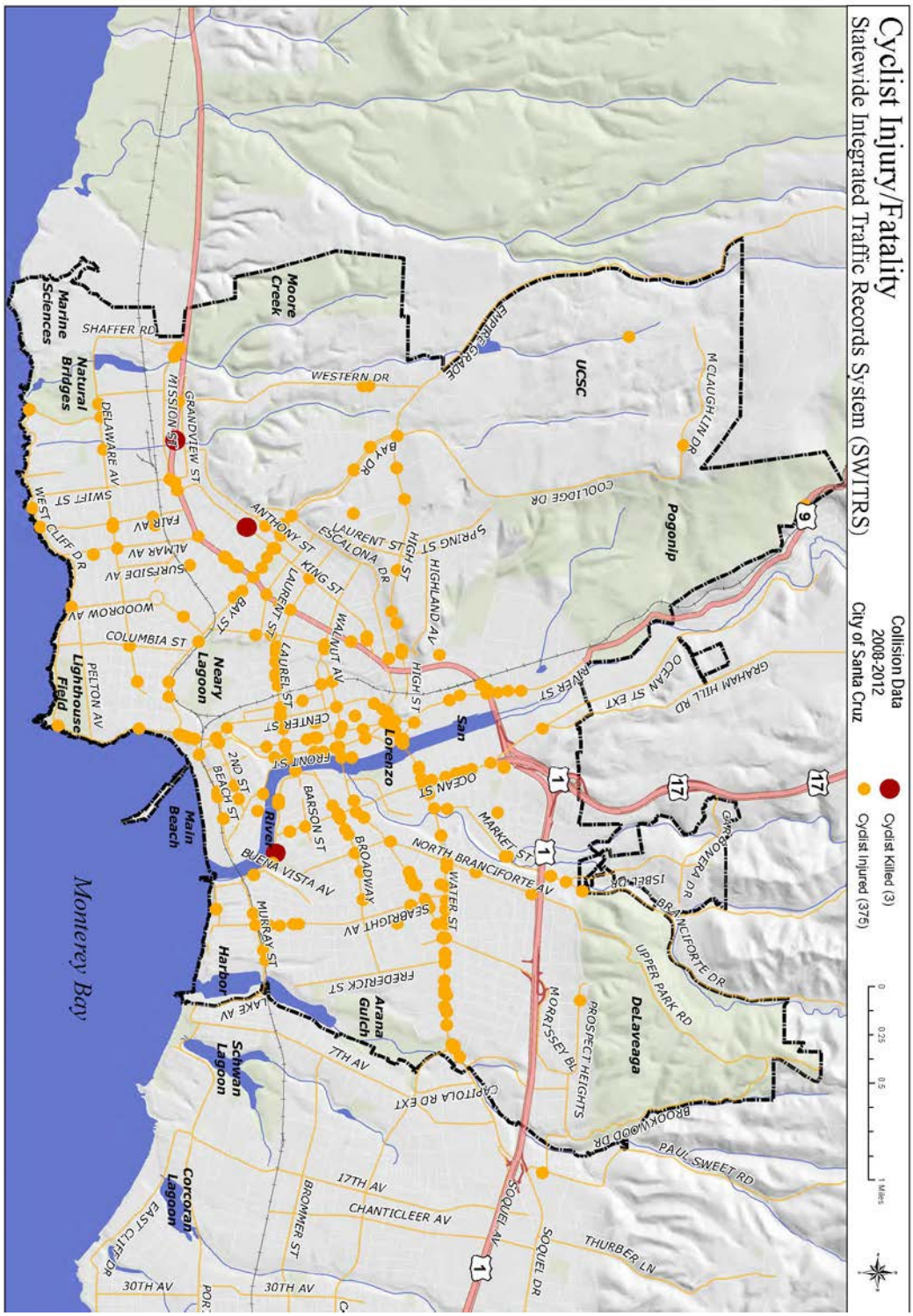


Figure 17 Bicycle Collision Map

Collision Rankings

The California Office of Traffic Safety (OTS) maintains records of different traffic safety statistics for cities and counties in California. Incorporated cities are broken in to groups and ranked based on population to generally group similar sized cities together for comparison. Data in the OTS rankings comes from multiple sources, including the CHP SWITRS data, Caltrans, California Department of Justice, and the Department of Finance.

OTS consistently ranks Santa Cruz as one of the worst cities for cycling based on cyclist injury and fatality statistics- ranked 1st in 2009, 2012, and 2013. Santa Cruz ranked 3rd worst in 2011 and 4th worst in 2010.

How will this Plan Reduce Collisions, Injuries, and Fatalities?

National research has shown that a clear relationship between two major factors:

1. If you build bike and pedestrian facilities, there will be more active transportation users[3].
2. The more users there are, the lower the injury and fatality rate will be. This is often referred to as the "safety in numbers" effect.[4] Research has found this to be true for both cyclists and pedestrians.

Within the City of Santa Cruz, we have seen a steady increase in the number of active transportation users. While some of this growth is likely attributable to cultural, political, economic, and personal preference of active transportation users, it's likely that the significant bike and pedestrian infrastructure improvements that have been

[3] Dill, Jennifer, and Theresa Carr. "Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them, Commuters Will Use Them." *Transportation Research Record: Journal of the Transportation Research Board* 1828 (2003): 116-23. Web.
Nelson, Arthur, and David Allen. "If You Build Them, Commuters Will Use Them: Association Between Bicycle Facilities and Bicycle Commuting." *Transportation Research Record: Journal of the Transportation Research Board* 1578 (1997): 79-83. Web. 24 Feb. 2016.

[4] Reynolds, Conor Co, M. Harris, Kay Teschke, Peter A. Cripton, and Meghan Winters. "The Impact of Transportation Infrastructure on Bicycling Injuries and Crashes: A Review of the Literature." *Environmental Health Environ Health* 8.1 (2009): 47. Web.
"The Alliance Benchmarking Report." *The Alliance for Biking and Walking*. Web. 23 Feb. 2016. <http://www.bikewalkalliance.org/resources/benchmarking>.

made over the past 15 years in Santa Cruz have been a significant driver of these increases.

Table 11 Mode Split and Injury/Fatality Data

	2008	2009	2010	2011	2012	2013
Bike Mode Split	9.30%	8.70%	8.40%	8.60%	9.20%	9.5%
Pedestrian Mode Split	6.80%	7.00%	8.10%	8.70%	9.40%	9.9%
Pedestrians Injured	29	31	24	29	20	29
Pedestrians Killed	0	3	0	0	0	0
Bicyclist Injured	93	69	56	73	91	112
Bicyclists Killed	2	0	0	0	1	0
Source: U.S. Census Bureau, 2008-2014 American Community Survey 3-year estimates						

Safety is a core pillar of any bike and pedestrian project that is considered for development. **The City of Santa Cruz will continue to do analysis each year, tracking both impact of transportation improvements and monitoring for new areas of concern.**

Additionally, the Santa Cruz County Health Services Agency is developing a Countywide Vision Zero Plan through the Community Traffic Safety Coalition. Vision Zero is an approach to transportation that starts with the idea that no loss of life of serious injury on our roads is acceptable. It promotes roadway design that anticipates mistakes so that

collisions do not result in severe injury or death. Several cities throughout the U.S. have adopted the Vision Zero goal, including New York, San Francisco, Seattle, Portland, Chicago, San Jose, and San Diego. **The City of Santa Cruz will continue to work with the Community Traffic Safety Coalition on this Plan.**

Finally, the City of Santa Cruz has been selected to have a Complete Streets Safety Assessment completed through the Institute of Transportation Studies at University of California Berkeley. A primary reason that Santa Cruz was selected for this program was the consistently high bicycle collision rate and corresponding OTS ranking. This program will help to identify areas that safety can be improved for bicyclists and pedestrians with access, mobility, and livability in mind. **The City will work towards implementing recommendations from this targeted program.**

These recommended programmatic improvements to the pedestrian network are outlined in **the Recommended Network Chapter.**

Bicycle and Pedestrian Safety, Education, and Encouragement Programs

The City of Santa Cruz is an active proponent of bicycle and pedestrian education and encouragement programs. The major education and encouragement programs in Santa Cruz are operated by local transportation and health education partners. Oftentimes these programs are supported by the City with financial or city staff time. A summary of these education and encouragement activities is below:

Education and Encouragement:

Sponsorship of Bike to Work Day- For nearly 30 years, Ecology Action has been organizing the Bike to Work program in Santa Cruz County. The City of Santa Cruz is a key sponsor of the program. The program happens every May and October and now represents the largest sustainable transportation event in the region and serves a combined total of over 13,000 residents every year.

Ecology Action's School-Based Education and Encouragement Programs: Ecology Action provides bike and walk safety education programs to schools throughout Santa Cruz County, including the Bike Smart! program and the WalkSmart! program. These programs provide both classroom lessons coupled with feet on the ground/feet on the pedals experience. Programming for older students is also provided in an age-appropriate form. Ecology Action's dynamic school programs including both education and encouragement date back to over 10 years ago and are a part of an international Safe Routes to School movement.

The City of Santa Cruz and Ecology Action have partnered on a Caltrans Active Transportation Program Cycle 2 grant to provide BikeSmart! to all 5th graders and WalkSmart! to all 2nd graders at Bay View, Westlake, Gault, and DeLaveaga Elementary Schools.

Sponsorship of Open Streets: The City has been a primary sponsor of Open Streets Santa Cruz County. Held in the City of Santa Cruz since 2013, Open Streets transforms roads into safe and car-free environments for people to walk, bicycle, dance, and play. These events have closed West Cliff Drive to cars for a portion of the day to allow active transportation users.

Enforcement Programs

Bicycle Traffic School: Cyclists that are given a ticket for traffic violations may have the option of attending a class on how to safely ride in traffic instead of paying the fine. This option is only an option a single time. Bicycle Traffic School is provided by the Santa Cruz County Health Services Agency. It is a coordinated program involving law enforcement, the traffic court, and the education services of Santa Cruz County's cycling community. Bicyclists that are given tickets for traffic violations have the option of attending a class on how to safely use a bicycle in traffic in lieu of paying the moving violation fine. The class is also available to members of the public who want to feel safer and more confident riding on busy local streets.

Bait Bikes: The Santa Cruz Police Department periodically conducts bait bike operations. While bait bikes frequently result in arrests, these operations have been less effective at impacting long term reductions in behavior. With a larger program, there is potential for a larger impact. Currently, a larger program is limited by police officer staff time.

Bike Licensing: The City of Santa Cruz requires all bikes to have a bicycle license. While we know that all bikes don't get licensed, we highly encourage people to register their bikes to serve a dual purpose of anti-theft and safety. By registration of the bicycle serial number and the issuance of a license emblem, positive identification of ownership is enhanced. This alone acts as a deterrence to theft. When a theft does occur, apprehension and conviction of the responsible person is considerably enhanced. Also licensed bicycles are quickly returned to the rightful owner as determined by licensing records.

To try to make bicycle licensing easy and accessible, the City currently offers bicycle licensing at the Finance Department and all City Fire Stations free of charge.

Targeted enforcement in school zones: The Santa Cruz Police Department periodically conducts targeted enforcement of traffic violations in school zones.

Crossing Guard Programs: Westlake Elementary School, gault Elementary School, Bay View Elementary School, and DeLaveaga Elementary School have crossing guards at selected intersections. These crossing guards are responsible for escorting children safely across streets and intersections at the assigned elementary school. This program is run by the Santa Cruz Police Department through a multi-agency partnership.

Figure 18 School Crossing Guard

Recommendations

This section describes the proposed bicycle and pedestrian improvements in Santa Cruz, including both project specific and programmatic improvements. The recommended active transportation improvements are the result of extensive public feedback, staff review, and stakeholder engagements. Programmatic recommendations are on-going actions that the City can take to continue to make active transportation safer and easier for users. Project specific recommendations are infrastructure improvements that result in new or enhanced bicycle and pedestrian transportation facilities in the City of Santa Cruz.

Programmatic Recommendations

Program Area	Actions
Adoption and reporting (o)	Adopt this Active Transportation Plan. Provides a framework and roadmap for active transportation improvements and indicates the City of Santa Cruz's commitment to support the implementation of active transportation facilities and programs.
	Post the Active Transportation Plan and project map to the City's website.
	Publish an annual report of the status of implementation of this Active Transportation Plan. This may occur coupled with additional annual reports.
	Retain Bicycle Friendly Community status through the League of American Bicyclists. Strive to continue to achieve higher rankings.
Safety	Publish an Annual Transportation Safety Report. Continue to conduct an annual safety analysis, tracking both impact of transportation improvements and monitoring for new areas

	of concern.
	Work on a Regional Traffic Safety Plan through the Community Traffic Safety Coalition.
	Implement recommendations from the Complete Streets Safety Assessment upon completion.
Education and Encouragement	As available, continue to contribute funding and staffing to Active Transportation education and encouragement activities, including but not limited to Bike to Work, Open Streets, school-based programs,
	Continue fiscal sponsorship of Bi-Annual Bike to Work Day
	Pursue funding to continue WalkSmart! for 2nd graders and BikeSmart! for 5th graders after the Active Transportation Program Cycle 2 funding ends
	Encourage active transportation events to include bicycle registration. Offer bicycle registration at Back to School events to register student bikes
	Pursue funding for Crossing Guard Education Program, as called for in the Santa Cruz City Schools Complete Streets Master Plan
Wayfinding	Implementation of all recommendations of the *Santa Cruz County Bicycle Route Signage Program* within City limits
	Coordinate with the Economic Development Department on implementation of bike and pedestrian signage identified in the wayfinding project
	Prioritize active transportation wayfinding signage in

	locations identified in this report through public input.
	Share bike and pedestrian route information with public and private entities that produce maps, both bike or pedestrian specific and general, and help disseminate both printed and electronic versions.
End of Trip Facilities- Bike Parking and Employer Showers	Dedicated funding to implement 30 bicycle parking spaces per year. Locations to be determined by staff and on a request basis. Reference the projects in Table 11 Priority End of Trip Facilities.
	Consider revising shower requirements to increase the number of employers who will provide showers in future developments to incentivize active transportation for commuting.
Maintenance	Investigate alternative funding mechanisms for constructing and repairing sidewalks, including potential for cost sharing or "sidewalk upon sale" of a property.

Prioritization

Project prioritization and an established prioritization methodology are required by the Caltrans Active Transportation Plan guidelines. In an era where transportation "wants" exceed available funding supply, the intent of ranking projects is to create a prioritized list of active transportation projects for implementation based on an objective set of criteria. As projects are implemented, lower ranked projects can move up on the list. The project list may change over time as a result of changing bicycling and walking patterns, new tools, land use patterns, implementation constraints and opportunities and the development of other transportation system facilities.

Methodology:

This Plan used a similar framework to the ranking system developed in the *Santa Cruz City Schools Complete Streets Master Plan*, and made refinements to the criteria to reflect the broader citywide focus of this Plan. Each recommendation received points

based on network connectivity closure, connection to trip generators and attractions, historical bicycle and pedestrian crash location proximity, low-stress network upgrade, city and community support, cost, and feasibility.

Proximity to Trip Generators: Schools, Parks/Open Space, Commercial Areas, Senior Centers, Grocery Stores

Historical Crash Data: Crash data was pulled from the Statewide Integrated Traffic Reporting System (SWITRS) for the five-year period of 2008-2012 was analyzed.

Public Comments: Each public comment received on a given project location was weighted as one point. A project with no public comments received 10 points, a project with one comment received 9 points, a project with two public comments received 8 points, and so forth.

Traffic Counts: Traffic counts were ranked on a scale of 1 to 10, with 1 having the highest traffic counts and 10 having the lowest. Traffic count data from City of Santa Cruz, Santa Cruz Regional Transportation Commission, and Caltrans was used. Where data was unavailable, professional judgment was used. See Table 8 below for scoring criteria.

Table 8 Traffic Count Scoring Criteria

Score	Traffic Counts
1	Greater than 25,000
2	21,001-25,000
3	18,001-21,000
4	15,001-18,000
5	12,001-15,000
6	8,001-12,000
7	5,001-8,000
8	3,001-5,000
9	1,001-3,000
10	Less than 1,000

Number of Trip Generators Served: Trip Generators include schools, parks and open space, beaches, commercial areas, employment centers, grocery stores, and senior centers. A project with no trip generators served received 10 points, a project

with one trip generator served received 9 points, a project with two trip generators served received 8 points, and so forth.

Cost of Project: Cost of project was ranked from very affordable (1) to very expensive (10). These are planning-level cost estimates, the resulting project costs may vary based upon environmental conditions, unforeseen construction costs, right-of-way, variations in materials cost, or other specific project conditions. These costs were estimated by City of Santa Cruz Public Works Department staff for the purpose of this Plan. The cost and scoring breakdown used is shown in Table 9.

Table 9 Cost and Scoring Breakdown

Score	Cost
1	Less than $10,000
2	$10,001-$50,000
3	$50,001-$100,000
4	$100,001-$200,000
5	$200,001-$300,000
6	$300,001-$400,000
7	$400,001-$600,000
8	$600,001-$800,000
9	$800,001-$1,000,000
10	Greater than $1,000,000

Feasibility: Feasibility was ranked on a score of easy implementation (1) to very difficult to implement (10). Factors that impact projects feasibility include, but are not limited to: right-of-way limitations, environmental considerations, parking removal, water crossings, traffic signal impacts, and construction methods. The feasibility was estimated by City of Santa Cruz Public Works Department staff for the purpose of this Plan.

While this list is prioritized based on the above factors, projects will not necessarily occur in order of highest to lowest rank. If a funding program arises that is narrowly focused to one type of program or project, the project list can be resorted based upon select criteria to be most competitive.

Key types of improvements:

The improvements identified in the project list fall in to the broad categories below. Important to note to this Active Transportation Plan is that the exact improvements required for each project are less strictly defined than they have been in the past. This is because we are in a new era of bike and pedestrian facilities: we've seen huge changes and improvements in the types of facilities that are allowed and encouraged, and new strategies continue to become available. With the location specificity of the project list coupled with the broad improvements identified, the City will be best positioned to use context sensitive emerging best practices in designing and implementing these improvements.

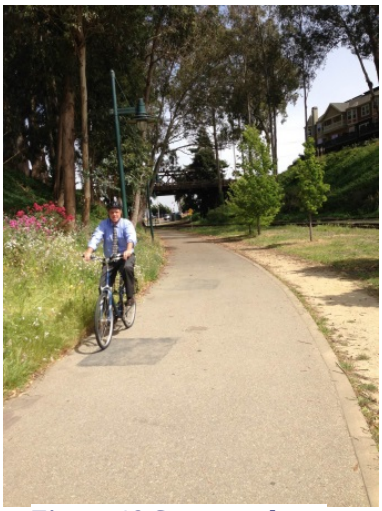


Figure 19 Separated Multi-Use Facility

Sidewalk infill: Construction of sidewalk facilities where they currently do not exist.

Separated Multi-Use Facilities: Multi-use paths are paved off-road facilities used by bicyclists, pedestrians, and those using other non-motorized modes of transportation. They are a completely separate facility from auto traffic, making them very comfortable for users of all comfort levels and abilities. These facilities particularly appeal to "interested but concerned" cyclists due to their separation from traffic.

Class II Bike lanes: A conventional bike lane that uses a stripe of paint and other markings to designate exclusive use by bicycles. Bike lanes are generally used on roadways with posted traffic speed limits of 25 mph or higher and a traffic volume of 3,000 or more cars per day. Because they often provide the most direct connections, these facilities tend to be most popular with bicyclists with a moderate to high level of comfort and experience. While conventional Class II bike lanes offer incredible levels of access and direct connection, their weakness is that they still place a cyclist immediately adjacent to traffic. In some areas with lower traffic speeds and volumes, conventional bike lanes are fine for most users.

Figure 20 Bike Lane

Standard Class II bike lanes can include additional features to enhance visibility of cyclists or to provide additional space for cyclists.

Figure 21 Buffered Bike Lane

Enhanced Bike Lanes: These may include protected bike lanes, buffered bike lanes or green bike lanes as appropriate and as funding and right-of-way allow.

Buffered bike lanes are an enhanced version of the conventional bike lane. They include an additional painted striped area immediately adjacent to the basic bike lane that creates extra space to buffer people bicycling from traffic.

Green bike lanes are conventional bike lanes that are filled in with green pavement markings. They are particularly useful in intersections or conflict zones. The green lanes increase the visibility of the bike lane and make it clearer that bicycles have priority in these zones.

Figure 22 Green Lane

Protected Bike Lanes: Like other bike lanes, protected bike lanes provide an exclusive space for people bicycling on the roadway. They are fundamentally different, however, because they also provide a physical barrier between the bicycle lane and traffic. This barrier can involve elevating the protected bike lane slightly above the roadway, or physically separating the protected bike lane from the car traffic lane with posts, bollards, or parked cars. Protected bike lanes can be one-way or bi-directional. Roadways with high speeds, high volume, frequent double parking, or parking lanes with high turnover are particularly good candidates for protected bike lanes.

Figure 23 Protected Bike Lane. Source: People for Bikes

Class III Bike Routes: Class III bike routes share the right-of-way between vehicles and bicyclists and utilize signage and optional shared lane markings to indicate that the road is a shared use facility. These facilities are typically recommended for streets with relatively low traffic speeds (25 mph or less) and lower volumes (<3,000 ADT) such that less experienced bicyclists will feel comfortable bicycling with mixed traffic. In order to better highlight the presence of bicyclists to motorists, bike routes could potentially be supplemented with shared lane markings ("sharrows", a combination of "share the road" and "arrow"). These pavement markings help to make less-experienced riders more comfortable on the road. Sharrows have been shown to improve interactions between bicycles and cars by decreasing aggressive behavior by motorists and increasing passing distance and following distance.

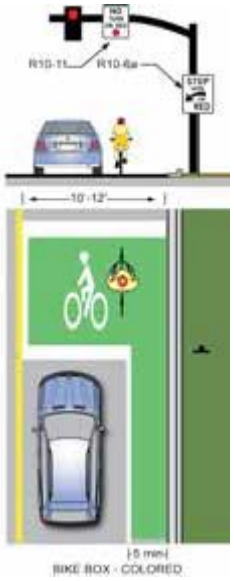
Complete Streets: Complete Streets are roadways designed for all users, inclusive of active transportation users. There is no singular design prescription for Complete Streets; each one is unique and responds to its community context. A complete street may include: sidewalks, bike lanes, sharrows, public transportation stops, frequent and safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.

Connection: These are relatively minor projects that provide or improve a connection to existing facilities to make bike and pedestrian access easier.

Neighborhood Greenways: Neighborhood Greenways are low-traffic, low-speed residential streets that have been optimized to make bicycling and walking comfortable via relatively minor modifications that increase bicycle and pedestrian safety and convenience and discourage non-neighborhood car traffic. Traffic calming structures, pavement markings and signage are used to improve safety for all modes of transportation; bicyclists, pedestrians and motorists. Residents across the country are enjoying Neighborhood Greenways and benefiting from quieter streets, pleasant neighborhoods, and the ability to feel safe and comfortable while riding a bike and walking in their community. Neighborhood Greenways are effective in encouraging the interested but concerned to ride more often since they provide a comfortable bicycling environment for most ability levels. Neighborhood Greenways are a vitally important aspect of this Plan, there are numerous corridors identified for Neighborhood Greenway

treatments in the project list. **A complete list of potential Neighborhood Greenway features and Frequently Asked Questions is included in Appendix D: Neighborhood Greenways.**

Intersection Improvements: Context sensitive intersection improvements scaled to support bike and pedestrian users. These may range from simple improvements such as improving crosswalk striping to more complicated or emerging techniques such as bike boxes at a high volume intersection. As funded, each of the locations identified in this Plan for intersection improvements will be evaluated and designed specific to their context.



Monterey Bay Sanctuary Scenic Trail (MBSST) Projects: Completion of the rail trail within City limits and the creation of new connections to the rail trail from surrounding neighborhoods.

End of Trip Facilities: End of trip facilities are places to safely and conveniently store your bicycle on either end of your trip. They may be identified as bike racks or bike lockers.

Project List

The following project list was developed through extensive community input, stakeholder involvement, and staff review. It presents the long range infrastructure priorities of the City of Santa Cruz.

ATP Projects list DRAFT			Trip Generators: Schools, Parks/Open Space, Commercial Areas, Senior Centers, Grocery Stores	25 crashes 12-24 crashes 5-11 crashes 4 crashes 2-3 crashes 1 crash		(1= >25k, 10= <1k)	Trip Generators: Schools, Parks, Beaches, Commercial Areas, Senior Centers, Grocery Stores,						
			1 = at generator	**1 = 1+crash 5 = close proximity to crash 10 = no crash proximity**	**1-lots comments**	**1-high counts**	**1-serves 10 trip generator**	**1-no barriers (ROW, parking, etc.)**	**1- low cost**				
			10 =5 or more blocks from generator		**10 = no comments**	**10-no traffic**	**10-serves 1 trip generator**	**10-extremely difficult to implement**	**10 - over million**				
Project Number	**Location**	**Recommendation**	**Proximity to Trip Generators**	**Crash Data**	**Public Comments**	**Traffic Counts**	**# Trip Generators Served**	**Feasibility**	**Cost of Project**	**Total Score**	**Project Type**	**Potential Spot Parking Impact? Y/N**	**Potential linear parking impact? Y/N**
1	Allerton St from Pacheco Ave to Park Ave	Sidewalks on both sides for safe routes to schools	1	10	8	10	10	10	4	53	Sidewalk	N	N
2	Almar	Sidewalks on both sides the entire length	1	1	4	7	8	10	10	41	Sidewalk	N	N
3	Alta Avenue / Chace Street	Neighborhood greenway (NACTO), which would include traffic calming, Shared Lane Markings ("sharrows"), evaluation of opportunities to remove stop signs to prioritize bicycle through movement on Alta Avenue, and enhanced crossing treatments at major cross streets	1	10	9	10	8	7	6	51	Neighborhood Greenway	Y	N
4	Alta Avenue / Fair Avenue / Chace Street intersection	Install marked crosswalks and enhanced signage to facilitate pedestrians and bicyclists crossing Fair Avenue between Alta Avenue and Chace Street	4	10	9	7	9	7	5	51	Intersection	Y	N
7	Bay between UCSC and West Cliff	Program and fund continued improvements on this high volume corridor based upon collision data, including pursuing protected or buffered bike lane treatments and intersection enhancements. Connect with planned improvement for Segment 7 of the Monterey bay Sanctuary Scenic Trail on lower Bay Street. Intersection treatments at Bay & Mission, Bay & High, Bay & King, Bay & Anthony, and Bay & Escalona based upon past crash data.	1	1	8	6	4	10	7	37	Enhanced Bike Lanes	Y	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
9	Bay Drive at Meder Street / Cardiff Court	Extend curb at northwest corner (Bay Drive and Meder Street) to reduce crossing distance for pedestrians, increase pedestrian visibility, and slow right-turning vehicles	4	1	1	6	9	4	4	29	Intersection	N	N
10	Bay Drive at Meder Street / Cardiff Court	On Bay Drive north of Meder Street address redwood tree trunk encroachment onto east sidewalk. Options include bumping out curb line to widen sidewalk, or routing sidewalk behind tree (which may encroach into adjacent private property)	4	1	1	6	9	7	6	34	Sidewalk	N	N
11	Bay Drive and High Street	Provide pocket bike lanes at intersection for through cyclists in eastbound and westbound direction on High Street	3	1	4	6	9	7	5	35	Bike Lane Spot Improvement	N	N
12	Bay Drive and Nobel Drive	Extend southeast sidewalk corner to reduce crossing distance for pedestrians crossing Bay Drive	4	10	8	6	9	7	6	50	Intersection	Y	N
13	Bay Drive and Nobel Drive	Improve entry and exit to Bay Dr. from ped/bike median path	4	10	8	6	9	4	4	45	Intersection	N	N
15	Bay Street at Anthony Street	Colored pavement intersection treatment	8	1	9	6	9	1	2	36	Intersection	N	N
16	Bay Street at Mission Street	Intersection improvements. Crosswalks on all legs. Bike improvements	1	1	1	4	7	10	6	30	Intersection	N	N
17	Bay Street north of Mission St	Remove bulbout in bike lane heading southbound	3	5	9	4	7	2	1	31	Obstacle	N	N
19	Bayona Drive at Scenic Street	Install sidewalk on hill	8	10	9	10	10	3	2	52	Sidewalk	Y	N
20	Beach Hill Stairway to Pacific	Re-open stairway	2	10	9	9	8	10	10	58	Opportunity Project	N	N
23	Benito Avenue	Install continuous sidewalks on Benito Avenue	1	1	4	10	10	7	6	39	Sidewalk	N	N
24	Benito Avenue / Benito Avenue intersection	Paint yellow crosswalks on west, south, and east legs	1	5	4	10	10	1	2	33	Intersection	Y	N
25	Berkeley Bridge	Improve landing pad to remove change in elevation between cement and DG. Extend curb cut to align with bridge. Realign bollards to easier bike access. Align curb cut with Hubbard Street for access	10	10	3	7	7	5	2	44	Obstacle	Y	N
27	Bicycle Rack Installation Program	Dedicated funding to implement 30 bicycle parking spaces/year. Locations to be determined by staff and on a request basis. Reference the project locations contained in the plan narrative.	1	10	1	10	1	8	3	34	Program level	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
28	Neighborhood Greenway Comprehensive Signage & Markings Project	Install new signage and markings for all proposed Neighborhood Greenways that meet a minimum development standard: - Less than 3,000 cars per day - 85th percentile speeds of 25 mph or less or using engineered speed reductions	1	10	1	10	1	9	4	36	Program level	Y	N
29	Bike Route Signage Program	Implement all recommendations within City limits from the SCCRTC Bike Route signage program	1	10	1	5	1	9	4	31	Program level	N	N
31	Bradley Drive and Majors Street	Ensure continuous sidewalk on at least one side of the street	2	10	9	10	9	10	8	58	Sidewalk	N	N
32	Branciforte Creek Crossing- Market St to Lee St North of SR1	New bike/ped path; bridge over creek. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	10	5	8	7	10	10	5	55	Multi-Use Path	Y	N
33	Branciforte Creek Path: Easement- west side Branciforte Creek, Water St through Medical Center	Acquire easements, complete paving. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	1	5	10	10	8	10	6	50	Multi-Use Path	Y	N
34	Branciforte Creek Path: Ocean St to Dakota Ave both sides	Acquire easements, new bike/ped paths. Consider adjacent alternate access, including on-street improvements to May and Dakota between Branciforte Creek and San Lorenzo Park. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	1	5	10	10	9	10	10	55	Multi-Use Path	Y	N
35	Branciforte Creek Path: East side of Branciforte Creek to south side of Water Street	Acquire easement, connect path to Water St and signalize crosswalk on east leg of Water/Market. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	1	1	8	5	8	10	10	43	Multi-Use Path	N	N
36	Branciforte Creek Path: Market Street at Water Street	Continue path under Water Street. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	1	1	8	5	8	10	10	43	Multi-Use Path	N	N
37	Branciforte Creek Path: May Avenue Bridge over Branciforte Creek	Install new bridge and connections. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	4	5	10	10	8	10	10	57	Multi-Use Path	Y	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
38	Branciforte Creek Path: May Avenue to Ocean Street on both sides of Branciforte Creek	Pave and connect to Ocean St. Consider adjacent alternate access, including on-street improvements to May and Dakota between Branciforte Creek and San Lorenzo Park. Prior to accepting any grant funds for any Branciforte Creek project, include neighborhood noticing.	4	10	10	10	6	8	4	52	Multi-Use Path	N	N
44	Broadway Corridor	Green lanes from Laurel to Arana Gulch to define Broadway as a bicycle corridor	1	1	1	6	3	2	3	17	Enhanced Bike Lanes	N	N
45	Broadway/Laurel Bridge-western side	Improve levee connections. Gradual on-ramps. Signage. Lighting along pathway and undercrossings. Remove the 6' cement barrier preventing bicyclists from leaving the San Lorenzo Riverway when heading North and trying to turn right onto Laurel	2	1	8	2	8	9	2	32	Levee access	N	N
46	Brookwood Dr- Prospect Heights to City Limits	Widen pavement for a contraflow lane OR explore options of two-way bike travel	1	5	5	9	8	10	10	48	Bike Lanes	N	N
47	California Street (from Laurel Street to Walnut Avenue)	Neighborhood Greenway (NACTO) designation including implementation of larger stencils and signage to alert drivers	1	1	4	8	8	7	4	33	Neighborhood Greenway	Y	N
48	California Street and Laurel Street	Install passive bike detection at intersection (if intersection is actuated). If pre-timed, removed sign that asks bicyclists to push button. Adjust green time to allow minimum crossing distance for turning bicyclists	3	10	4	6	8	4	3	38	Intersection	N	N
49	Cayuga Avenue from Soquel Ave to Hiawatha Ave	Install bike lanes OR Neighborhood Greenway.	2	1	5	9	8	1	3	29	Neighborhood Greenway	Y	Y
51	Chestnut St at Locust St	Raised median/pedestrian island	1	10	9	8	10	5	1	44	Intersection	Y	N
52	Chestnut St- Laurel St to end	Install rail trail spur	1	10	8	9	6	10	7	51	MBSST	Y	N
53	Chestnut Street- stairs to Mission Hill	Install bike rail on steps	1	10	9	8	9	1	1	39	Obstacle	N	N
55	Connections to Monterey Bay Sanctuary Scenic Trail Network	Connections at Harbor, Chestnut, Bronson, Mott, Cayuga,	1	1	3	5	5	10	5	30	MBSST	Y	N
56	Coral St- River St to Evergreen St	Install bike lanes	6	1	8	9	8	10	1	43	Bike Lanes	N	Y
57	Dakota St at Ocean St	Install cut through in partial closure on Dakota to allow cyclists to turn eastbound from Ocean St or continue straight onto Dakota.	1	1	9	10	9	4	2	36	Intersection	N	N

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58	Darwin St: Gault St to Hall St	Neighborhood Greenway (NACTO). Continuous sidewalks at least one side. Pavement markings showing jog at Darwain-Clinton-Owen	4	10	8	1	6	5	3	37	Neighborhood Greenway	Y	N
59	Delaware Ave at High Rd	Install crosswalk to connect to new Delaware Addition	3	5	9	8	8	4	3	40	Intersection	Y	N
60	Delaware Ave at Natural Bridges	Marked crosswalk with median	1	5	8	8	7	1	3	33	Intersection	Y	N
61	Delaware Ave Complete Streets: Swift St to Surfside, Woodrow St to Columbia St	Enhanced and continuous bike lanes between Swift and Surfside and between Woodrow and Colunbia. Fill sidewalk gaps between Almar and Columbia.	10	1	3	8	2	10	10	44	Complete Streets	Y	Y
62	Dubois St from Harvey West Blvd to Encinal St	Install bike lanes	1	10	10	10	9	10	2	52	Bike Lanes	Y	Y
65	East Cliff Drive at Ocean View Park access	Pedestrian connection from southern end of levee path to bottom of Ocean View Park path. Consider RRFB.	2	1	9	6	8	3	2	31	Intersection	N	N
66	East Cliff Drive Connection-Murray St to Jessie St	Widen walkway to create multi-purpose path	4	1	5	6	8	2	2	28	Opportunity Project	N	N
67	East Cliff Drive path between 4th Street and East Cliff Drive	Upgrade existing path to multi use path. Extend to connect East Cliff Drive	2	10	8	10	8	9	6	53	Multi-Use Path	N	N
68	East Cliff Drive pathway at 4th Avenue	Curb cut and red curb for access to coastal path	1	10	5	10	7	1	1	35	Connection	Y	N
69	East Cliff/Murray St Intersection Improvements	Reconfigure/restripe intersection for enhanced bike/ped circulation	4	10	8	6	8	4	2	42	Intersection	Y	N
70	Elk St	Continuous sidewalk on at least one side of Elk.	8	10	9	9	10	10	4	60	Sidewalk	N	N
71	Emeline Street	Neighborhood Greenways (NACTO)	1	1	9	10	10	5	2	38	Neighborhood Greenway	Y	N
72	Encinal St	Install bike lanes the entire length. Install continuous sidewalks on at minimum one side entire length. Smooth out rail crossing.	6	1	9	6	8	5	3	38	Complete Streets	N	Y
73	Escalona Drive and Bay Drive	Extend corners to reduce crossing distance for pedestrians and slow turning vehicles	6	1	4	5	8	7	6	37	Intersection	Y	N
74	Escalona Drive and Bay Drive	Add sidewalks on at least one side of Escalona Drive	1	1	4	5	8	10	10	39	Sidewalk	N	N
75	Evergreen St: Coral St to end	Install sharrows	1	1	9	10	10	1	1	33	Sharrows	N	N
76	Fairmount Avenue	Fill sidewalk gaps	3	10	9	8	9	7	10	56	Sidewalk	N	N

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78	Felker St	Neighborhood Greenways (NACTO)	2	1	8	10	8	4	3	36	Neighborhood Greenway	Y	N
79	Fern St at Railroad Tracks	Remove curbing in pathway of cyclists and smooth pavement over railroad tracks	10	10	9	9	9	5	1	53	Obstacle	N	N
81	Frederick St: Soquel Ave to Broadway	Install bike lanes.	1	1	10	6	5	10	2	35	Bike Lanes	N	Y
82	Front St at Soquel	Install signage and green lane markings to show Front St southbound travel lane jogs	1	1	9	5	5	2	1	24	Bike Lane Spot Improvement	N	N
83	Front Street between Cooper Street and Water Street	Consider a contraflow lane	1	1	8	5	7	9	4	35	Bike Lanes	Y	N
85	Gault St at South Morrissey	3-way stop with new crosswalks. Curb extensions to shorten crossing distance.	1	10	9	9	10	8	3	50	Intersection	Y	N
86	Gault St: Seabright Ave to Frederick St	Neighborhood Greenway (NACTO)	1	1	9	9	10	5	2	37	Neighborhood Greenway	Y	N
87	Goss Ave from N Branciforte to Elk St	Continuous sidewalks both sides entire length	10	10	3	9	1	10	4	47	Sidewalk	N	N
88	Goss Avenue between Market and N. Branciforte	Install Class II bike lanes on eastbound (uphill) direction to separate bicyclists from vehicles on the uphill climb	10	10	1	7	9	7	2	46	Bike Lanes	Y	N
90	Grant St between Plymouth St to Market St	Neighborhood Greenways (NACTO). Remove solid parking lane stripe	1	1	7	9	10	4	2	34	Neighborhood Greenway	Y	N
91	Grant St/Plymouth/Felker/Graham Hill Rd	Improve intersection and access to levee and bridge and across Ocean Street	4	1	1	1	8	10	10	35	Intersection	Y	N
93	Hammond Avenue between Poplar and Morrissey	Fill sidewalk gaps on north side of Hammond between Morrissey and Poplar	2	10	5	9	9	8	6	49	Sidewalk	N	N
94	Hanover at Sumner	Consider 4-way stop with new crosswalks if warranted	2	1	9	10	9	7	1	39	Intersection	Y	N
95	Harbor Drive north end at Arana Gulch path	Curb cut to connect to Arana Gulch Path	1	10	5	10	7	2	1	36	Connection	Y	N
97	Harvey West Blvd at Sylvania	Install separated bike lane through the eastbound Harvey West intersection with Sylvania	2	10	9	6	8	1	1	37	Bike Lane Spot Improvement	Y	N
98	Harvey West Blvd from Dubois St to Coral St	Install bike lanes.	2	10	10	6	8	10	2	48	Bike Lanes	N	Y
100	Hiawatha and Logan Streets	Priority sidewalk completion	1	1	10	9	7	9	6	43	Sidewalk	N	N
101	High St at Arboretum	Install sidewalks	1	10	9	6	10	1	3	40	Sidewalk	N	N
102	High Street Bridge over SR1	Replace ped bridge with bike/ped bridge when reconstructing	4	5	5	9	6	10	10	49	Opportunity Project	N	N
103	Highland Avenue between Escalona Dr and Mission St	Southbound, cut back choker and continue southbound Highland bike lane between Escalona and Mission St.	6	1	9	6	7	3	2	34	Obstacle	N	N

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104	Highway 1 at Shaffer Road	Reconfigure/restripe the eastbound Highway 1 intersection with Shaffer Rd to tighten the curve and slow motorists turning onto Shaffer Rd	2	1	9	1	7	7	2	29	Intersection	N	N
105	Holway Drive & Morrissey Boulevard path	Formalize the entry/exit of the path between Morrissey Blvd and Holway Drive	2	10	8	9	9	7	3	48	Sidewalk	Y	N
106	Ingalls St at Swift St	Install crosswalk	1	10	8	8	7	8	2	44	Intersection	Y	N
107	Kennan Street connection to San Lorenzo Riverwalk	Improve levee connections. Gradual on-ramps. Signage. Lighting along pathway and undercrossings. Add curb cuts, including unlocked gate	1	5	8	10	9	10	6	49	Levee access	Y	N
108	King Street	Install bike lanes. Consider protected bike lanes at school frontage. Include traffic calming.	1	1	1	7	6	10	10	36	Bike Lanes	Y	Y
109	King Street and Kirby Street	Install "Yield to Pedestrians" paddle sign in centerline of each uncontrolled crosswalk on King Street	1	10	10	7	8	7	3	46	Intersection	N	N
110	King Street and Peyton Street	Install "Yield to Pedestrians" paddle sign in centerlines of uncontrolled King Street crosswalks	1	10	10	7	8	7	3	46	Intersection	N	N
111	King Street at Miramar and West	Reconfigure intersection and sidewalk bulb out to maintain bike lane continuity	1	10	9	8	8	4	2	42	Intersection	N	N
112	King Street at Mission Street (west end)	Provide gateway feature / signage for vehicles turning onto King Street from Mission to indicate they are entering a residential neighborhood and major bicycle / pedestrian corridor	3	1	8	1	8	7	5	33	Intersection	Y	N
113	King Street Connection-Grandview to King St	Provide public access to connect King Street to Grandview for bike and pedestrians.	8	5	7	7	8	5	1	41	Connection	Y	N
114	King/Mission/Union	Intersection improvements for bike and pedestrian circulation	2	10	7	1	8	8	2	38	Intersection	N	N
115	La Fonda Ave between Soquel Ave to SR1	Repaint and add additional sharrows on southbound downhill lane to alert drivers to the presence of bicyclist.	1	5	1	8	9	10	1	35	Sharrows	N	N
116	La Fonda Ave between SR1 to Prospect Heights	Neighborhood Greenway to support access to DeLaveaga Elementary School and Harbor High School.	2	10	10	8	9	1	2	42	Bike Lanes	N	Y

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117	La Fonda Avenue	If possible, widen sidewalk to provide additional pedestrian space	1	5	1	8	9	10	10	44	Sidewalk	N	N
118	La Fonda Avenue between Soquel Ave and High School	Consider painting east side (uphill) bike lane green to distinguish it from the parking and travel lanes and to alert drivers to the presence of bicyclists; paint additional bike lane pavement legends	1	5	1	8	9	7	4	35	Bike Lanes	N	N
119	Laurel St between King St to California St	Install bike lanes. Sharrows installed as recommended interim treatment	2	1	8	3	7	10	2	33	Bike Lanes	N	Y
120	Laurent Street and King Street	Consider bulbouts at the King Street crosswalks and repaint as high-visibility crosswalks Ensure recommendations are coordinated with King Street bike lane recommendations	7	10	5	8	8	10	6	54	Intersection	Y	N
121	Laurent Street between Escalona Drive and Moore Street	Improve sidewalk conditions on Laurent Street: repair uneven areas on Larent Street sidewalk and consider widening	5	10	5	10	8	1	1	40	Sidewalk	N	N
122	Lee St between North Plymouth St to Emeline Ave	Sharrows, full use of lane sign	4	10	10	8	10	1	2	45	Sharrows	N	N
123	Lighthouse Ave between Bay St to Pelton Ave	Sharrows, full use of lane sign	2	10	10	10	9	1	2	44	Sharrows	N	N
124	Limekiln St between Encinal St to Coral St	Install bike lanes.	6	10	10	10	10	10	2	58	Bike Lanes	N	Y
125	Lincoln Street and Chestnut Street	Install curb bulb-outs to replace the painted bulb-outs on the east leg of the intersection	2	1	9	6	9	7	5	39	Intersection	N	N
127	Market Street	Complete Streets Treatments between Avalon and Goss, including sidewalk on at least one side and complete bike lanes. An enhanced crossing is needed near Avalon to facilitate active transportation users between the Branciforte Creek Path and the Lee Street Connection path.	1	1	5	7	9	10	9	42	Complete Streets	Y	Y
128	Market Street at Avalon	Install crosswalk	8	1	9	7	9	3	2	39	Intersection	Y	N
129	Market Street at Isbel Drive	Reconfigure pedestrian island on northwest corner to better serve both cyclists and pedestrians	4	1	9	7	10	6	2	39	Intersection	N	N
130	May Ave between Soquel Ave to Grant St Park	Neighborhood Greenway (NACTO). Change STOPs for bike boulevard	2	5	7	10	1	4	2	31	Neighborhood Greenway	Y	N
131	Meder St between Western Dr to Bay Dr	Neighborhood Greenway (NACTO)	1	1	10	10	10	4	3	39	Neighborhood Greenway	Y	N

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132	Melrose Avenue	Fill sidewalk gap on south side between Magnolia and Catalpa. Repair sidewalks root uplift, trim vegetation	1	5	8	9	10	4	5	42	Sidewalk	N	N
133	Melrose Avenue at Morrissey Blvd	Install marked crosswalk and RRFB to provide enhanced crossing for bicyclists and pedestrians that use this crossing location. Provide enhanced median refuge and reconfigure left turn pocket as part of this improvement	3	10	8	4	10	7	6	48	Intersection	Y	N
134	Melrose Neighborhood Greenway	Neighborhood Greenways (NACTO).Hageman to Trevethan, to Melrose, to Stanford, to Water and join existing bike lane. Traffic calming, signage, and crossing improvements to prioritize bikes and peds.	2	1	8	10	1	10	8	40	Neighborhood Greenway	Y	N
136	Mission St Extension Natural Bridges to Swift Street	Sharrows, full use of lane sign. Wayfinding signage to MBSST Segment 7. At minimum, install continuous sidewalks on south side. Enhanced pedestrian crossing at Mission St Ext and Swift Streets.	1	1	7	10	8	7	4	38	Sharrows	N	N
137	Shaffer Rd to Delaware via Mission St Extension and Natural Bridges Dr	Continue the cycletrack on Mission Street Extension along Natural Bridges and Delaware Ave. Connect to multi-use path on west side of Swanton Blvd and to Segment 7 of the MBSST.	1	1	10	7	6	8	6	39	Bike Lanes	Y	N
138	Mission Street and King Street	Install curb extension at pedestrian crosswalk to improve visibility	7	10	9	4	9	7	6	52	Intersection	Y	N
139	Mission Street and Laurel Street	Install passive bike detection on Laurel Street legs of intersection	4	1	8	1	8	7	2	31	Intersection	N	N
140	Mission Street and Walnut Avenue	Reduce minimum green time, which will reduce pedestrian wait time and increase pedestrian compliance	2	10	4	1	8	7	4	36	Intersection	N	N
141	Mission Street and Walnut Avenue	Install Sharrow markings across intersection to indicate the intended path of bicyclists on Walnut Avenue crossing Mission Street	2	10	4	1	8	7	3	35	Intersection	N	N
143	Mission Street at Fair	Improve pedestrian crossing	1	10	8	1	8	8	3	39	Intersection	N	N
145	Mission St at Center St	Intersection Improvements, particularly left turns for cyclists. Allow pedestrians to cross all 4 directions. Eliminate free right turn.	1	5	7	2	6	8	8	37	Intersection	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
146	Monterey Bay Sanctuary Scenic Trail Network- entire length through the city including bridges	Construct all new path network, including bridges and spurs as defined by the Monterey Bay Sanctuary Scenic Trail Network Master Plan	1	5	1	5	1	10	10	33	MBSST	Y	N
147	Moore Street between Bradley Drive to Fridley Drive	Install sidewalk on the east side of the street	2	10	8	10	9	7	8	54	Sidewalk	N	N
149	Morrissey Blvd between Park Way to Prospect Heights	Neighborhood Greenway to support access to DeLaveaga Elementary School and Harbor High School.	1	10	8	8	9	10	2	48	Bike Lanes	N	Y
150	Morrissey Boulevard and Fairmount Avenue	Add bicycle turn box on Fairmount and signage to direct cyclists onto the sidewalk when traveling towards Prospect Heights. Add sharrows for cyclists traveling towards Soquel. Directional signage on how to negotiate to/from multi-use path on bridge.	10	10	1	4	8	9	2	44	Intersection	N	N
151	Morrissey Boulevard and Fairmount Avenue	Install bicycle detection loops	6	10	1	4	8	4	2	35	Intersection	N	N
152	Morrissey Boulevard and Fairmount Avenue	Widen west sidewalk on Morrissey Blvd overpass to a two-way multi-use path for pedestrians and cyclists. Add a barrier between the path and adjacent travel lane.	6	10	1	4	8	7	7	43	Opportunity Project	N	N
153	Morrissey Boulevard and Fairmount Avenue	Install missing sidewalk segment on Fairmount at northwest corner	6	10	1	4	8	7	3	39	Sidewalk	N	N
154	Morrissey Boulevard and Prospect Heights	Install a crosswalk on the south leg of the intersection	5	10	9	9	1	4	3	41	Intersection	Y	N
156	Murray St at western Harbor Stairs	Protected crosswalk and traffic calming	1	5	9	5	9	5	2	36	Intersection	N	N
157	Murray St between City Limits and Seabright	Enhanced bike lanes. Where possible, encourage installation of protected bike lanes, buffered bike lanes, or colored pavements as appropriate.	1	1	8	5	9	4	2	30	Enhanced Bike Lanes	N	N
158	Murray Street east of Seabright near METRO bus stop	Use green lane treatment eastbound where lane curves and bike lane narrows. Consider adding a speed feedback sign near this location eastbound.	1	1	8	5	9	4	2	30	Bike Lane Spot Improvement	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
159	N Branciforte Avenue / Soquel Avenue	Consider painting markings across the intersection in the northbound direction to help cyclists track their path and ensure they are maintaining appropriate clearance from the pedestrian island at the northeast corner	4	1	8	5	9	4	1	32	Intersection	N	N
160	N. Branciforte and Keystone	Restripe crosswalk as high visibility; consider restriping to south leg of intersection to provide better alignment for curb ramps on both sides	3	5	9	6	9	4	3	39	Intersection	Y	N
162	North Pacific between River St to Water St	Install bike lanes. (sharrows installed in interim)	1	1	10	7	8	10	2	39	Bike Lanes	N	Y
163	Ocean St at Soquel Ave	Intersection Improvements to promote multimodal transportation	1	5	8	1	9	5	2	31	Intersection	N	N
165	Ocean St from Soquel Ave to San Lorenzo Blvd	Install bikes lanes. Preferred by widening pavement (requires new right of way). Called for in Ocean Street Area Plan. Where possible, encourage installation of protected or buffered bike lanes.	1	1	2	1	7	10	10	32	Opportunity Project	Y	Y
167	Ocean Street between Grant St and Soquel Avenue	Enhanced bike lanes. Includes green lane markings in conflict zones at Plymouth NB, County Building Driveways, and Dakota NB. Where possible, encourage installing protected bike lanes, buffered bike lanes, or colored pavement.	1	1	6	1	1	8	4	22	Enhanced Bike Lanes	Y	Y
168	Pacheco Avenue and Allerton Street	Remove sidewalk obstructions or provide additional sidewalk width at constrained locations including utility poles, signs, and hydrants	5	10	8	9	9	7	4	52	Sidewalk	N	N
171	Pacific Avenue between Front Street and Second Street	Clearly delineate a path for cyclists and pedestrians on the northbound side of the road.	1	1	8	6	7	8	2	33	Bike Lanes	Y	N
172	Pacific Avenue from West Cliff to Front Street	Install sidewalk	1	10	9	7	7	9	3	46	Sidewalk	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
174	Palm Street	Install additional sharrow markings on Palm Street and Seaside Street to achieve recommended CA MUTCD spacing of approximately 250 feet between markings, to alert drivers to the presence of bicyclists. For shorter blocks (like Seaside) there should be a minimum of 2 sharrows per direction per block.	1	1	1	10	10	4	2	29	Sharrows	N	N
175	Palm Street and Seaside Street	Paint high visibility crosswalk on west leg of Seaside Street and Palm Street; install advanced yield markings (sharks teeth) and pedestrian crossing signs (W16-7p) in advance of crosswalk	1	10	5	10	10	4	3	43	Intersection	N	N
176	Palm Street and Seaside Street	Repair sidewalks on Palm Street to address cracking and uneven surface	1	10	5	10	10	1	2	39	Sidewalk	N	N
177	Park Way	Designate as Neighborhood Greenway (NACTO); add sharrows, signage, traffic calming	2	10	8	9	9	10	6	54	Neighborhood Greenway	Y	N
178	Park Way	Install continuous sidewalk on at least one side of the roadway.	2	10	8	9	9	7	8	53	Sidewalk	N	N
179	Park Way – La Fonda Avenue Path	Widen sidewalk area at La Fonda where path links to marked crosswalk	2	10	1	9	9	7	4	42	Sidewalk	N	N
180	Park Way and Allerton Street	Widen entry path at Park Way, remove bollard, and evaluate path conformance with ADA standards	1	10	1	10	10	4	4	40	Connection	N	N
181	Park Way and Allerton Street	Consider new pedestrian/bicycle bridge over the creek aligned with intersection to improve crossing location and create wider path entry to school to better accommodate pedestrian and bicyclist volumes (back entrance to DeLaveaga)	1	10	1	10	10	7	5	44	Connection	N	N
183	Pedestrian Bridge- Dakota to River St	Upon reconstruction, build as a multi-use bridge.	1	10	6	10	7	10	10	54	Opportunity Project	N	N
185	Pelton	Install sidewalks on at least one side entire length	1	10	8	10	7	9	6	51	Sidewalk	N	N
186	Pine St from Soquel to Seabright Ave	Neighborhood Greenway (NACTO)	1	1	6	10	9	7	4	38	Neighborhood Greenway	Y	N
189	Plymouth St: City limits to Emeline Street	Install bike lane	1	10	9	9	10	5	2	46	Bike Lanes	Y	N
190	Poplar and Fairmount	Install marked crosswalks	3	10	4	8	9	1	3	38	Intersection	Y	N
191	Poplar Avenue between Fairmount and Chilverton	Fill sidewalk gap on west side	3	10	9	10	9	7	5	53	Sidewalk	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
192	Potrero St between High Street Bike Pedestrian Bridge and River Street	Sharrows to connect High Street Bridge to the San Lorenzo Riverwalk	2	5	9	9	9	1	1	36	Sharrows	N	N
193	Prospect Heights	Complete gaps in sidewalk network	1	10	1	9	10	10	10	51	Sidewalk	N	N
194	Prospect Heights from Morrissey Blvd to Brookwood Dr	Neighborhood Greenway to enhance low speed/low volume connection.	1	10	9	8	9	10	1	48	Bike Lanes	N	Y
195	Pryce Street connection to San Lorenzo Riverwalk	Improve levee connections. Gradual on-ramps. Signage. Lighting along pathway and undercrossings.	2	10	9	10	10	10	4	55	Levee access	Y	N
197	River Street at River St South	With intersection modifications, provide better bike and pedestrian circulation. If intersection modifications do not happen in the near term, consider shortening traffic island to increase space for southbound cyclists and delineate the path cyclists take from the intersection to continue northbound.	4	10	9	7	9	10	9	58	Opportunity Project	Y	N
198	River Street South entire length	Add bike lanes both sides	1	1	9	7	9	10	2	39	Bike Lanes	N	Y
199	Rooney Street and Pacheco Avenue	Reconfigure intersection corners to give pedestrians more sidewalk space and to reduce vehicle turning speeds. Paint advance stop bars on all legs	6	10	4	7	8	7	5	47	Intersection	Y	N
200	Rooney Street: Gilbert Lane to Elk Street	Install bike lanes.	10	10	9	8	10	10	2	59	Bike Lanes	N	Y
201	San Lorenzo Riverwalk	Improve levee connections. Gradual on-ramps. Signage. Lighting along pathway and undercrossings.	1	1	1	10	1	7	8	29	Levee access	Y	N
202	San Lorenzo Riverwalk exit to Riverside Avenue	Stripe pathway through parking lot in order to leave a clear pathway for bikes and peds. Use crosshatch striping, signage or another method to indicate that this is a no stopping area.	1	5	8	10	8	4	1	37	Sharrows	Y	N
204	Seabright Avenue and Broadway	Add high visibility crosswalk on the south leg.	1	10	9	6	9	4	2	41	Intersection	N	N
205	Seabright Avenue and Effey Street	Add Shared Lane Bicycle markings ("sharrows") in both directions along Seabright Avenue (intermediate step)	1	10	1	7	10	4	4	37	Sharrows	N	N
206	Seabright Avenue at Clinton Street	Install crosswalk with bulbouts	8	10	7	6	10	5	2	48	Intersection	Y	N
207	Seabright Avenue at Logan Street	Re-stripe this crosswalk, add lighting/RRFB	1	1	2	6	6	8	3	27	Intersection	N	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
209	Seabright Avenue between Soquel Ave to Pine St	Install sharrows between Soquel and Pine. Consider identifying and signing alternate routes	1	1	5	6	7	10	2	32	Bike Lanes	N	Y
210	Seaside Street to Acadia St to California St	Complete Streets treatments. Between Acadia St and California St, improve existing bike route using NACTO Neighborhood Greenways treatments- include pavement markings to direct cyclists through jogs. Between Delaware Ave and Younglove Ave, install continuous sidewalk on at least one side of the road.	1	5	9	9	8	10	5	47	Complete Streets	Y	Y
211	Soquel at Capitola Rd	Green lane treatment on jog in eastbound travel and bike lanes	1	1	9	1	9	3	2	26	Bike Lane Spot Improvement	Y	N
212	Soquel Ave at Forest Ave	Green lane treatment on jog in eastbound travel and bike lanes	1	1	9	1	9	3	1	25	Bike Lane Spot Improvement	N	N
213	Soquel Ave at Morrissey Blvd	Green lane treatment on jog in eastbound travel and bike lanes	1	1	9	1	8	3	2	25	Bike Lane Spot Improvement	N	N
214	Soquel Ave at Frederick St	Green lane treatment on jog in eastbound travel and bike lanes	1	1	9	1	9	3	2	26	Bike Lane Spot Improvement	N	N
215	Soquel at Front St	Consider eliminating free right turn. Improve alignment of pedestrian island and bike lane.	1	1	7	1	7	10	2	29	Intersection	Y	N
218	Soquel at Water and Morrissey (the weave)	Implementing pedestrian friendly design treatments at the Soquel-Water Morrissey Intersection, including access between Poplar and Darwin	1	1	1	1	6	7	3	20	Intersection	Y	N
219	Soquel Ave from Branciforte Ave to Ocean St	Between Branciforte Avenue to Ocean Street, install bike lane on north side (downhill).	1	1	3	4	8	10	3	30	Enhanced Bike Lanes	N	Y
221	Soquel Avenue and Cayuga Street	Add Rectangular Rapid Flash Beacons at existing marked crosswalk on Soquel Avenue at Cayuga. Consider curb extensions to shorten crossing distance. Provide gateway feature / signage for vehicles turning onto Cayuga Street from Soquel to indicate they are entering a residential neighborhood and major bicycle / pedestrian corridor	4	10	9	5	8	7	6	49	Intersection	Y	N
222	Soquel between Benito and 725 Soquel Avenue	Buffered/protected bike lane north side of Soquel. Coordinate with METRO for bus stop at 817 Soquel Avenue	1	1	9	5	6	10	3	35	Bike Lanes	N	Y

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
223	Soquel between City limits and Pacific Avenue	Enhanced bike lanes and treatments at intersections. Where possible, encourage installation of protected or buffered bike lanes.	1	1	2	1	1	6	4	16	Enhanced Bike Lanes	Y	Y
224	Soquel between Pacific Avenue and Front Street	Reinstall westbound Soquel Ave bike lane between Pacific and Front St	1	5	9	4	7	10	2	38	Bike Lanes	Y	Y
225	South Branciforte Ave from Broadway to Peck Terrace	Improve existing bike route using Neighborhood Greenways (NACTO) features	1	1	9	10	8	6	3	38	Neighborhood Greenway	Y	N
227	Spruce Street entrance to San Lorenzo Riverwalk	Improve levee connections. Gradual on-ramps. Signage. Lighting along pathway and undercrossings.	1	10	8	10	8	9	4	50	Levee access	N	N
229	Swanton Blvd from West Cliff to Delaware	Install multi-use bike/ped path to connect to existing West Cliff Drive bike/ped path. Connect to existing Highway 1 multiuse path to Wilder Ranch via Natural Bridges and Mission St Ext	1	1	6	9	6	10	6	39	Multi-Use Path	Y	Y
230	Swift St / Chace St intersection	Install curb extensions at all corners. Add crosswalk on south leg. Install advance stop line on all three legs.	1	10	1	8	10	4	6	40	Intersection	Y	N
231	Swift St at Delaware	Pedestrian enhancements on NW corner of Swift/Delware intersection on Delaware. Consider bulbouts or a refuge island.	1	10	9	8	7	8	3	46	Intersection	Y	N
232	Swift Street / Wanzer Street / Modesto Avenue intersection	Install curb bulb-outs and high-visibility crosswalk on all legs. Daylighting. Conduct warrant study to determine if all-way stop is appropriate	2	10	5	8	10	7	5	47	Intersection	Y	N
233	Swift Street between Wanzer and West Cliff	Install bike lanes northbound	1	10	9	8	9	10	1	48	Bike Lanes	N	Y
234	Sylvania Ave between Encinal St to Harvey West Blvd	Install bike lane	1	1	10	8	9	4	2	35	Bike Lanes	Y	Y
236	Third St between Beach St to beyond Uhden St	Install bike lane. Widen where needed and install nourthbound bike lane	1	10	10	8	6	10	4	49	Opportunity Project	Y	Y
237	Trestle	Widen and improve the pedestrian and bicycle bridge over the San Lorenzo River corridor. Improved lighting	1	10	1	10	5	10	10	47	MBSST	N	N
238	Trevethan Bridge	New bike/ped bridge over SR1 at Trevethan	4	10	8	9	5	10	10	56	Multi-Use Path	Y	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
239	Trevethan-Roxas-Park Way Neighborhood Greenway	Neighborhood Greenway (NACTO). Combine with future bridge over SR1 at Trevethan	1	10	10	9	5	9	7	51	Neighborhood Greenway	Y	N
240	Walnut between Pacific and King	Enhanced bike lanes. Particular attention to school frontage and curve.	1	1	8	6	5	4	3	28	Bike Lanes	Y	N
241	Water between Morrissey and Pacific	Program and fund continued improvements on this high volume corridor based upon collision data, including pursuing protected or buffered bike lane treatments and intersection enhancements. Focus intersection improvements at Ocean Street & Water Street, Water Street & North Branciforte, and "The Weave". Where possible, encourage installation of protected bike lanes, buffered bike lanes, or colored pavement bike lanes.	1	1	7	1	1	7	4	22	Enhanced Bike Lanes	Y	Y
242	Water St at Market St	Allow pedestrians to cross all 4 ways at this intersection to connect Branciforte Creek Multiuse path	1	1	8	1	8	10	5	34	Intersection	N	N
243	Water Street / Seabright Avenue intersection	Add curb bulb-out to the north side of the crosswalk	2	1	8	3	8	4	3	29	Intersection	N	N
244	Water Street at Ocean Street	Intersection improvements, including upgrading pedestrian islands and intersection bike guidance markings. Install bike sensor in left turn lane from eastbound Water onto northbound Ocean.	1	1	5	1	6	8	5	27	Intersection	N	N
245	Water Street at Pacific Avenue	Intersection Improvements, particularly left turns for cyclists. Consider bike boxes for cyclists turning left from westbound Water to southbound Pacific from	1	1	8	1	6	7	2	26	Intersection	N	N
246	Water Street at Poplar Street	Consider recommendations for reconfiguration of intersection to improve visibility of pedestrians and bicyclists crossing and reduce potential conflicts with vehicles turning left from Water onto Poplar.	2	1	1	3	9	7	8	31	Intersection	Y	N

Project Number	Location	Recommendation	Proximity to Trip Generators	Crash Data	Public Comments	Traffic Counts	# Trip Generators Served	Feasibility	Cost of Project	Total Score	Project Type	Potential Spot Parking Impact? Y/N	Potential linear parking impact? Y/N
247	Citywide Bike and Pedestrian Wayfinding Program	Define routes, develop, and install wayfinding signage connecting bike and pedestrians to preferred routes, shortcuts, and high use locations citywide. Reference projects specifically listed in the Plan narrative and the SCCRTC Bicycle Route Signage Program	1	10	9	10	5	1	2	38	Program level	N	N
257	West Cliff Drive, various locations	Stripe additional crosswalks	1	1	9	7	5	5	3	31	Intersection	Y	N
258	Western Dr between Echo/Flower to High St	Install bike lanes.	2	1	9	7	9	10	3	41	Opportunity Project	N	Y
259	Western Dr between Mission and Echo	Widen bike lane on the lower end of Western in the NB/uphill direction at next repaving. At lower end of Western, SB direction bike lane bikes travel as fast as cars and should use the full lane	10	1	9	7	9	10	2	48	Opportunity Project	N	N
260	Western Dr between Mission St to SR1	Install bike lanes.	8	5	10	7	9	10	2	51	Bike Lanes	N	Y
261	Wharf	Implement the promenade from the Wharf Master Plan for better bike/ped access to the ocean for users of all ages and abilities.	1	1	9	8	5	10	10	44	Multi-use path	Y	N
263	Graham Hill Rd from Ocean St Ext to City Limits	Install bike lanes. Consider speed feedback signs.	8	1	9	5	10	4	2	39	Opportunity Project	Y	N

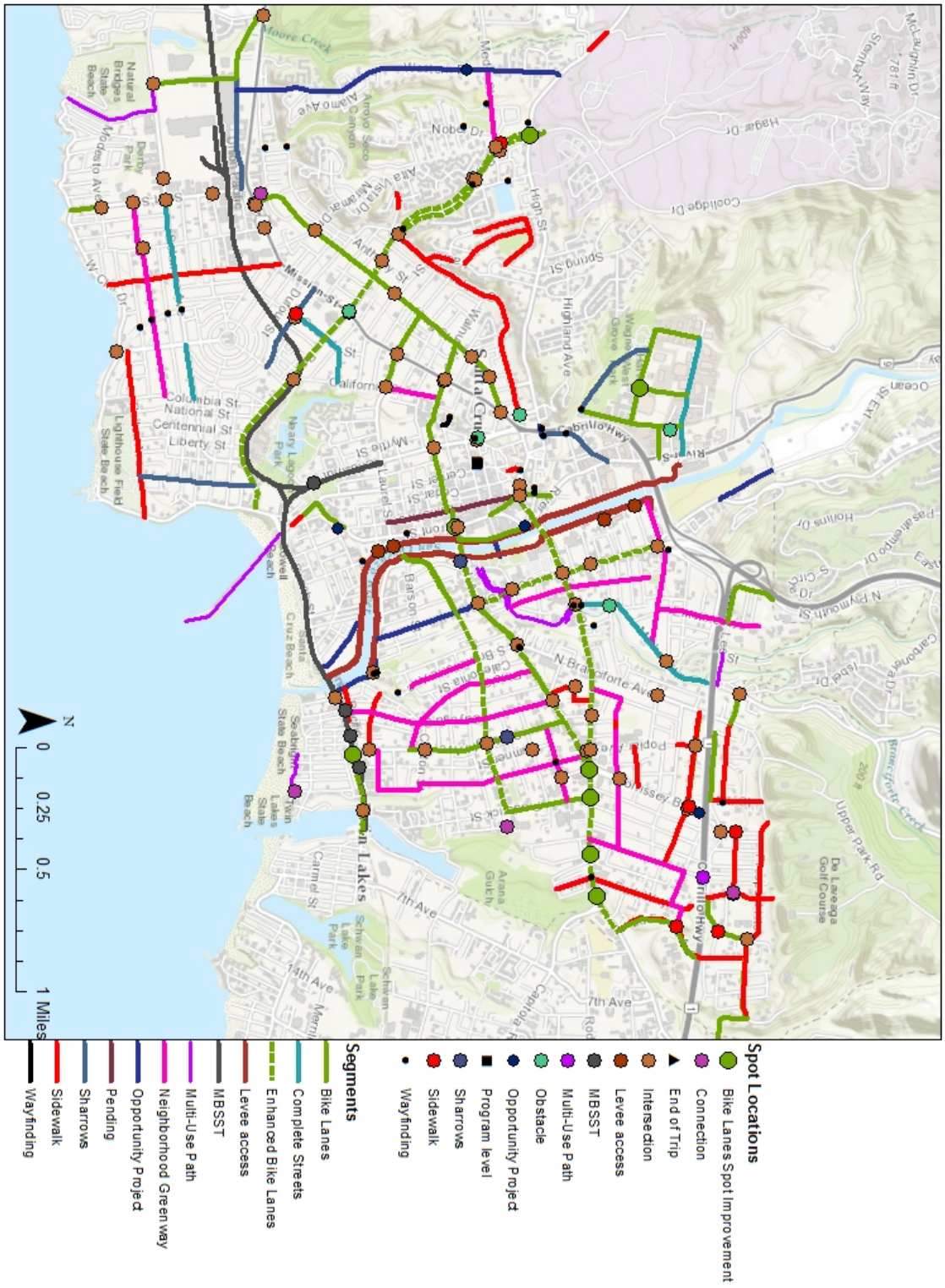

Figure 24 Active Transportation Plan Project Map

High Priority Project List

A stand-alone "Highest Priority Recommendations" list was identified out of the overall project list based upon the Active Transportation Plan Stakeholder Group and city staff input. These are major projects that may be incredibly difficult and expensive, face design or right-of-way challenges, or other significant obstacles, but are the highest priorities concentrated focus to be implemented due to their enormous potential to increase safe active transportation options for the community. This focus will not preclude earlier implementation of other projects on the list.

Table 10 High Priority Project List

Project Number	Location	Improvements
108	King Street Bike Facilities	Update data and findings from the 2008 King Street Bikeway Feasibility Study. Based upon recommendations, install safe, continuous, and appropriate bike facilities along this facility. Particularly important as an alternative to Mission Street and as a Safe Route to School for Bay View Elementary, West Lake Elementary, Mission Hill Middle, and Santa Cruz High students.
237	San Lorenzo Trestle Bike and Pedestrian Improvements	Create a wider, multi-use facility on this pinch point on a major commute corridor. Monitor the study underway as part of the MBSST. Seek funding as part of a larger project or as a stand-alone improvement to implement this high priority project.
61	Delaware Complete Streets	Fill the remaining sidewalk and bike lane gaps to make this a continuous active transportation corridor. Limited bike lane gaps remain between Swift Street and Surfside Street and between Woodrow Avenue and Columbia Street. Large distances of missing sidewalks exist west of Swift Street, at Seaside St, and between Palmetta and

		Columbia.
127	Market Street Complete Streets	Fill the remaining sidewalk and bike lane gaps to make this a continuous active transportation corridor. Maintain sharrows and traffic calming elements between Water Street and Curtis Street; install bike lanes north of Avalon Street. Missing sidewalks exist north of Avalon Street, though limited sidewalk has been installed as the result of new development. An enhanced crossing is needed near Avalon to facilitate active transportation users between the Branciforte Creek Path and the Lee Street Connection path.
2	Almar Complete Streets	Fill the remaining sidewalk gaps on Almar Avenue to make this a continuous active transportation corridor. Large sidewalk gaps exist the entire length of Almar. This street serves a primary neighborhood shopping center, Garfield Park and West Cliff Drive.
219, 223	Soquel Bike Lane gap, Soquel Corridor	Immediate term, add bike lane on Soquel between North Branciforte and Ocean St west bound to close the final gap in the Soquel Corridor bike lane network. Program and fund continued improvements on this high volume corridor based upon collision data, including pursuing protected or buffered bike lane treatments and intersection enhancements.
7	Bay Corridor	Program and fund continued improvements on this high volume corridor based upon collision data, including pursuing protected or buffered bike lane treatments and intersection enhancements. Connect with planned improvement for Segment 7 of the Monterey bay Sanctuary Scenic Trail on lower Bay Street.

		Intersection treatments at Bay & Mission, Bay & High, Bay & King, Bay & Anthony, and Bay & Escalona based upon past crash data.
241	Water Corridor	Program and fund continued improvements on this high volume corridor based upon collision data, including pursuing protected or buffered bike lane treatments and intersection enhancements. Focus intersection improvements at Ocean Street & Water Street, Water Street & North Branciforte, and "The Weave".

Bicycle Support Facilities

Proposed End of Trip Facilities

In 2014, bike thefts made up 10.5% of all Part 1 crimes in the City of Santa Cruz. There are both broad community concerns about bike thefts as well as hard data that support that this is a significant problem in our community. Having well designed, well placed, quality bike parking coupled with an education campaign on how to correctly secure your bicycle can make an impact on this.

The existing bicycle parking ordinance has good bones, but could use refreshing and integration with the allowance for parking reductions. While the ordinance ensures that bike parking is provided in new and renovated developments, it's often been abused by projects looking to reduce their parking requirement, therefore supplying a higher quantity of bike parking, but not necessarily useful or high quality bike parking.

Additionally, more bike parking is needed in many locations both public and private. Some of these places are easy to spot: bikes currently there are locked to fences, street signs, trees, and anything else that looks like it may be a theft deterrent without an actual bike rack in sight, such as in Figure 25. Other locations, you see bikes overflowing from the existing racks, clearly demonstrating a need for additional capacity. Many community members identified their favorite beaches, parks, and shopping areas as needing more parking.

Figure 25 Bikes locked to sign.

This Plan recommends the following key actions in bike parking:

1. Commit to updating the current bike parking requirements and ensure that bike parking provided through new development is high quality, usable infrastructure in line with APBP best practices.

Ensure that any change in business continues to meet the bike parking ordinance. Ensure that when bike parking facilities are installed, they meet the ordinance requirements with regard to quality, placement, and functionality.

2. Commit to increasing Class II bike parking on city streets/sidewalks and other public properties.

Safe and secure bike parking is essential for people to make everyday trips by bike. While there are on street and off-street locations in town that provide bike parking, we should proactively identify locations that are deficient in bike parking. Additionally, the City should utilize selected on-street parking spaces in high use locations for bike corrals.

3. Commit to participation in a proactive program for private business owners to install Class II bike parking.

In the past, the Santa Cruz County Regional transportation Commission ran a bike parking subsidy program, which provided installation of high quality bike parking at the request of property owners. This program helped to increase bicycle accessibility to local business above and beyond the minimum standards required by the code. The RTC's bike parking subsidy program has ended, and at this point a new funding source must be found in order to continue the success of this program. we need to proactively identify parking deficient locations and get businesses to install or upgrade the parking.

4. Commit to revamping the Class I bike locker program

Bike lockers in the Downtown Core are a great resource for residents, visitors, and employees. Despite this, their usage is low and they are showing their age. A revamped bike locker program should focus on security and broad ability to use.

As it stands, before being able to use a bike locker, you must first secure a Park Card. The Park Card is the only fare media that a locker will take. While there are many outlets that sell Park Cards, this twostep process is a huge deterrent to new users who may be curious about using a bike locker. A new program should aim to take debit and credit cards to make the lockers accessible and easy to use for the broadest cross section of people.

5. Consider updates to the Shower Facility Requirements in the Zoning Code

Having shower and changing rooms available at worksites is a key incentive to commuting by active transportation. An updated program should consider lowering the threshold to trigger shower and locker facilities in new and remodeled buildings.

Priority Bike Parking Locations:

Many public and private locations that would benefit from the new or additional bike parking were identified through the public outreach process. Many of these locations are high use areas where encouraging cycling is important, including beaches, schools, parks, libraries, and commercial areas. Specific locations identified through the Active Transportation Plan public outreach are identified in Table 11.

Table 11 Priority End of Trip Facilities

Location	Recommendation	Public/Private
Branciforte Library	More bike parking	Public
Branciforte Middle School Front of School	Install bike rack in front of the school near the entrance for mid-day trips	Public/Other Governmental
East Cliff Drive at Mott Ave (Castle Beach)	Install bike racks	Public
Frederick St Park	Additional bike racks; need to accommodate family-type bikes.	Public
Gateway Plaza	Additional bike racks	Private
Harbor High	Bike racks for mid-day trips	Public
Mission Hill Middle School	Bike racks for mid-day trips	Public/Other Governmental
Morrissey Safeway	Bike parking	Private
Ocean St at Water St	Bike lockers for transit users	Public

Pacific Avenue	Additional bike parking Good location for an on-street bike corral	Public
Pacific Station	Additional bike racks and lockers at Pacific Station. Future Bike Station with redesign.	Public
Santa Cruz High	Additional bike racks	Public/Other Governmental
Soquel Avenue between Seabright and Pine	Additional bike racks Good location for an on-street bike corral	Public
Third Avenue Beach	Additional bike racks	Public
West Cliff Drive	Bike racks at regular intervals	Public
Wharf	Additional bike racks. Good location for bike corral	Public
Boardwalk	Additional bike racks	Private
Bay View Elementary	Bike racks for mid-day trips	Public/Other Governmental

Network Maintenance

Maintaining the existing and proposed bicycle and pedestrian network is important to all roadway users. Bicyclists often avoid bike facilities filled with cracked pavement, gravel, broken glass and other debris; they will ride in the roadway to avoid these hazards. Pedestrians similarly will walk in the roadway if there is no sidewalk, if the sidewalk is blocked by overgrown vegetation, if there is significant damage to the sidewalk, or if there are no curb cuts at intersections. Bicycle and pedestrian facilities must be kept in a state of good repair for the safety and comfort of all active transportation users.

For pedestrians, the condition of the sidewalk is very important to making sidewalks usable. The property owners of the adjacent property are responsible for maintaining the sidewalk, park strip, curb and gutter, and the property owner is also liable for injuries caused by that owner's failure to maintain the sidewalk area in a safe condition (see Santa Cruz Municipal Code Section 15.20.220). Additionally, the property owner is required to abate any landscape related problems, such as vegetation encroachment on to the sidewalk or interference with visibility and sight distance. Areas with deficient sidewalks are typically identified and reported by a community member, and a staff member will subsequently field check the report. If there is indeed a deficient sidewalk, City will issue a letter to the property owner alerting them to the issue and providing them with instructions on how to remedy. If the property owner is unwilling to fix the problem, the City may contract for the work and bill the property owner. **This plan recommends this process continue. In the near term future, this plan recommends that the City investigate alternative funding mechanisms for constructing and repairing sidewalk, including a requirement for cost sharing or "sidewalk upon sale" of a property.**

For cyclists, pavement overlays represent good opportunities to improve conditions for cyclists if done carefully. A ridge should not be left in the area where cyclists ride (this occurs where an overlay extends part-way into a shoulder bikeway or bike lane). Overlay projects offer opportunities to rethink the roadway with bike facilities, including restriping with bike lanes or other bike markings as appropriate.

The General Plan contains policy and action statements that support active transportation system maintenance. These are included in Appendix B: General Plan Active Transportation Policies.

New construction projects are exciting- they present an opportunity for increased access, safety improvements, and an increase in active transportation users. This Plan presents a robust list of wanted and needed new projects. In contrast, maintenance is not exciting. Not only do the existing bike and pedestrian facilities have to be maintained, an already daunting task, but all new facilities will have to be maintained as well. In advance of any new active transportation project, the City shall consider the impacts of on-going maintenance needs.

Implementation

Process to Implement

Successful implementation of the active transportation projects and programs will require ongoing cooperation within and among City departments. This Plan presents a long term planning horizon with the goal of continuous progress towards a more active transportation friendly city. Implementation of the projects in this plan will occur incrementally in a variety of ways. Some projects may be incorporated into the City's Capital Improvement Program (CIP) process and will be implemented as the CIP projects get funded. Others can happen as part of regular maintenance and operations practices and road resurfacing projects. Development in the city will present a significant opportunity to implement some of the recommendations. While improvements associated with development often occur "piecemeal," this is the way development happens and it is important to include bicycle and pedestrian improvements as a component of project improvements. Finally, outside funding can be obtained to finance the design and construction of other projects, improvements and programs. The city should continue to apply for all eligible grant funding opportunities. Where it would provide an additional funding advantage, the city should weigh the benefit of partnering with local and regional agencies, non-profits, and private sector partners to better compete for Federal and State funding opportunities.

An annual report of progress on the Active Transportation Plan will be presented to the Transportation and Public Works Commission.

Notification Process for Projects

Implementing new Active Transportation Plan projects that may impact residents or businesses will include a notification process consistent with Santa Cruz Municipal Code (SCMC) section 10.16. This process includes mailed notices to all residents, business owners, and property owners within 300' and posting notice of the project at the site. For changes to parking, Section 10.16 further specifies an appeal process to the Transportation & Public Works Commission (TPWC). The decision from TPWC can then be appealed to City Council.

Public participation is an integral part of confirming projects reflect the Santa Cruz community values and the vision for this document as an active transportation system that is easy, safe, fun, and serves people of all ages and abilities

Future Financial Needs & Funding Strategies and Sources

The projects included in this Plan carry a total price tag of **$106-$135 million**. Of note, the programs and projects within this Plan are **unconstrained**, which is to say that currently there is not identified and secured funding to implement the entirety of the project list. While this is a daunting figure on its own, there are numerous funding programs that can help fund these important projects.

Funding Source	**Comments**
Federal	
Surface Transportation Program	A wide variety of bicycle and pedestrian improvements are eligible, including on-street bicycle transportation facilities, off -street trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities.
Highway Safety Improvement Program (HSIP)	This program provides funds for the implementation of bicycle transportation facilities that address safety concerns, especially along corridors with high bicycle-involved collision rates. Projects may include education and enforcement programs. The City has been successful in several HSIP grant applications.
Transportation Investments Generating Economic Recovery (TIGER) Program	Can be used for innovative, multimodal and multi-jurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation. These include bicycle and pedestrian projects. Project minimum is $10 million, including a 20% local match.
State	

AB2766	California Assembly Bill 2766 (AB2766), signed into law in 1990, permits Air Districts to allocate a $4.00 per vehicle registration surcharge fee towards projects that reduce motor vehicle emissions such as roundabouts and traffic signal coordination. Funds may also be used for related planning, monitoring, enforcement, and technical studies.
Affordable Housing and Sustainable Communities (AHSC) Program	AHSC grants are available for projects that integrate walking and bicycling improvements with affordable housing developments and transit connectivity. Requirements for housing and transit project components vary based on the frequency of transit in the project vicinity and by the density of the community. The primary criteria for project selection is reduction of greenhouse gas emissions. Current funding requirements do not favor the AMBAG region, but efforts are underway to change this.
Caltrans Active Transportation Program (ATP)	Funds construction, planning, and design of facilities for pedestrians, bicycle riders, and other non-motorized forms of transportation, while also funding non-infrastructure programs related to active transportation. The ATP uses federal funds and state only funds for a portion of the funded projects, so local agencies must be able to adhere to certain federal guidelines. The Active Transportation Program is one of the primary sources of State funding for active transportation.
California Coastal Conservancy Grants	California Coastal Conservancy grants are available for projects located along the coast and coastal watersheds that meet the Coastal Conservancy Strategic Goals. These projects may include shared use trails, river parkways
Community Based	Eligible projects that exemplify livable community

Transportation Planning Grants	concepts including enhancing bicycle and pedestrian access. Administered by Caltrans.
Environmental Justice: Context- Sensitive Planning	Funds projects that foster sustainable economies, encourage transit-oriented and mixed use development, and expand transportation choices, including walking and biking. Projects can be design and education, as well as planning. Administered by Caltrans.
Office of Traffic Safety (OTS) Grant Program	Funds safety improvements to existing bicycle transportation facilities, safety promotions including bicycle helmet giveaways, and studies to improve traffic safety. The grant cycle typically begins with a Request for Proposals in November/December, which are due the following January.
Public Access Program	Funds the protection and development of public access areas in support of wildlife-oriented uses, including helping to fund construction of ADA trails.
Recreational Trails Program	Administered in California as part of the ATP. $5.8 million guaranteed set-aside. Managed by the California Department of Parks and Recreation.
State Transportation Improvement Program (STIP)	Funds new construction projects that add capacity to the transportation network. STIP consists of two components, Caltrans' Interregional Transportation Improvement Program (ITIP) and regional transportation planning agencies' Regional Transportation Improvement Program (RTIP). STIP funding is a mix of state, federal, and local taxes and fees
Sustainable Communities Planning Grant and	Funded by Prop 84 bond funds, this grant program funds the development and implementation of plans that lead to significant reductions in greenhouse gas

Incentives Program	emissions, such as rehabilitation of existing infrastructure and the enhancement of recreational resources. The 10 percent local match requirement is waived for a proposal that qualifies for the Environmental Justice set-aside.
Watershed Protection Program (Proposition 13)	Grants to municipalities, local agencies, or nonprofit organizations to develop local watershed management plans (maximum $200,000 per local watershed plan) and/or implement projects (maximum $5 million per project) consistent with watershed plans. Administered by the Division of Financial Assistance.
Local/Regional	
Potential: 2016 Transportation Sale tax	There is potential for a Countywide .25% transportation sales tax on the 2016 ballot. A portion of this funding would be available for local bicycle and pedestrian projects.
General Fund	The General Fund could be used to fund active transportation projects. This funding is also highly needed for all other City capital and operating needs.
Private Funding	
Health Foundations	Focus pedestrian improvements for an obesity prevention strategy. Examples include California Wellness Foundation, Kaiser, and the California Endowment.
PeopleForBikes	PeopleForBikes (formerly Bikes Belong) provides grants for up to $10,000 with a 50 percent match that recipients may use towards the engineering, design, and construction of bike paths, lanes, bridges, and end-of-trip facilities, as well as programs.

Future Active Transportation Commute Profile

The Active Transportation Plan identifies a network and series of projects that will help City of Santa Cruz staff, stakeholders, and citizens advance towards establishing an even better citywide active transportation network. The City should work with the County, SCCRTC, Caltrans and the local stakeholder groups to ensure coordination with their transportation plans. Implementation of projects identified in the Plan will require champions for each potential project from the City as well as from the local community and partner agencies in order to identify funding and to move each project to completion.

The City's Climate Action Plan sets a goal for bicycle commute mode split of 12% by 2020, but to date there is no quantified mode split goal for pedestrians. Over the past few years, the bicycle mode share has been increasing while the pedestrian mode share has remained relatively flat. This Active Transportation Plan establishes a set of projects and programs that will lead to an increase in the active transportation commute profile to exceed the bicycle mode split goal set by the Climate Action Plan and establish a mode split goal for pedestrians. With the implementation of the programs and projects in this Active Transportation Plan, the active transportation commute profile of both bicyclists and pedestrians will increase. Table 12 shows the future mode splits after implementation of this Plan.

Table 12 Future Mode Split

Means of Transportation to Work	**2014 Existing Mode Split**	**2030 Goal Mode Split**
Walked	9.90%	12%
Bicycle	9.70%	15%
TOTAL Active:	***19.6%***	***27%***

Resolution

A resolution showing adoption of the plan by the city

Appendix A: Existing Planning Framework

General Plan 2030

The City of Santa Cruz 2030 General Plan was adopted in June 2012. The General Plan serves as a comprehensive and everyday guide for making decisions about the nature and location of economic and urban development and transportation improvements. The General Plan serves as the City's "constitution" for land use and community development, providing the legal foundation for all zoning and land use decisions, which must be consistent with the general plan. The Active Transportation Plan was undertaken in the context of the policies and standards of the 2030 General Plan. Active transportation policies from the General Plan are included as Appendix B: General Plan Active Transportation Policies.

A guiding principle of the General Plan is to provide an accessible, comprehensive, and effective transportation system that integrates automobile use with sustainable and innovative transportation options- including enhanced public transit, bicycle, and pedestrian networks throughout the community. Goal LU4 calls for "land use patterns that facilitate alternative transportation and/or minimize transportation demand."

Climate Action Plan

The Active Transportation Plan aligns with the transportation and mobility goals and objectives of the Climate Action Plan (CAP) to reduce greenhouse gas (GHG) emissions. The Active Transportation Plan specifically supports with the CAP goals to reduce within-town car trips and single occupancy vehicle commutes 10% by 2020, double bike ridership by 2020,

Bicycle Transportation Plan

The Active Transportation Plan will supersede the 2008 Bicycle Transportation Plan. Notable improvements include an updated inventory of existing facilities, a revised map of existing facilities, and an updated list of project recommendations and support facilities.

Pedestrian Master Plan

The Active Transportation Plan will supersede the 2003 Pedestrian Master Plan. Notable improvements include an inventory of existing facilities, a map of existing facilities, and an updated list of project recommendations.

Santa Cruz Master Transportation Study

The Active Transportation Plan aligns with the Master Transportation Study (MTS), including the following key indicators that were established to measure overall performance of the transportation system and inform policy makers and the public:
Pedestrians: Increase in average daily pedestrian movements.

Bicycles: Increase in average daily bicycle ridership.

Transit: Increase in transit boardings per capita.

Traffic Management: Decrease in auto trip mode share; and decrease in pedestrian, bicycle and auto accidents.

Livability: Increase in livability or quality of life as it relates to the safety, health, and comfort of access facilities in Santa Cruz.

Santa Cruz City Schools Complete Streets Master Plan

The Active Transportation Plan complements the 2015 Santa Cruz City Schools Complete Streets Master Plan (SCCSCSMP) and utilizes much of the data and project list developed as part of that project. The SCCSCSMP studied the areas surrounding 10 school sites to identify barriers to safe student sustainable transportation and guide future transportation developments and interventions at 10 city schools.

Regional Transportation Plan

The Santa Cruz County Regional Transportation Commission (SCCRTC) prepared and adopted the Regional Transportation Plan (RTP) in June 2014. The RTP includes goals, targets and policies that are used to prioritize projects for funding; identifies the area's transportation needs; and estimates the amount of state, federal, and local funds that may be available. Certain transportation funds require the project/program to be included in the most current RTP.

Monterey Bay Sanctuary Scenic Trail Network

The SCCRTC completed the Monterey Bay Sanctuary Scenic Trail (MBSST) Master Plan in February 2014. The purpose of the MBSST Master Plan is to establish the continuous alignment and set of design standards for the Monterey Bay Sanctuary Scenic Trail Network, including the Coastal Rail Trail spine, and associated spur trails. The City of Santa Cruz contains multiple segments of the MBSST. The Active Transportation Plan was undertaken in the context of the policies and standards of the MBSST Master Plan.

Appendix B: General Plan Active Transportation Policies

Policies from the City of Santa Cruz General Plan 2030.

- CD4.2.1 Where possible, site buildings at the street frontage and place parking areas away from street corners and to the rear of buildings.
- CD5.1.1 Implement the Master Transportation Study's recommendations for improving the city's pedestrian network
- CD5.2.1 Encourage buildings to be oriented towards sidewalks, public plazas, walkways, or rivers and to include features such as public benches and natural seating areas.
- CD5.2.2 Encourage the incorporation of public benches and natural seating areas along public walkways and in public plazas and parks.
- CD5.2.3 Design parking strategies at a district or neighborhood-wide level to foster a pedestrian oriented environment.
- CD5.2.4 Ensure that new and revised design guidelines encourage the use of pedestrian-scaled fenestration, awnings, entrances, landscaping, and other amenities.
- LU3.5.2 Further develop Depot Park as a multi-modal center.
- M1.1.1 Create walkable, transit-oriented activity centers throughout the city.
- M1.1.2 Connect activity centers with pedestrian and bicycle paths.
- M1.1.3 Implement pedestrian and bicycle improvements that support transit ridership.
- M1.2.1 Facilitate implementation of livable street design guidelines for key street types as defined in the City's Master Transportation Study.
- M1.3.1 Amend the Zoning Ordinance to require pedestrian improvements appropriate to development type and design.
- M1.4.1 Assure that right-of-way acquisition and street design will support pedestrian and bike improvements and transit.
- M1.4.2 Allow for future multi-modal use of future rights-of-way by protecting them from development.
- M1.5.1 Increase land use efficiency and the walkability of activity centers.
- M2.1.2 Encourage use of alternative modes of transportation.
- M2.1.3 Implement pedestrian, bike, mass transit, and road system improvements through the Capital Improvements Program.
- M2.1.4 Support regional funding and implementation of key regional projects that can significantly benefit Santa Cruz and further the City's mobility policies.

- M2.3.1 Design for and accommodate multiple transportation modes.
- M2.3.2 Promote alternative transportation improvements with transportation system management (TSM) strategies, road improvements, and widening/expansion projects that can achieve an acceptable level of service.
- M2.3.3 Incorporate pedestrian, bicycle, and mass transit facilities in the design of bridges and road projects.
- M2.3.4 Encourage visitor-serving developments, such as hotels, to make bicycles and shuttle programs available to patrons.
- M2.4.12 In coordination with the transit district, require development along arterial streets to provide adequate and accessible bus shelters, with curb cuts leading to the shelter and to destination and loading platforms.
- M3.1.5 Maintain and update the Transportation Impact Fee to ensure that developers pay a proportional share of circulation system improvements.
- M3.1.10 Utilize up-to-date multi-modal transportation studies and reports to identify areas where major deficiencies are projected.
- M3.2.6 Regularly inspect streets and maintain pavement in a condition that keeps maintenance costs at a minimum, encourages bicycling, and ensures that repairs are acceptable and long-lasting.
- M4.1.1 Update and implement the Pedestrian Master Plan for development of a complete, continuous, and structurally adequate system of pedestrian paths and walkways.
- M4.1.2 Include and address sidewalk improvements in the Capital Improvements Program.
- M4.1.3 Encourage pedestrian travel by providing pedestrian pathways on cul-de-sac and loop streets.
- M4.1.4 Encourage walking in Santa Cruz through educational outreach and promotional programs.
- M4.1.5 Where there are proposed or existing plan lines, require developments to dedicate land for rights-of-way, and require that sidewalks be added or repaired within, and in the area adjacent to, new developments.
- M4.1.6 Enhance the pedestrian orientation of the Downtown Central Business District.
- M4.1.7 Require the site and building design facilitate pedestrian activity.
- M4.1.8 Remove or reduce obstructions and sidewalk tripping hazards, ensure accessibility to the physically disabled and elderly, and improve amenities along existing and potential pedestrian paths and walkways.
- M4.1.9 Require landscaping in the development, replacement, and repair of sidewalks, including the placement of trees on private property and/or in tree wells on sidewalks.

- M4.2.1 Maintain and update as necessary the City's Bicycle Transportation Plan.
- M4.2.2 Work with appropriate agencies to seek funding for pedestrian and bicycle projects.
- M4.2.3 Facilitate bicycling connections to all travel modes.
- M4.2.4 Implement bicycle safety programs and cooperate with other agencies in the enforcement of bicycle safety.
- M4.2.5 Study the development of parking alternatives (such as removal of parking from one side of the street) and off-street parking facilities prior to the removal of any on-street parking.
- M4.2.6 Provide regular sweeping, pavement repairs, striping, and signs along bike routes.
- M4.3.1 Promote development of bike lanes on arterial and collector streets and in proposed and already-adopted City plans.
- M4.3.2 Develop bike commute routes along railroad rights-of-way (while ensuring the ability to develop rail transit) and along West Cliff Drive, Broadway, King, and other streets.
- M4.4.1 Maintain Zoning Ordinance and parking district requirements that require secure, covered bicycle parking and/or storage lockers at private and public facilities.
- M4.4.2 Provide design guidelines for safe and secure bicycle parking, and promote bicycle access for special events.
- M4.4.3 Increase the supply of bicycle parking throughout the city.
- M4.4.4 Consider ways to require existing development to upgrade and/or retrofit on-site bicycle user amenities.
- M4.5.1 Design and also modify intersections using striping, pedestrian crossing signs, pedestrian islands, and pedestrian friendly signal phasing.
- M4.5.2 Design driveway access ramps to not interfere with the safe use of sidewalks.
- M4.5.3 Develop a schedule and comprehensive funding program for proposed bike system improvements within the Capital Improvements Program.
- M4.5.4 Consider counter-flow bike lanes on one-way streets where significant bicycle traffic is expected and where safety measures are in place.
- ED1.2.1 Encourage transportation improvements and pedestrian activity along Ocean Street to stimulate economic vitality.
- ED1.9.2 Implement transportation, parking, and alternative transportation improvements consistent with circulation planning
- ED5.5.4 Create a distinctive and active pedestrian environment downtown.

- CC8.4.1 Implement the Safe Routes to School program where funded.
- CC8.4.2 Re-stripe streets for school zone safety as needed.
- PR1.6.1 Maintain and enhance access for vehicles, transit, bicycles, and pedestrians.
- PR1.6.2 Develop a sign program for visitor access to coastal parks and recreation areas, for all modes of transportation.
- PR1.6.4 Provide and encourage provision of adequate bike parking.
- PR4.1.1Provide trails for a variety of uses.
- PR4.1.2 Update and maintain trails in accordance with the City's bicycle and Pedestrian Master Plans.
- PR4.1.3 Maintain and enhance the recreational value of the San Lorenzo River walkway and East and the West Cliff Drive pathways.
- PR4.1.4 Create a continuous pathway along the coast by enhancing the physical links between West Cliff and East Cliff Drives and the Beach Promenade.
- PR4.1.6 For special events, examine the feasibility of periodically closing the street or limiting vehicular access along West Cliff Drive.
- PR4.2.1 Use public or quasi-publically-owned lands for trails.
- PR4.2.2 Obtain trail easements through private donations and by public purchase, where required for critical links.
- PR4.2.3 Require development projects located along planned trail routes to dedicate trails or trail easements.
- PR 4.2.4 Use roadside improvement funds to develop bicycle paths and pedestrian trails.
- NRC4.1.3 Implement sections of the Climate Action Plan that reduce vehicle emissions 30 percent by 2020, identify metrics for tracking success, and address objectives not met.
- NRC4.4.2 Establish a Sustainable Transportation and Land Use Team to produce a transportation plan that defines alternative transportation options (not associated with autos, busses or carpools) to address the Santa Cruz mobile emission reduction goals of 30 percent by 2020 and 80 percent by 2050.

Appendix C: Bike Parking Requirements

24.12.250 Bike Parking Requirements

1. Bicycle parking facilities shall be provided for any new building, addition or enlargement of an existing building, or for any change in the occupancy.

2. Bike Spaces Required. Bicycle parking facilities shall be provided in accordance with the following schedule, with fractional requirements for bike parking over .5 to be rounded up:

		Number of Bicycle Parking Spaces Required
a.	Commercial, industrial, office, retail, service Number of auto parking spaces 1+	2 + 15% of auto parking requirement
b.	Multifamily residential (3 or more units)	1 space per unit
c.	Public, or commercial recreation (See Land Use Code 7XX)	35% of auto parking
d.	Schools	1 space per 3 students
e.	Park-and-ride lots and transit centers	35% of auto parking
f.	Lodging	1 space per 5 units

3. Type of Bicycle Parking Required. Each bicycle parking space shall be no less than six feet long by two feet wide and shall have a bicycle rack system in compliance with the bike rack classifications listed in subsection 4. of this section as follows: Fractional amounts of the type of parking facilities may be shifted as desired.

		Classification
a.	Office, industrial (commercial), financial	60% Class 1 40% Class 2
b.	Retail, service (commercial)	20% Class 1 80% Class 2
c.	Multifamily residential (3 or more units)	100% Class 1 Garages or secure accessible indoor areas count
d.	Public or commercial recreation	10% Class 1 90% Class 2
e.	Schools	100% Class 2 secured, covered
f.	Park-and-ride lots	80% Class 1 20% Class 2
g.	Transit center	100% Class 2 secured, covered

4. Classification of Facilities.

a. "Class 1 bicycle facility" means a locker, individually locked enclosure or supervised area within a building providing protection for each bicycle therein from theft, vandalism and weather.

b. "Class 2 bicycle facility" means a stand or other device constructed so as to enable the user to secure by locking the frame and one wheel of each bicycle parked therein. Racks must be easily usable with both U-locks and cable locks. Racks should support the bikes in a stable upright position so that a bike, if bumped, will not fall or roll down. Racks that support a bike primarily by a wheel, such as standard "wire racks" are damaging to wheels and thus are not acceptable. (See Bikes are Good Business design guidelines.)

5. Location and Design of Facilities.

a. Bicycle parking should be located in close proximity to the building's entrance and clustered in lots not to exceed sixteen spaces each.

b. Bicycle parking facilities shall support bicycles in a stable position without damage to wheels, frame or other components.

c. Bicycle parking facilities should be located in highly visible, well-lighted areas to minimize theft and vandalism.

d. Bicycle parking facilities shall be securely anchored to the lot surface so they cannot be easily removed and shall be of sufficient strength to resist vandalism and theft.

e. Bicycle parking facilities shall not impede pedestrian or vehicular circulation, and should be harmonious with their environment both in color and design. Parking facilities should be incorporated whenever possible into building design or street furniture.

f. Racks must not be placed close enough to a wall or other obstruction so as to make use difficult. There must be sufficient space (at least twenty-four inches) besides each parked bike that allows access. This access may be shared by adjacent bicycles. An aisle or other space shall be provided to bicycles to enter and leave the facility. This aisle shall have a width of at least six feet to the front or rear of a bike parked in the facility.

g. Paving is not required, but the outside ground surface shall be finished or planted in a way that avoids mud and dust.

h. Bike parking facilities within auto parking areas shall be separated by a physical barrier to protect bicycles from damage by cars, such as curbs, wheel stops, poles or other similar features.

6. Variation to Requirements.

a. Substitution of Car Parking with Bike Parking. New and preexisting developments may convert up to 10% of their auto spaces to unrequired additional bike parking, as long as the spaces are conveniently located near the entrance. Converted parking spaces must yield at least six bike parking spaces per auto space.

b. Where the provision of bike parking is physically not feasible the requirements may be waived or reduced to a feasible level by the zoning administrator in accordance with city bike parking standards for existing buildings.

(Ord. 95-20 § 1, 1995: Ord. 94-15 § 1, 1994).

24.12.252 Shower Facility Requirements

1. Employee shower facilities in compliance with ADA standards shall be provided for any new commercial building constructed or for any addition to or enlargement of any existing building in compliance with the following table:

	Gross Floor Area of New Construction (Square Feet)	No. of Showers
Industrial, manufacturing, and medical, general business office or financial service	0 – 12,499	No requirement
	12,500 – 29,999	1
	30,000 – 49,999	2
	50,000 and up	4
Retail, eating and drinking and personal service	0 – 24,999	No requirement
	25,000 – 99,999	1
	100,000 and up	2

2. Shower facilities shall include at least one personal locker for every twenty employees. If only one shower is provided it must be designed as a unisex facility that is accessible to the handicapped.

3. As an alternative to including shower facilities within a building, a new business may submit a written agreement for employees to utilize existing shower facilities of a business within three hundred feet of the project's property lines. This agreement must be signed by both parties involved, allow use of the facilities in perpetuity, establish allowable hours of use, include provisions for maintenance, and involve shared liability agreements.

(Ord. 94-15 § 2, 1994).

Appendix D: Neighborhood Greenways

What are Greenways?

- Places for people of all ages and abilities with a distinctive neighborhood feel.
- Residential streets that have been improved for everyone using them. Generally streets one off of main arterials with low volumes of auto traffic and low speeds where people who walk, roll and ride feel safer because they are given priority.
- Safe routes to school, the park, local businesses, places of worship, the library and everywhere in-between. Greenways show you how to get there, and get there safely, by walking, rolling or riding. Greenways get you to the places you want to go – and the routes have been scouted by greenways volunteers – so you can relax and enjoy the trip.

Neighborhood greenways meet the following goals:

- Reduce vehicle cut-through traffic – For example, median islands can be installed to keep drivers from trying to avoid main streets and cutting through on neighborhood streets.
- Provide safer bicycling and pedestrian connections – Pavement markings not only direct bicyclists along the greenway, but alert drivers to expect people bicycling. Improved crossings and curb ramps make walking easier and safer.
- Prioritize for non-motorized travel – Stop signs can be installed for drivers crossing greenways at residential intersections.
- Help people across our busier streets - Improved crossings at main streets help people walking and bicycling to cross more easily, for example flashing beacons can announce to drivers someone is crossing.
- Guide people along the route and help get them where they are going - Markings on the pavement and new signs let people know where the greenways is going and what's nearby.
- Provide more "eyes on the street" – Greenways encourage local residents to walk and ride a bike. Having more people on the street helps to make them safer.

Built to encourage walking and biking:

Neighborhood Greenways are designed for the whole community- from the littlest babies in strollers to the seniors walking group. Neighborhood Greenways are routes that prioritize human powered transportation throughout our community. Neighborhood greenways are most often found on local service streets that can have a large range of street widths. Neighborhood greenways typically include two shared travel lanes and two parking lanes.

Features of Neighborhood Greenways:

The key component of Neighborhoods Greenways is that traffic speeds and volumes remain low. While there is no one-size fits all approach to Neighborhood Greenways; there are a variety of tools that can be used:

Change Street Layout: Changes in street layout force drivers to become more aware of their surroundings. By narrowing the road at an intersection, motorists turning speeds are reduced as is the distance for a crossing pedestrian. Slight shifts in the travel lane along a route slow speeds and improve the visibility of approaching pedestrians and bicyclists.

Chicane	Mini Traffic Circle	Pinch Point
Neckdown	Median Crossing	Reducing Turning Radius
Curb Extension	Pedestrian Refuge Island	Medians
Median Barriers	Marked crosswalks/crossbikes	Shared Lane Markings

Figure 27 Pinch Point

Figure 26 Chicane

Raised Interruptions: Raised interruptions placed mid-block or at intersections will slow the speed of motor vehicles. Raised interruptions also slow emergency response times and should not be used on primary fire response routes, and should always be vetted through the Fire Department in advance of implementation.

Speed Humps Speed Table Raised Crosswalks

Raised Intersections Material Changes

Figure 28 Speed Cushion. Source: NACTO

Figure 29 Raised Crosswalk. Source: PBIC Image Library

Physical Barriers: Physical barriers and deviations limit or restrict vehicle traffic. This can keep traffic volumes lower and restrict motorists from cutting through on Neighborhood Greenways while maintaining full bike and pedestrian access. These barriers may pose inconvenience to typical road user. Residence nearest closure will have greatest auto trip length after project is complete. Diversion is tool of last resort after other methods have not worked.

Full Diverter | Partial Diverter | Diagonal Diverter

Directional Closure | One-Way Streets

Figure 30 Diagonal Diverter. Source: FHWA

Figure 31 Directional Closure. Source: Wikimedia Commons

Intersections: When defined Neighborhood Greenways cross other streets, a variety of different intersections may be appropriate depending upon the speed and volume of the intersection street.

Crossing signs and beacons | Pedestrian Countdown Signals | Bike Boxes

Bike Signals | Roundabout | Mini-Roundabout

Figure 33 Bike Box

Figure 32 Roundabout

Traffic Rules: Traffic rules affect how people behave. They are successful only if people are educated and streets are designed to reinforce the rules.

Reduced Speed Limit | Speed Feedback Signs | Speed Cart

Figure 34 Speed Cart (right) and Figure 35 Speed Feedback Signs (left)

Sources: City of Seattle Department of Transportation. *Neighborhood Greenways Frequently Asked Questions*. http://www.seattle.gov/transportation/docs/Greenways%20General%20FAQ_FINAL.pdf (accessed 4/4/2016). City of Portland Office of Transportation. *Matching Engineering Tools to Livability Goals* (http://seattlegreenways.org/wp-content/uploads/00-Mode-Goals-Tools-Table-2.pdf). Seattle's Neighborhood Greenways. *Seattle Toolkit 2012* (https://issuu.com/neighborhoodgreenwayssea/docs/neighborhoodgreeways_toolkit_final). Kirkland Greenways. *What are Greenways* (http://kirklandgreenways.org/neighborhoods/what-are-greenways/).