City of Larkspur
DRAFT BICYCLE & PEDESTRIAN MASTER PLAN

February 2016

ACKNOWLEDGMENTS

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1. INTRODUCTION

This Bicycle and Pedestrian Master Plan has been developed to identify Larkspur's existing network of bicycle and pedestrian facilities and multi-use paths, lay the framework for future facilities, and develop policies that will work towards making bicycling and walking an integral part of transportation and daily life in Larkspur. The purpose of this Plan is to coordinate and guide the provision of all bicycle and pedestrian related plans, programs, and projects in Larkspur. It is intended to assist the City in the implementation of its priorities but does not mandate any particular action on its part.

Doherty Drive Bike Lane (Class II)

Communities in Marin County and around the nation are recognizing that an integrated transportation system, which includes a well-developed network of non-motorized facilities, can improve the quality of life for all residents in the community. Bicycling and walking can be part of a healthy lifestyle, and the entire community can benefit from lessened traffic congestion, fewer vehicle exhaust emissions, decreased noise levels, and less land dedicated towards automobiles. In addition, a community is friendlier and more inviting when residents are not confined to an automobile and can easily socialize with those they meet on their streets.


Holcomb Shared-Use Path (Class I)

Becoming a bicycle and pedestrian friendly community requires several elements. Safety is the number one concern of citizens, whether they are school children, avid or casual recreational bicyclists, bicycle commuters, pedestrians, or motorists. In many locations around the city, bicyclists, motorists, and pedestrians must share narrow, high-traffic roadways. Crossing busy intersections on these roadways can be especially difficult for school commuters and bicyclists, and is often cited as the primary reason why many people elect not to bicycle or allow their children to walk or bicycle to school more often. Second, access improvements are important to help enhance the ability to make utilitarian trips to destinations like shops, work, and school. Currently, Larkspur lacks a continuous and connected bikeway network to access these activity centers and like its neighboring communities, must lessen the barrier U.S. 101 represents to bicyclists and pedestrians. Finally, effective implementation is vital for the success of this plan. Educational programs, enforcement, and the active pursuit of funding are necessary to promote non-motorized use.

2. PLAN GOALS

Goals provide the context for the specific objectives and policy actions discussed in the Bicycle and Pedestrian Master Plan. Goals are broad statements of purpose that do not provide specific descriptions of the policy actions required to achieve them. These more detailed recommendations are provided in the Recommended Active Transportation Facilities and Recommended Active Transportation Policies and Programs sections. The goals and recommended actions contained herein do not mandate any specific action by the City of Larkspur.

The goals, which can be summarized as *more* active transportation and *safer* active transportation, are as follows:

Goal 1: Develop a more pedestrian/bicycle-friendly community

Goal 2: Improve safety and accessibility

Goal 3: Address safe routes to school concerns

Goal 4: Identify regional and multi-jurisdictional gaps in connectivity

Goal 5: Improve transit access

3. COMMUNITY INVOLVEMENT

A DESCRIPTION OF THE EXTENT OF COMMUNITY INVOLVEMENT IN DEVELOPMENT OF THE PLAN, INCLUDING DISADVANTAGED AND UNDERSERVED COMMUNITIES. (L)*

Opportunities for public comment on bicycle and pedestrian issues in Larkspur were developed one year prior to this plan. An initial kickoff meeting was held March 24, 2014 to discuss the Larkspur Bicycle and Pedestrian Master Plan update process and plan goals. A follow-up meeting was held May 13, 2014.


CMFC Technical Advisory Committee

Two public meetings were held to solicit community input and share preliminary planning concepts. These public meetings were held on October 23, 2014 and March 17, 2015.

A survey was launched in spring 2015 that provided Larkspur residents and visitors the opportunity to comment on an initial set of proposed active transportation improvements. Survey feedback was integrated into the final assembly of the Recommended Active Transportation Network.

Recurring feedback themes from the Larkspur community included:

Active Transportation Network

- Increase the level of protection and separation for on-street bike lanes;
- Accommodate users of various skill levels;
- Improve east-west access (across 101) and north-south access (across Corte Madera Creek);
- Extend routes and coordinate linkages to neighboring communities;
- Complete discontinuous sections of the bikeway and walking networks;
- Install spot improvements, such as intersection crossing treatments and lighting, at key locations; and
- Upgrade stairs (tread and rails), especially around bus stops.

Active Transportation Policies and Programs

- Improve etiquette and behavior on shared-use paths;
- Increase enforcement of all road and path users;

* Required Active Transportation Plan component.

- Educate children and adults about bicycle safety and bicyclist/pedestrian rights to the road;
- Improve wayfinding for both residents and visitors;
- Improve maintenance practices; and
- Increase coordination with neighboring jurisdictions.

Not all projects suggested by Larkspur residents and visitors were incorporated into the Recommended Active Transportation Facilities. In some cases, projects were determined to be outside the ten-year planning horizon of this Master Plan, while in other cases feasibility analysis is required prior to inclusion in a Master Plan. These projects are potential future projects pending the outcome of feasibility analysis, and are listed in Appendix F.

4. CONSISTENCY WITH OTHER PLANS

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 PLANS, INCLUDING, BUT NOT LIMITED TO, GENERAL PLANS AND A SUSTAINABLE COMMUNITY STRATEGY IN A REGIONAL TRANSPORTATION PLAN. (M)*

The Larkspur Bicycle and Pedestrian Master Plan builds upon the previous Larkspur Bicycle and Pedestrian Master Plan, adopted in 2004 and updated in 2006. It is consistent with relevant studies and planning efforts completed in the City of Larkspur since 2006, such as the Circulation element of the 2011 Draft General Plan 2030.

This Plan is also consistent with recent regional bicycle and pedestrian plans, such as the 2009 Metropolitan Transportation Commission Regional Bicycle Plan for the San Francisco Bay Area and the 2015 Marin County Unincorporated Bicycle and Pedestrian Master Plan.

These plans have been reviewed for consistency and have been incorporated into this Bicycle and Pedestrian Master Plan where appropriate. Planning consistency refers to the alignment of planned transportation networks, policy directions. Taking into account the efforts of neighboring jurisdictions and regional and state policy leads to smarter investments and helps to identify policy requirements and targets, such as the Active Transportation Program plan requirements referenced throughout this plan.

A number of studies and planning efforts involving non-motorized travel in Larkspur were completed prior to 2015. These studies and plans include

LARKSPUR GENERAL PLAN UPDATE (2010)

The Larkspur City Council initiated the update of the City's General Plan (adopted in 1990) in June of 2010. The Plan Update includes policies, programs, and projects relevant to the Bicycle Master Plan, including the Circulation Element.

CENTRAL LARKSPUR AREA SPECIFIC PLAN (2006)

The CLASP proposes a mix of residential, retail, recreation, cultural, and civic uses in three subareas to contribute to the vitality of the Downtown area of the City. Sub-area 1 is comprised of the Nazari property, the American Legion Hall and the City parking lot and Doherty Park. Subarea 2 contains the Larkspur Plaza shopping center and the gas station. Subarea 3 is the former Niven Nursery site, for which the Rose Garden development was approved and is currently under construction.

LARKSPUR SMART STATION AREA PLAN (2014)

* Required Active Transportation Plan component.

This plan focused on the planning, design, and access to the proposed SMART station in larkspur Landing, including bicycle and pedestrian access. Completion of the Cal park Tunnel, Central Marin Ferry Connector bridge project over East Sir Francis Drake Blvd. were considered as part of the station evaluation process.

CENTRAL MARIN FERRY CONNECTOR PROJECT (2003)

The 2000 Marin County Bicycle and Pedestrian Master Plan identified the Central Marin Ferry Connection Project (CMFC) as a top priority project in Marin County. The CMFC project was identified to plan a connection through or around the U.S. 101 Greenbrae Interchange, and across Sir Francis Drake Boulevard. The project site is notorious for being the most heavily congested location in Marin County. It is at the confluence of a mix of multimodal routes, including pedestrian and bicycle paths, bus connector services, automobile, truck, ferry, and airport commuter transportation services, all of which radiate across the Bay Area, extending the reach of non-motorized travelers. In 2002, the City of Larkspur began planning work on the Central Marin Ferry Connection project in partnership with local and regional agencies. Competitive source funding was been obtained for design and environmental work. It is anticipated that Regional Measure 2 funds will be available fund some portion of the proposed improvements. Portions of the CMFC are completed or under design as of 2015, including the over crossing of East Sir Francis Drake Blvd. and a new over crossing of Corte Madera Creek along US 101 and connecting to Corte Madera.

MTC'S REGIONAL BICYCLE AND PEDESTRIAN PLAN (2009)

The Regional Bicycle and Pedestrian Plan incorporates key routes from the County's bike plan and the entire Bay Trail network. These routes are eligible for Regional Bicycle and Pedestrian Programs Funds.

MARIN COUNTY NORTH-SOUTH BIKEWAY FEASIBILITY STUDY (1994)

The purpose of the Marin County North-South Bikeway Feasibility Study was to identify and develop a safe and efficient north-south bikeway for commuters from the Golden Gate Bridge to the Sonoma County line, generally following the old Northwestern Pacific Railroad right-of-way. Recognizing the difficulties associated with the development of this right-of-way, a short-term alignment primarily following existing streets and paths was also recommended. The North South Bikeway Feasibility Study was never officially adopted.

MARIN COUNTY BICYCLE & PEDESTRIAN PLAN (2015)

The Bicycle & Pedestrian Plan for Unincorporated Marin County is being updated as of 2015, including areas such as Kentfield and Greenbrae that are adjacent to Larkspur. The plans are being coordinated between jurisdictions to ensure consistency

5. LAND USE

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 (C).*

Larkspur is a relatively small city of 11,926 residents (2010 US Census) situated within 3.14 square miles. Located on U.S. 101 – the primary route from the North Bay region to San Francisco, the city lies between the Larkspur and Southern Heights Ridges and the San Francisco Bay. Approximately 25% of the terrain in Larkspur is hilly; the remaining 75% is relatively flat, which is ideal for novice bicyclists and commuters. More challenging environments abound in the nearby hills for recreational bicyclists, serious riders, and mountain bikers. According to Larkspur's General Plan, the city is primarily residential with 38% of the community's land area dedicated to single and multi-family residential uses, while only 7% of the city is in commercial and industrial uses. Larkspur's location near the center of Marin County's population lends itself to easy access to major activity and transportation centers for bicyclists and pedestrians.

Land Use and settlement patterns are displayed in Figure 1.

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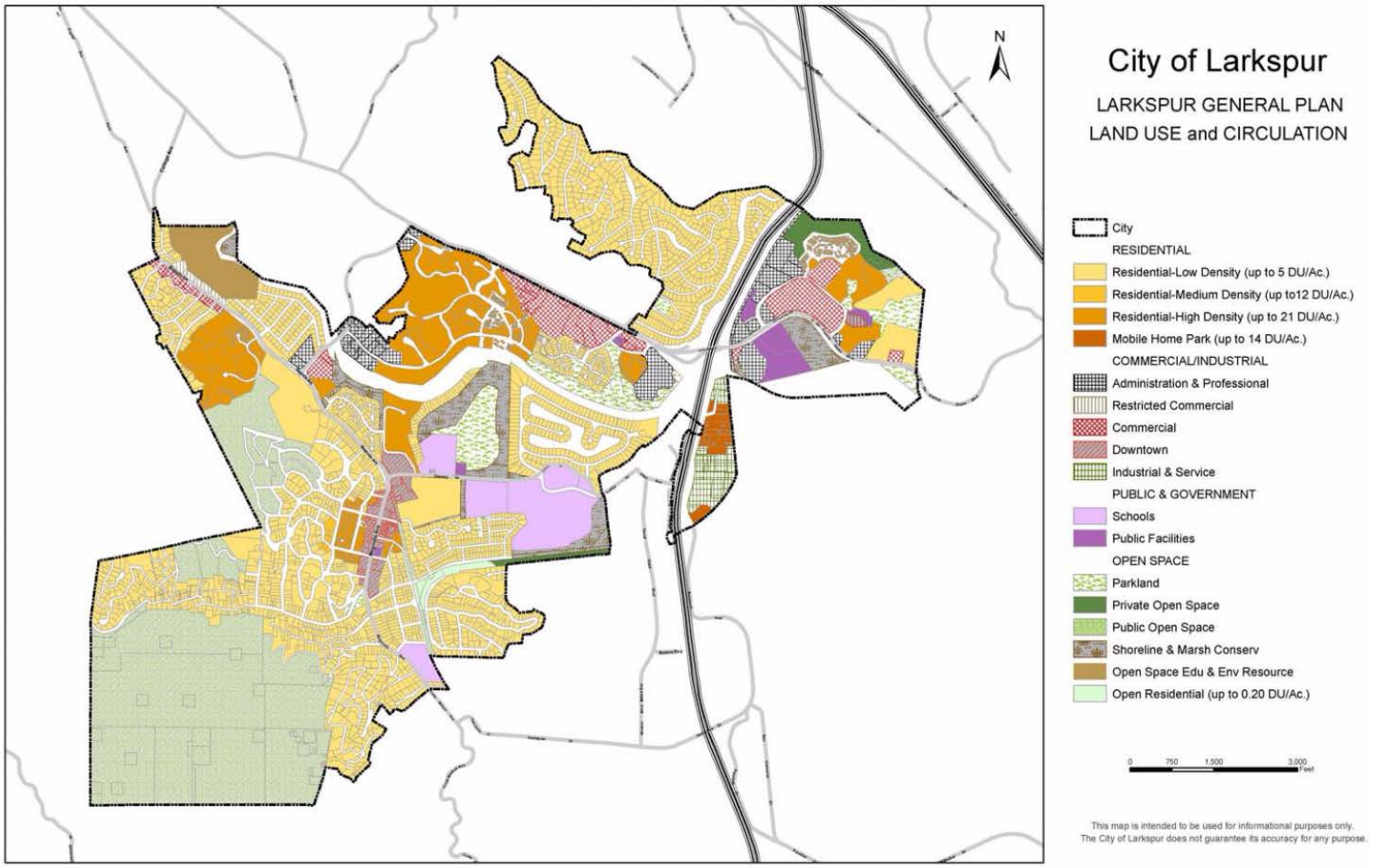
* Required Active Transportation Plan component.

FIGURE 1: LARKSPUR LAND USE MAP



6. WALKING AND BICYCLING IN LARKSPUR

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 (A).*

The City of Larkspur currently has above-average levels of bicycling (for commute trips) relative to national and state figures, but less bicycling than Marin County as a whole. In terms of walking, it has lower levels of participation than county, state and national averages (ACS 2009-2013 5-Year Estimates). This information suggests that active transportation uptake in Larkspur has room to grow.

Larkspur has a great potential to increase the number of people who ride or walk to work or school because of (a) the small size of the community, (b) the proximity of its residential neighborhoods to the employment centers of Central Marin County, (c) a favorable climate where commuters could potentially commute over 250 days a year rain free, and (d) a high percentage (31%) of work trips that are less than 15 minutes (ACS 2009-2013 5-Year Estimates).

TABLE 1
JOURNEY TO WORK MODE SPLIT COMPARED TO THE COUNTY, STATE AND NATION (PERCENT)

MODE	NATIONWIDE	STATEWIDE	MARIN COUNTY	LARKSPUR
Walk	2.8	2.7	3.3	2.1
Bicycle	0.6	0.3	1.6	1.2
Public Transit	5.0	5.2	8.9	12.6
Drive Alone	76.3	73.2	66.2	69.8
Carpool	9.8	11.3	8.8	6.4
Other	5.5	6.5	11.3	7.8

Source: American Community Survey (ACS), 2009-2013 5-Year Estimates.

Although the ACS data only includes adult commuters who walk or ride to work, any automobile trip that is replaced by active transportation benefits the community. Therefore, active transportation commuters actually range from employees who ride to work to a child who rides to school to people riding to shops and transit, all of which

* Required Active Transportation Plan component.

reduce automobile trips. For this reason, the following section estimates the number of non-commute trips that are not captured by the American Community Survey, and uses this baseline information to project future active transportation trips and vehicle trip replacement potential.

DEMOGRAPHIC, TRIP AND EMISSION PROJECTIONS

According to 2009 to 2013 American Community Survey (ACS) data, over 4.7 million Americans bicycle or walk as their primary means of transportation to work (approximately 3.4 percent). The percent of Larkspur residents that bicycle or walk to work is right in line with the national average (3.4 percent), with 78 residents choosing to use a bicycle as their primary mode of transportation to work and 119 residents choosing to walk.

Because bicycling and walking trips typically take place over short distances, high quality bicycling and walking infrastructure has the potential to encourage Larkspur residents to replace trips by motor vehicle with active transportation trips. According to 2009 to 2013 ACS data, approximately 31 percent of workers 16 years and over who did not work at home had commutes that were under 15 minutes. These short motor vehicle commute trips are good candidates to be replaced by bicycling and walking trips.

It is estimated that potential improvements to the existing non-motorized network and supporting facilities could increase the number of annual bicycle trips from 297,000 to between 443,000 and 885,000 trips and the number of annual walk trips from 638,000 to between 934,000 to 1,556,000 trips. Please see Table 2 for demographic, bicycle and walk commute, and air quality projections.

TABLE 2 DEMOGRAPHIC, TRIP AND EMISSION PROJECTIONS		
Population	12,025	2009-2013 ACS
# of Employed Persons	5,804	2009-2013 ACS
# Bicycle-to-Work Commuters	78	2009-2013 ACS
Bicycle-to-Work Mode Share	1.3%	2009-2013 ACS
# Walk-to-Work Commuters	119	2009-2013 ACS
Walk-to-Work Mode Share	2.1%	2009-2013 ACS
School Children: Kindergarten to Grade 12	1,872	2009-2013 ACS
# of College Students	521	2009-2013 ACS
Annual # of Bicycle Trips	297,343	Alta Benefits Impact Model
Annual # of Walk Trips	638,064	Alta Benefits Impact Model
Annual Trips Replaced by Bicycle	80,320	Alta Benefits Impact Model
Annual Trips Replaced by Walking	283,262	Alta Benefits Impact Model
Vehicle-Miles Traveled Reduced due to Bicycling	253,097	Alta Benefits Impact Model
Vehicle-Miles Traveled Reduced due to Walking	176,622	Alta Benefits Impact Model
Estimated # of Annual Bicycle Trips after Plan Implementation if Commute Bicycle Mode Share Increases to 2%, 3%, or 4%	443,000 664,000 885,000	Alta Benefits Impact Model
Estimated # of Annual Walk Trips after Plan Implementation if Walk Commute Mode Share Increases to 3%, 45, or 5%	934,000 1,245,000 1,556,000	Alta Benefits Impact Model
Estimated Annual VMT Reduced due to Bicycling if Commute Bicycle Mode Share increases to 2%, 3%, or 4%	377,000 565,000 753,000	Alta Benefits Impact Model

Estimated Annual VMT Reduced due to Walking if Commute Walk Mode Share Increases to 3%, 4%, o 5%	258,000 345,000 431,000	Alta Benefits Impact Model
Annual Reduced $C0_2$ Emissions (lbs) if Commute Bicycle Mode Share Increases to 2%, 3%, or 4%	520,000 780,000 1,040,000	Alta Benefits Impact Model
Annual Reduced Other Emissions (lbs) if Commute Bicycle Mode Share Increases to 2%, 3%, or 4%	12,000 18,000 24,000	Alta Benefits Impact Model (includes hydrocarbons, particulate matter, nitrous oxides, and carbon monoxide)
Annual Reduced $C0_2$ Emissions (lbs) if Commute Walk Mode Share Increases to 3%, 4%, or 5%	512,000 682,000 853,000	Alta Benefits Impact Model
Annual Reduced Other Emissions (lbs) if Commute Walk Mode Share Increases to 3%, 4%, or 5%	8,000 11,000 14,000	Alta Benefits Impact Model (includes hydrocarbons, particulate matter, nitrous oxides, and carbon monoxide)

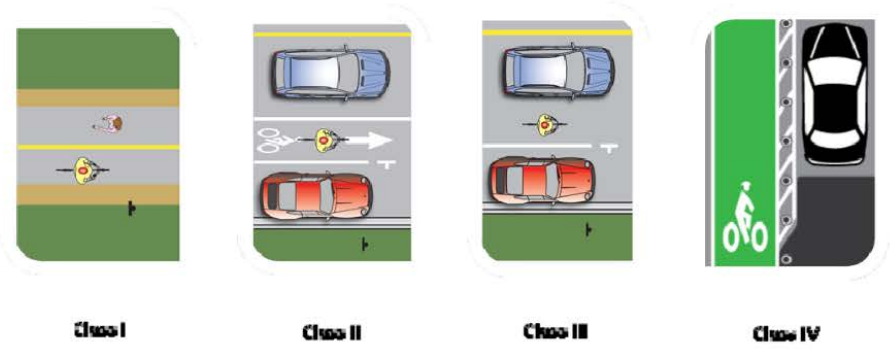
7. Existing Active Transportation Facilities

A MAP AND DESCRIPTION OF EXISTING AND PROPOSED BICYCLE TRANSPORTATION FACILITIES. (D)*

The bicycle map which accompanies this plan designates Larkspur's bicycle routes and those in adjacent unincorporated areas by Class I, II, or III in accordance with Chapter 1000 of the California Department of Transportation, *Highway Design Manual* – Bikeway Planning and Design. *Class I Bikeways – Shared-use Paths* serve the exclusive use of bicycles and pedestrians. *Class II Bikeways –Bicycle Lanes* serve the preferential use of bicycles on marked lanes on paved streets. *Class III Bikeways –Bicycle Routes* serve bicycles on streets connecting Class I or Class II bikeways.

Protected bicycle lanes, which have recently been officially permitted in California, are referred to in this plan as *Class IV Bikeways – Protected Bicycle Lanes*. This is a working title and subject to change as Caltrans and other agencies develop more detailed guidelines and standards regarding protected bicycle lanes.

FIGURE 2: BIKEWAY FACILITY TYPES



- **Class I Bikeway.** Typically called a shared-use path, a Class I Bikeway provides bicycle travel on a paved right-of-way completely separated from any street or highway. It is usually shared with pedestrians and other active transportation users.

- **Class II Bikeway.** Often referred to as a bicycle lane, a Class II Bikeway provides a striped and stenciled lane for one-way bicycle travel on a street or highway.

* Required Active Transportation Plan component.

- **Class III Bikeway.** Generally referred to as a bicycle route, a Class III Bikeway provides for shared use with motor vehicle traffic and is identified only by signing and/or pavement markings. A subset of this type of bikeway is a Bicycle Boulevard, which is a local street that has been optimized for bicycle travel by reducing motor vehicle speeds and volumes and by improving arterial crossings and operating speeds for bicyclists.

- **Class IV Bikeway.** Often referred to as protected bicycle lanes or cycle tracks, Class IV bikeways are located within a street or highway right-of-way, provide a designated area for one-way or two-way bicycle travel, and offer physical protection from adjacent motor vehicle traffic using barriers, bollards, curbing, parked cars, posts, planters, or other vertical elements.

It is important to note that bicycles are permitted on all roads in Larkspur and in the State of California (with the exception of designated freeways). As such, Larkspur's entire street network is effectively the city's bicycle network, regardless of whether or not a bikeway stripe, stencil, or sign is present on a given street. The designation of certain roads as Class II, III or IV bicycle facilities is not intended to imply that these are the only roadways intended for bicycle use, or that bicyclists should not be riding on other streets. Rather, the designation of a network of Class II, III and IV on-street bikeways recognizes that certain roadways are optimal bicycle routes, for reasons such as directness or access to significant destinations, and allows the City of Larkspur to then focus resources on building out this primary network. The city's existing network of designated bikeways is shown in Figure 3. Specific facility segments are discussed in more detail below. Larkspur has a total of 11.32 miles of bikeways. Table 2 lists the existing bikeway facilities by classification type and length.

FIGURE 3: EXISTING BIKEWAY NETWORK

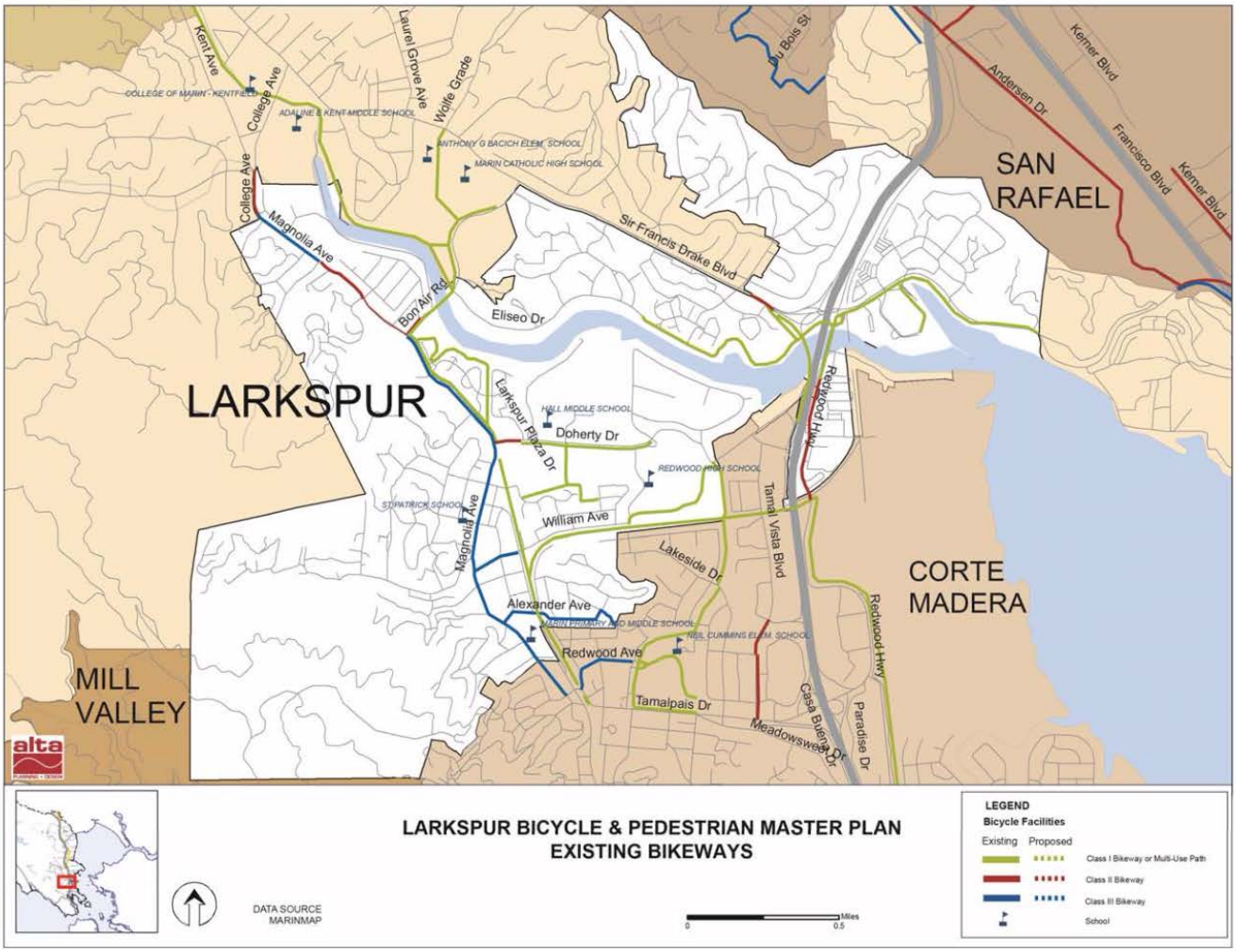


TABLE 3 EXISTING ACTIVE TRANSPORTATION FACILITIES IN LARKSPUR				
Segment	**Class**	**From**	**To**	**Length (miles)**
Larkspur Creek Path (Marin County Bicycle Route 20)	I	South Eliseo Drive	Remillard Park	1.40
Creekside Loop	I	Magnolia Avenue	Magnolia Avenue	0.71
NWP Railroad Trail	I	Doherty Park	Magnolia Ave. Park	0.61
Sandra Marker Trail	I	Holcomb Avenue	High Canal Bridge	0.75
US 101 Overcrossing Path (west side)	I	Larkspur Creek Path	Lucky Drive	0.48
US 101 Overcrossing Path (east side)	I	Sir Francis Drake Blvd.	Redwood Highway	0.25
Bon Air Road/ Bridge Path	I	South West Side of Bon Air Bridge	Northern City Limit	0.15
Magnolia Avenue Side Path	I	Bon Air Road	Doherty Drive	0.45
North-South Multi-Use Path	I	Doherty Drive	Southern City Limit	0.64
Doherty Drive Path	I	Larkspur Plaza Drive	Riviera Circle	0.43
Redwood High School Path	I	Lucky Drive	Doherty Drive	0.36
Heatherwood Path	I	Doherty Drive	Heatherwood Park	0.20
Meadowood Path	I	Heatherwood Path	Meadowood Drive	0.20
Larkspur Landing Path	I	Sir Francis Drake Blvd.	Larkspur Ferry Terminal	0.20
Class I = Multi-Use Trails			**Total Class I**	**6.83**
Segment	**Facility Type**	**From**	**To**	**Length (miles)**
Doherty Drive	II	Magnolia Avenue	Riviera Circle	0.53

TABLE 3 EXISTING ACTIVE TRANSPORTATION FACILITIES IN LARKSPUR				
Redwood Highway	II	US 101 Overcrossing Path (east side)	Wornum Drive Under-Crossing	0.63
Bon Air Road	II	Magnolia Avenue	Bon Air Bridge	0.09
Sir Francis Drake Blvd.	II	Barry Way	US 101 Overcrossing Path (west side)	0.13
Magnolia Avenue	II	Woodland Avenue	College Court	0.13
Magnolia Avenue	II	Murray Lane	Dartmouth Drive	0.16
Magnolia Avenue (westbound only)	II	Dartmouth Drive	Bon Air Road	0.17
Class II = Bike Lanes			**Total Class II**	**1.84**
Segment	**Facility Type**	**From**	**To**	**Length (miles)**
South Eliseo Drive	III	Bon Air Road	Larkspur Creek Path	0.71
Magnolia Avenue	III	College Court	Murray Lane	0.22
Magnolia Avenue	III	Bon Air Road	Southern City Limit	1.10
William Avenue	III	Magnolia Avenue	Holcomb Avenue	0.16
Alexander Avenue	III	Magnolia Avenue	Bay View Avenue	0.36
Bay View Avenue	III	Alexander Avenue	Walnut Avenue/City Limits	0.10
Class III = Shared Routes			**Total Class III**	**2.65**
			Grand Total	**11.32**

DESIGN CONSIDERATIONS

The City of Larkspur has an extensive active transportation network requiring ongoing maintenance and rehabilitation in order to meet the growing needs of its residents. However, the City contains many roads that were built to primarily serve the automobile, and thus do not provide a high level of bicycle and pedestrian infrastructure. Many of the comments received from the public identified issues at commercial centers or other destinations, such as schools and parks, that are visited on a daily basis. These areas

require bicycle and pedestrian amenities to encourage active transportation and to create a safe, inviting environment.

Accessibility Design Standards

The Americans with Disabilities Act (ADA) was signed into law in 1990 to protect the rights of people with disabilities. ADA protects the right to access public services and places of public accommodation, including transit. Compliance with ADA does not solely benefit those with mobility impairments; continuous and level walkways, audible countdown signals, and sidewalk transitions (i.e., curb ramps) provide safety and mobility for all users, including children and families with strollers, and bicycle riding where appropriate. When evaluating whether a walkway is ADA-compliant, cities consult guidelines such as the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and the Public Rights-of-Way Accessibility Guidelines (PROWAG).

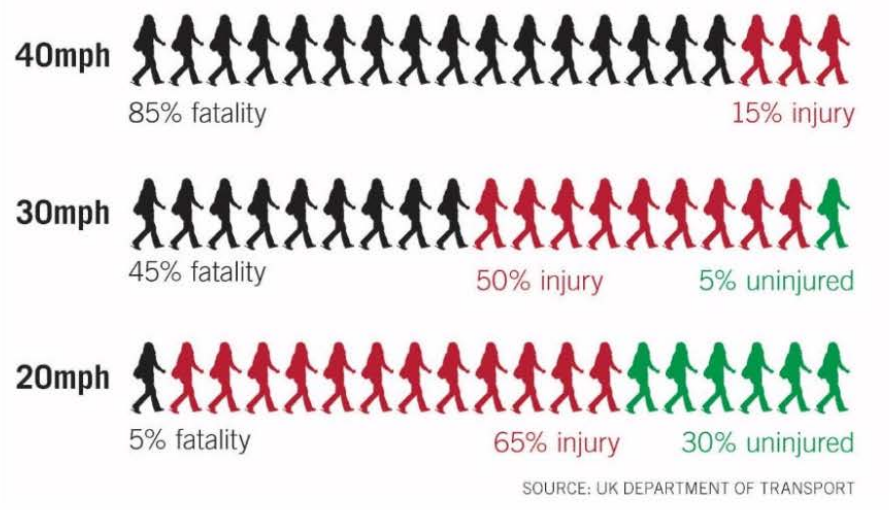
These guidelines offer specific guidance addressing the following:

- **Pedestrian through zone:** An area of the sidewalk reserved for pedestrian travel, at least 36 inches wide with periodic passing zones, and preferably 6-10 feet wide where feasible.
- **Cross-slope:** The slope that is perpendicular to the direction of travel, for which the maximum is two percent for pedestrian facilities.
- **Running slope:** The slope that is parallel to the direction of travel. Acceptable running slope depends greatly on the site conditions.
- **Obstructions:** Any landscaping, utility pole, or other protruding or vertical object that obstructs the pedestrian through zone.
- **Gaps, grates, and other openings:** Any gap in the pedestrian through zone wider than one-half inch may catch wheelchair castings, canes, crutches, inline skate wheels, and bicycle wheels.
- **Accessible signals:** Traffic signals that alert pedestrians through multiple media (sound, vision, tactile).

TRAFFIC CALMING AND SPEED LIMITS

Vehicular speeds have significant impacts on the actual and perceived safety of the bicycle and pedestrian environment because of the likelihood of injury resulting from a crash **(IMPACT OF MOTOR VEHICLE SPEED ON PEDESTRIAN INJURY RATE**).

FIGURE 4: IMPACT OF MOTOR VEHICLE SPEED ON PEDESTRIAN INJURY RATE



Traditional traffic calming measures, such as curb extensions and traffic diverters on neighborhood streets, are effective ways to improve safety and the sense of "sharedness" within the right-of-way. With recent California legislation, cities and towns are now also able to protect the most vulnerable road users by implementing strict speed limits around schools – without the need for an engineering and traffic study. For example, San Francisco has designated 15 miles per hour speed limit zones within 500 feet of all its elementary schools.

8. COLLISION TRENDS

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. (B)*

In the five years between January 1, 2008 and December 31, 2012 (the five-year period with the most recent available data), Larkspur had a total of 47 motor vehicle collisions that involved a pedestrian or a bicyclist. Bicycle collisions (n = 32) comprised more than two-thirds of these incidents. None of the collisions resulted in a fatality.

Below is a detailed analysis of each type of collision. The analysis was produced using data from the California Highway Patrol (CHP) Statewide Integrated Traffic Records System (SWITRS). This data includes only collisions reported to the CHP and local police agencies, and that resulted in documented injuries or complaints of pain. As such, these numbers likely underestimate the total number of bicycle- and pedestrian-related collisions that have occurred in Larkspur, particularly those that caused only minor injuries.

Pedestrian Collisions

Table 4 identifies pedestrian collisions within Larkspur involving injury for the last five years of available data. From January 1, 2008 to December 31, 2012, there were 25 pedestrian-related collisions.

TABLE 4
PEDESTRIAN-RELATED COLLISIONS, 2008-2012

	2008	2009	2010	2011	2012	TOTAL
Total Collisions	35	35	53	36	29	188
Total Collisions Involving a Pedestrian	7	6	6	5	8	15
Total Injuries Involving a Pedestrian	7	6	7	6	8	15
Fatal Collisions Involving a Pedestrian	0	0	0	0	0	0
Percent Pedestrians Injured per Total Collisions	20%	17%	13%	17%	28%	8%

Source: American Community Survey (ACS), 2009-2013 5-Year Estimates.

* Required Active Transportation Plan component.

Between 2008 and 2012 the number of pedestrian collisions ranged from one to six collisions per year. No pedestrian fatalities occurred in Larkspur over the five-year period. However, multiple pedestrian-related collisions occurred on Doherty Drive (six collisions), Magnolia Avenue (four collisions) and Ward Street (two collisions).

Bicycle Collisions

Larkspur has the potential to be particularly good place to ride a bicycle. Unfortunately, more bicycle riders on busy streets means a higher probability of bicycle collisions, unless alternative facilities are provided. This section summarize the number, type and location of bicycle collisions from January 1, 2008 to December 31, 2012.

TABLE 5
BICYCLE-RELATED COLLISIONS, 2008-2012

	2008	2009	2010	2011	2012	TOTAL
Total Collisions	35	35	53	36	29	188
Total Collisions Involving a Bicyclist	7	6	6	5	8	32
Total Injuries Involving a Bicyclist	7	6	7	6	8	34
Fatal Collisions Involving a Bicyclist	0	0	0	0	0	0
Percent Bicyclists Injured per Total Collisions	20%	17%	13%	17%	28%	18%

Source: American Community Survey (ACS), 2009-2013 5-Year Estimates.

Between 2008 and 2012 the number of bicycle collisions remained relatively consistent, ranging between five and eight collisions per year. No bicyclist fatalities occurred over this time period. However, multiple bicycle-related collisions occurred on Magnolia Avenue (eleven collisions), Eliseo Drive and South Eliseo Drive (seven collisions), Sir Francis Drake Boulevard and East Sir Francis Drake Boulevard (four collisions), Bon Air Road (three collisions), Doherty Drive (two collisions) and Larkspur Landing Circle (two collisions).

Collision Reduction Goal

Between 2008 and 2012, 47 collisions occurred in Larkspur involving either a bicyclist or a pedestrian – a combined rate of approximately nine (9) collisions per year. This plan establishes a goal to reduce the combined bicycle and pedestrian collision rate by 50 percent in five years to below five (5) collisions annually.

Larkspur has achieved zero pedestrian and bicycle fatalities for at least five years running. This plan establishes a goal to replicate this success each year through supporting policies, programs, and design that have been proven to reduce bicycle- and pedestrian-related fatalities.

9. SAFETY AND EDUCATION

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 ACCIDENTS INVOLVING BICYCLISTS AND PEDESTRIANS. (K)*

Many potential bicyclists cite the fear of traffic as their main objection to riding a bicycle on urban streets. Larkspur can help alleviate this fear by providing good bikeway facilities, particularly at intersections, where most bicycle-motor vehicle crashes occur.

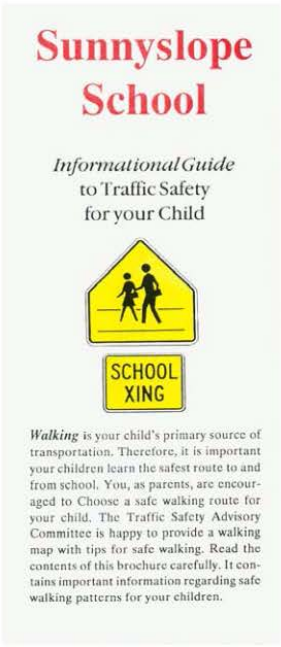
However, many concerns about bicycling's level of danger are based on the misconception that most bicycle crashes involve an automobile. In fact, the vast majority of bicycle crashes do not involve a motor vehicle; rather, studies of hospital data have shown that bicycle crashes primarily involve falls or collisions with stationary objects, other cyclists, or pedestrians. This points to the need for education of bicyclists and motorists, enforcement of existing laws, and encouragement of safe bicycling techniques.

Education is an important element in promoting bicycle use while also improving safety. People often assume that as cycling becomes more popular, the number of crashes will increase. This need not be the case as has been demonstrated in other communities. Perhaps the most effective way to improve the safety of bicycling is simply to improve the quality of Larkspur's bikeway facilities. However, bikeways cannot do it alone; it must be combined with proper education of both youth and adult bicyclists and motorists.

The Central Marin Police Authority sponsors annual bicycle safety courses for children ages 5-13 at all Larkspur schools. The Police Authority in association with the Larkspur Recreation Department offers an after school bicycle safety course for students ages 5-13, and Trips for Kids offer skill and other education programs for adults and youth.

The following Larkspur area schools participate in the Marin Safe Routes to Schools Program, a pilot program developed in 2000 to create a national model for Safe Routes to Schools programs. Each school in the program received educational and promotional materials, held a series of *Walk* and *Bike to School Days*, and sponsored *Frequent Rider Miles* contests, which rewarded children who came to school walking, biking, by carpool or bus.

- Neil Cummins
- St. Patrick's (private)



Sample safe routes brochure.

* Required Active Transportation Plan component.

- Hall Middle School

In coordination with the Safe Routes to Schools Program, the Neil Cummins and St. Patrick's PTA have been sponsoring Bike/Walk/Scooter-to-School days. On a typical day, approximately 22 bicycles are parked in the school's bike cage. On their inaugural event in November 2000, 110 bicycles were counted in the bicycle cage. The event has proven to be so successful that the PTA has expanded the program to every Wednesday.

The Larkspur School District is also working with the Town of Larkspur, who was recently rewarded a $29,000 grant from the Office of Traffic Safety (OTS) for the Town's Bicycle and Pedestrian Safety Program (BPSP). This program was developed as a result of growing concern citizens had for the safety of pedestrians and bicyclists on public streets. The BPSP involves many components to achieve its goal of improving safety on public streets, including a Traffic Safety Week, production and distribution of pamphlets, newspaper and newsletter articles, additional bicycle and pedestrian signage – especially near schools and critical intersections and periodic presence of police officers at schools during morning and afternoon peak periods. BPSP implementation will involve the City Council, and the Central Marin Police Authority to work with the Larkspur School District, private schools, and homeowner associations to educate and inform the public.

In addition, the Larkspur City Council formed a Safe Routes to Schools Workgroup to address specific requests of the parents and school children, such as difficulty crossing heavily trafficked intersections, to promote safety. As a result, the City responded by targeting specific locations suggested by school representatives for improvements and/or traffic calming measures. Activities ranged from enforcement to engineering and included pavement striping, signing campaigns, traffic controls, and notices requiring sidewalk repairs on private property, among other measures. The City Work Group continues to meet with school representatives to manage city resources to encourage students to walk and bicycle by targeting police enforcement of speeding near schools, enforcing crosswalk safety and improving walkways and intersections.

Sample bicycle safety training for school children.

10. BICYCLE PARKING FACILITIES

A MAP AND DESCRIPTION OF EXISTING AND PROPOSED END-OF-TRIP BICYCLE PARKING FACILITIES. (E)*

Parking must not be overlooked when planning bicycle facilities and encouraging widespread use. Bicycles are one of the top stolen items in all communities, with components being stolen even when a bicycle is securely locked. Because today's bicycles often cost between $350 to over $2,000, parking issues should be considered. Bicycle parking requirements are addressed in section 18.56.140 of the City's Zoning Ordinance.

Parking facilities can be classified as follows:

Class I bicycle parking facilities accommodate employees, students, residents, commuters, and others expected to park more than two hours. This parking is to be provided in a secure, weather-protected manner and location. Class I bicycle parking will be either a bicycle locker or a secure area like a "bike corral" that may be accessed only by bicyclists.

Sample Class I bike parking – Bike Lids

Magnolia Avenue Bike Racks (Class II)

Class II bicycle parking facilities are best used to accommodate visitors, customers, messengers, and others expected to depart within two hours. Bicycle racks provide support for the bicycle but do not have locking mechanisms. Racks are relatively low-cost devices that are secured to the ground and typically hold between two and eight bicycles, which allow bicyclists to securely lock their frames and wheels. They should be located in highly visible areas at schools, commercial locations, and activity centers such as parks, libraries, and civic centers.

Following the publication of Larkspur's 2004 Bicycle and Pedestrian Master Plan, the City installed 35 bicycle racks at a total cost of $19,271.75. More than half of this cost was covered by grants (approximately $8,000) and donations (approximately $2,000).

Bicycle racks are located at the following destinations in Larkspur:

- Larkspur Landing Ferry Terminal
- City Hall/Library
- Piper Park
- Niven Park
- Centennial Park
- Magnolia Park
- Saint Patricks School
- Redwood High School
- Hall Middle School
- Marin Primary School

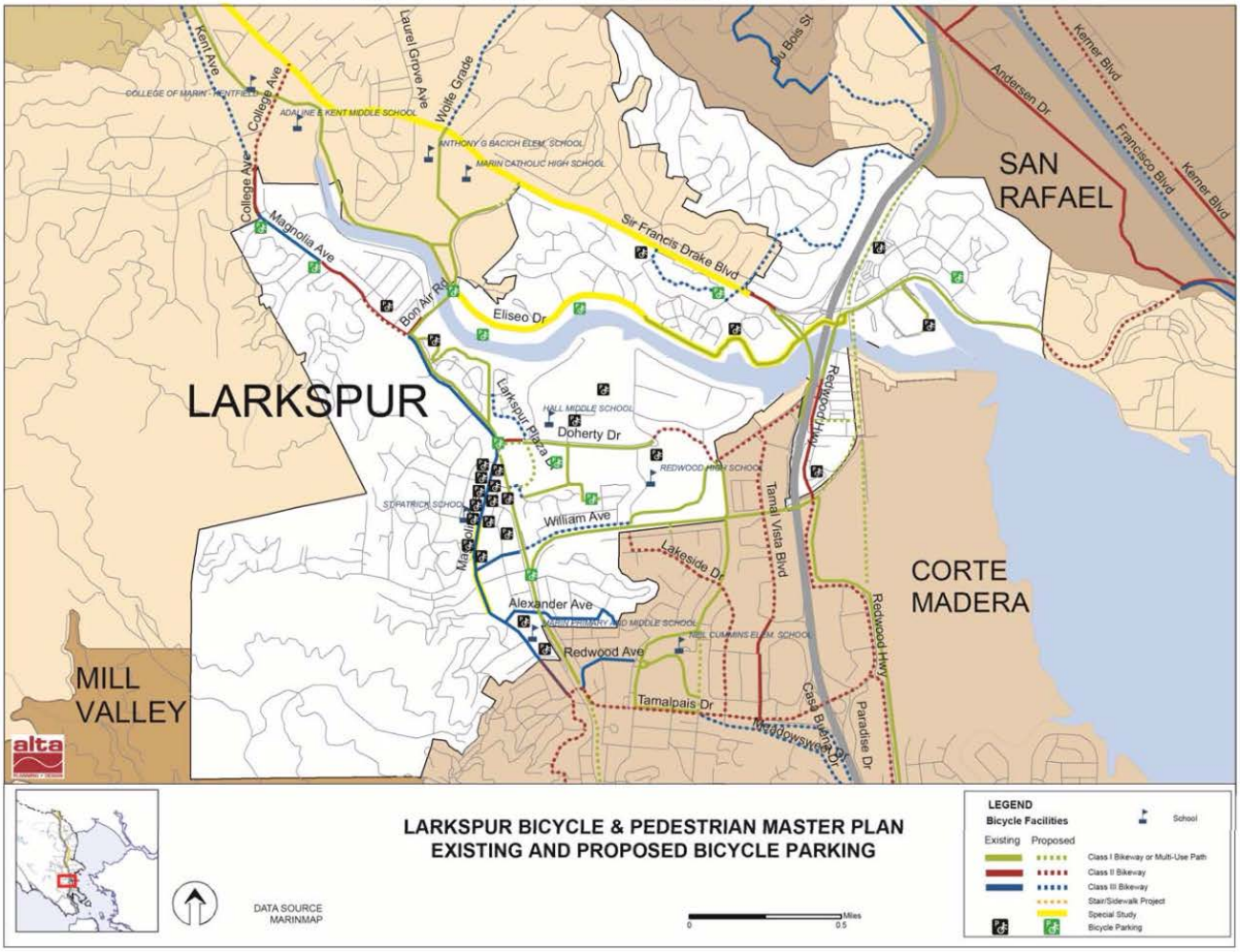
* Required Active Transportation Plan component.

- St. Patrick's Thrift Shop
- Silver Peso
- Doughnut Alley
- Bank of the West
- Across from Lark Theater
- Public parking lot on Magnolia Avenue (Downtown Larkspur)
- Lark Creek Inn
- Arch Street stairs (at Magnolia Avenue)
- Post Street (at Magnolia Avenue) Bon Air Shopping Center
- Larkspur Landing Shopping Center
- Larkspur Landing Theatre
- Trader Joe's

Figure 5 identifies the location of existing and proposed bicycle parking in Larkspur. Installation of bicycle racks or lockers is recommended at the following community destinations:

- Bon Air Shopping Center (east side)
- Larkspur Landing Circle (east side)
- Rose Garden Community Facility
- Magnolia Avenue at Estelle Avenue
- Magnolia Avenue at Frances Avenue
- Hamilton Park
- Bon Air Landing Park
- Heatherwood Park
- Sandra Marker Trailhead (at Holcomb Avenue)
- Bon Air Road at Eliseo Drive
- Magnolia Avenue at Doherty Drive

FIGURE 5: EXISTING AND PROPOSED BICYCLE PARKING



11. MULTI-MODAL CONNECTIONS

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, 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. (G)*

A MAP AND DESCRIPTION OF EXISTING AND PROPOSED PEDESTRIAN FACILITIES AT MAJOR TRANSIT HUBS. THESE MUST INCLUDE, BUT ARE NOT LIMITED TO, RAIL AND TRANSIT TERMINALS, AND FERRY DOCKS AND LANDINGS. (H)*

Improving the bicycle-transit link is an important part of making bicycling a part of daily life in Larkspur. Linking bicycles with public transportation (bus and ferry) overcomes such barriers as lengthy trips, personal security concerns, and riding at night, in poor weather, or up hills. Additionally, bicycling to transit instead of driving benefits communities by reducing air pollution, demand for park and ride land, energy consumption, and traffic congestion with relatively low cost investments.

There are three main components of bicycle-transit integration:

- Enabling bicycle storage on transit vehicles
- Offering bicycle parking at transit locations
- Improving bikeways to transit

Magnolia Avenue Bus Stop at Arch Street Stairs – Bike Rack

Nearly 13 percent of commuters in Larkspur use public transit, according to American Community Survey (2009-2013 5-Year Estimates). Golden Gate Transit (GGT) offers bus service and necessary support services such as transit shelters and bicycle racks at some stops. All buses in the GGT fleet accommodate bicycles, either with front racks (2-3 bicycles) or luggage bay racks (2 bicycles). The former are installed on all 30-, 40- and 60-foot buses in the GGT fleet, while the latter are installed on 45-foot MCI buses.

Bicycles may be brought on board all Larkspur Ferry vessels. High-speed catamaran class vessels (used on weekdays) accommodate 15 bicycles, while high-capacity Spaulding class vessels (used on weekends) accommodate 100 bicycles.

Larkspur Ferry Terminal includes bicycle parking within the paid waiting area that holds up to 80 bicycles. Conventional bike racks are also available outside the paid waiting area, with a capacity of 60 bicycles.

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* Required Active Transportation Plan component.

* Required Active Transportation Plan component.

For those bicyclists who may chose to leave their bicycles at their bus stop or if the bus racks are full, Class II bicycle racks can be found at five GGT stops in Larkspur:

- Magnolia northbound at Ward
- Magnolia southbound at Arch Street
- Magnolia northbound at Bon Air
- Bon Air at Bon Air Bridge – rack at 2 Bon Air
- U.S. 101 Southbound Ramp at Lucky Drive

Magnolia Avenue Bus Stop at Bon Air – Bike Rack

12. RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

A DESCRIPTION OF THE PROJECTS AND PROGRAMS PROPOSED IN THE PLAN AND A LISTING OF THEIR PRIORITIES FOR IMPLEMENTATION, INCLUDING THE METHODOLOGY FOR PROJECT PRIORITIZATION AND A PROPOSED TIMELINE FOR IMPLEMENTATION. (N)*

The following improvement projects are recommended to enhance Larkspur's existing active transportation network through:

- improved connectivity
- increased separation and protection from motor vehicle traffic
- improved safety on multi-use trails
- additional spot treatments intended to improve safety and comfort.

The recommended projects are shown in Figure 6 and listed in Table 6.

* Required Active Transportation Plan component.

FIGURE 6: RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

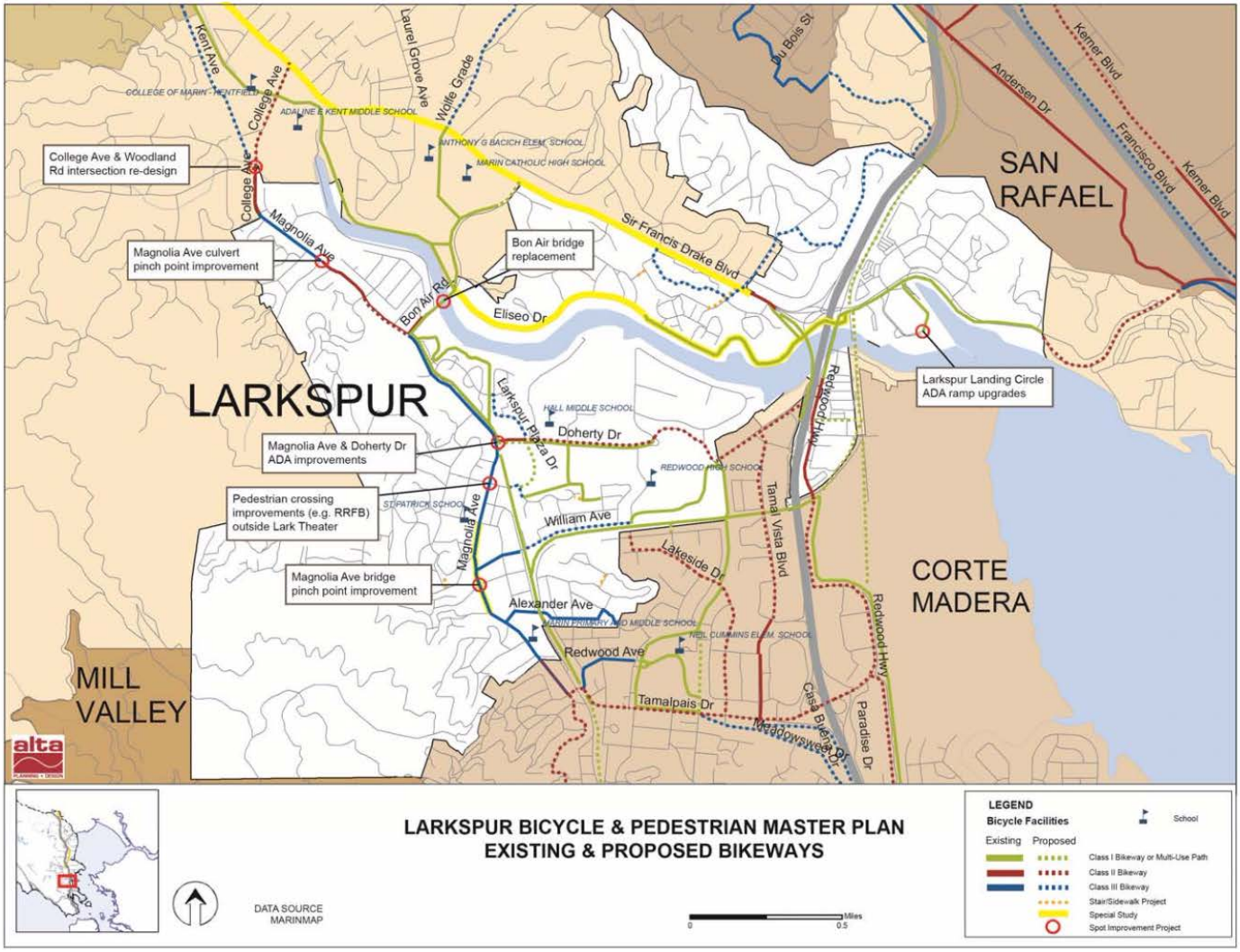


TABLE 6
RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

No.	Description	Class	From	To	Length (miles)	Notes	Cost Estimate[1]
1	College Ave & Woodland intersection re-design	N/A	College / Woodland / Kent	--	--		$20,000 - $100,000
2	Magnolia Ave culvert pinch point improvement	N/A	975 Magnolia Ave	965 Magnolia Ave	--	Consider investments to improve pedestrian and bicyclist safety within existing ROW	$50,000
3	Magnolia Ave bridge pinch point improvement	N/A	Madrone Ave	William Ave	--	Consider investments to improve pedestrian and bicyclist safety within existing ROW	$50,000
4	North-South Greenway Gap Closure project (south segment)	TBD	Creek Crossing at Redwood	Railroad ROW	0.2	Future study by County of Marin.	$4.7-$5.6 million
5	North-South Greenway Gap Closure project (north segment)	TBD	CMFC MUP	Greenbrae POC	0.2	Currently being studied by TAM.	$10.6 million
6	Connector between Corte Madera and Doherty Drive Pathways	I	Corte Madera Pathway	Doherty Drive Pathway	0.2	A minimum 10-foot-wide ADA-compliant multi-use pathway. Reduce Magnolia Ave driveway width to shorten crosswalk length. Restripe continental crosswalk with white retroreflective	$165,564

[1] Planning level cost estimates are based on latest available actual implementation unit costs in the Bay Area, and include all design, environmental, and other costs. Some project costs are for multi-jurisdictional projects and the cost will be shared between numerous agencies. Many projects are undefined at this level, and the final type and scope of the project is yet to be determined. The estimates do not include any major right-of-way, environmental, or engineering costs that may be discovered in the feasibility design process. Costs from available feasibility studies are used where available.

TABLE 6
RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

No.	Description	Class	From	To	Length (miles)	Notes	Cost Estimate[1]
						thermoplastic and install CA MUTCD-specified crosswalk signage. Additional improvements could include a raised crosswalk, retroreflective pavement markers, approach yield markers, or a stop sign if warranted.	
7	Camellia Circle N. MUP	I	Rt 5 MUP	Rose Lane (west)	0.1	Connect with existing MUP and sidewalks next to community center on Rose Ln. Add connectivity through the junction of Camellia Circle and Ward Street.	$100,000
8	Magnolia Avenue	II	Dartmouth Drive	Bon Air Road	0.2	Southbound only.	$5,000
9	Meadowood Path Connector	III	Meadowood Path (at Larkspur Creek)	Larkspur Path	0.1	Connect Meadowood Path MUP to Larkspur Path MUP	$5,000
10	Doherty Dr (Rt 18) Buffered Bike Lanes	II+	Magnolia Ave	Riviera Circle (east)	0.6	Where applicable, re-stripe the 0.6-mile long roadway corridor to reduce vehicular lane widths to 10.5 feet to assist in lowering travel speeds, and provide a buffered area between the vehicle travel lanes and bike lanes to separate motor vehicle and cyclists.	$156,870

TABLE 6
RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

No.	Description	Class	From	To	Length (miles)	Notes	Cost Estimate[1]
11	101 SB ramp MUP improvements	I	Del Monte	Lucky Dr	0.3	Widen path crossing on west side of 101 ramp. Concepts have been developed as part of Greenbrae Corridor project.	$4 million
12	Marin Rowing Association MUP (Rt 18) improvements	I	Del Monte	Marin Rowing Association	0.1	Widen path	$100,000
13	William Ave shared roadway	III	Larkspur Path	Lucky Dr	0.3		$2,000
14	Barry Way shared roadway	III	Sir Francis Drake Blvd (west)	Sir Francis Drake Blvd (east)	0.1		$2,000
15	Pavement improvements on Class I paths	I	n/a	n/a	--	In the works in FY 2014-15	$200,000
16	Sir Francis Drake Special Study	Special Study	Bon Air Road	Barry Way	0.8	Part of County of Marin's Sir Francis Drake Bike/Ped Study.	n/a
17	Eliseo Drive Corridor Special Study (west segment)	Special Study	Bon Air Road	Eliseo Drive terminus	0.7	Consider investments to improve pedestrian and bicyclist safety within existing ROW; do not modify parking. Pedestrian improvements could include marked crossings and modifications to driveway approaches for ADA compliance. Bicycling investments could include signage and enhanced pavement markings (e.g.	$30,000

TABLE 6
RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

No.	Description	Class	From	To	Length (miles)	Notes	Cost Estimate[1]
						green-backed sharrows).	
18	Eliseo Drive Corridor Special Study (east segment)	Special Study	Eliseo Drive terminus	Sir Francis Drake Blvd	0.8	Existing Class I path. Investigate potential lighting and wayfinding improvements along this ecologically sensitive corridor.	$30,000
19	Magnolia Avenue Uncontrolled Pedestrian Crosswalk Enhancements	Special Study - Ped Only	King Street	Piedmont Road	0.3	Improve the visibility of major crossings on Magnolia Avenue that are used daily for school access. Improvements include installation of LED pedestrian signage, a median island and new striping to enhance visibility. Future improvements could include curb extensions at crosswalks.	$40,000
20	Pedestrian crossing improvements (e.g. RRFB) outside Lark Theater	Ped only	549 Magnolia Ave	--	--	Consider a Rectangular Rapid Flash Beacon (RRFB) and curb extensions.	$40,000
22	Heatherwood Park stairway	Ped only	Heatherwood Park	Meadowood Drive	--	Enhance existing stairway and add wayfinding signage on Meadowood Dr	$20,000
23	Upper Elm Ave stairway (aka Palm Hill Paper Trail)	Ped only	80 Elm Ave (south side)	391 Elm Ave (north side)	--	Replace worn and rotted railing at lower portion. Install new stairs and railing for 120 ft upper	$10,000

TABLE 6
RECOMMENDED ACTIVE TRANSPORTATION FACILITIES

No.	Description	Class	From	To	Length (miles)	Notes	Cost Estimate[1]
						section.	
24	Shady Lane stairway	Ped only	Piedmont Rd	Shady Ln	--	Install handrail. Repair landing with concrete infill.	$10,000
25	Palm Ave stairway	Ped only	Palm Ave	Madrone Ave	--	Replace failing section. The pavement section of stairs is cracked and failing. The pavement sub-grade is undermined and does not support the pavement section. Replace downhill side railing and extend to existing railing. Railing has dry rot and steep downhill adjacent to the failing section has no railing. Also install low retainment along uphill side to keep trash from entering adjacent drainage swale. Extend railing on uphill side to existing railing.	$20,000
26	Larkspur Landing Circle ADA ramp upgrades	Ped only	n/a	n/a	--	In the works in FY 2014-15	n/a
27	Bon Air Pedestrian Bridge replacement	Ped only	n/a	n/a	--	In the works in FY 2014-15	n/a
28	Magnolia/Doherty ADA improvements	Ped only	n/a	n/a	--	In the works in FY 2014-15	n/a

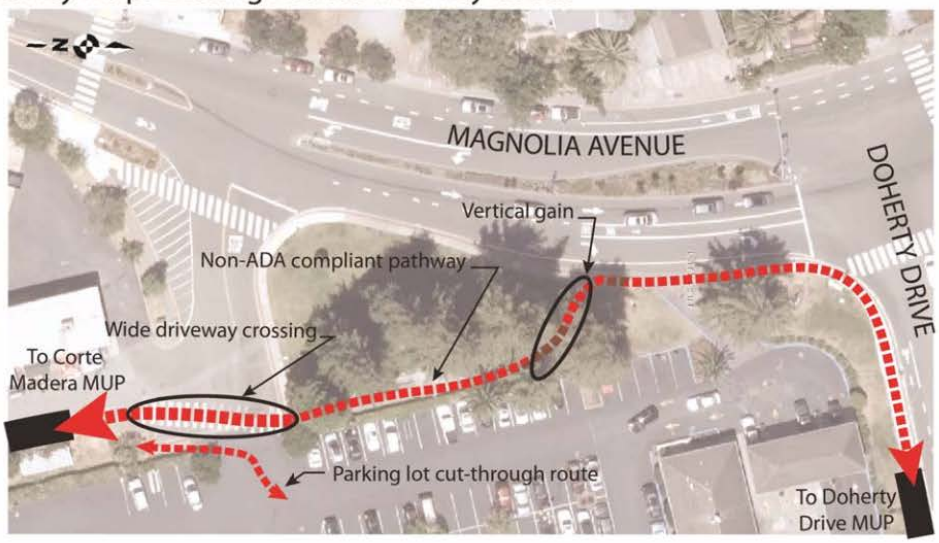
TABLE 6 RECOMMENDED ACTIVE TRANSPORTATION FACILITIES							
No.	**Description**	**Class**	**From**	**To**	**Length (miles)**	**Notes**	**Cost Estimate[1]**
				Total	**5.3**		**$6,022,694** ($22,222,694 including regional projects #3 and #4)

PRIORITY PROJECT DETAILS

City of Larkspur - Connector between Corte Madera and Doherty Drive Pathways

Magnolia Avenue and Doherty Drive

Vicinity Map: Existing Routes with Key issues



Vicinity Map: Project Concepts

*All concepts are preliminary in nature.

Existing conditions

The pedestrian and bicycle connection between the Corte Madera pathway (adjacent to Magnolia Avenue) and the Doherty Drive pathway is uncomfortable for walking and biking. The current connection is discontinuous, non-compliant with ADA provisions, and has wide driveway crossings.

- A 70-foot-wide driveway crossing with no crossing signage and moderate vehicluar entry speeds.
- A circuitous six-foot-wide non-ADA compliant pathway winding south of Magnolia with a steep vertical incline section.
- The pathway joins a five-foot-wide sidewalk at Magnolia Avenue which does not provide separation from the roadway or space for continued shared use.
- Pathway users traverse the shopping center parking lot as a cut-through route between pathways.

Project Description

There is a need for an ADA-compliant multi-use pathway connector between the existing pathways. Some of the project elements would include:

- A minimum 10-foot-wide ADA-compliant multi-use pathway from the Magnolia Avenue driveway to Doherty Drive.
- Reduce Magnolia Avenue driveway width to shorten crosswalk length. This could include median or landscape area bulb out, striping changes, or both.
- Restripe continental crosswalk with white retroreflective thermoplastic and install CA MUTCD specified crosswalk signage on both driveway approaches for higher visibility. Additional improvements could include a raised crosswalk, retroreflective pavement markers, approach yield markers, or a stop sign if warranted.

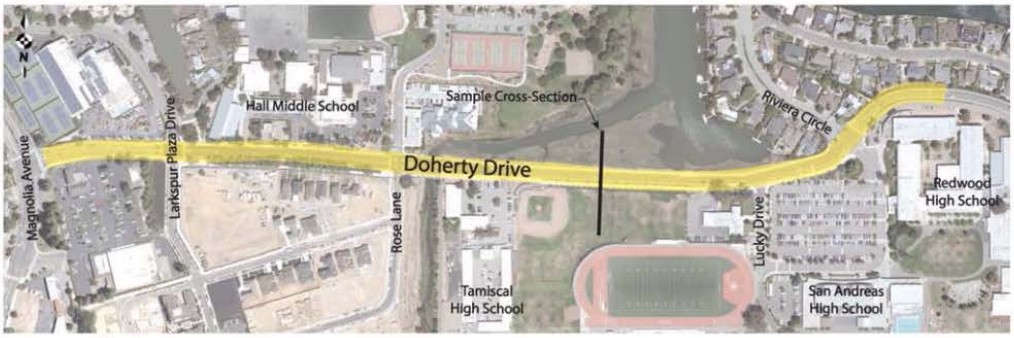
Cost estimate

Item No.	Item Description	Estimated Quantity	Unit of Measure	Unit Cost	Item Total
1	Mobilization (5%)	1	LS	$6,570.00	$6,570.00
2	Traffic Control	1	L.S.	$3,000.00	$3,000.00
3	Remove Tree and Grind Stump	3	Each	$1,200.00	$3,600.00
4	Clearing and Grubbing	1	L.S.	$8,000.00	$8,000.00
5	Adjust Utility Cover to Grade	4	Each	$500.00	$2,000.00
6	SWPPP & Temporary Erosion Control	1	L.S.	$2,500.00	$2,500.00
7	Erosion Control (Type D)	1	L.S.	$2,500.00	$2,500.00
8	Landscape & Irrigation Repair	1	L.S.	$3,000.00	$3,000.00
10	Drain Pipe	1	LS	$5,000.00	$5,000.00
11	Accessible Ramps	2	EA	$5,000.00	$10,000.00
12	Retaining Wall	30	LF	$100.00	$3,000.00
13	Curb and Gutter	40	L.F.	$100.00	$4,000.00
14	10' Concrete Path	4000	S.F.	$20.00	$80,000.00
15	Signs	4	Each	$200.00	$800.00
16	Crosswalk Stripes & Pavement Markings	1	L.S.	$4,000.00	$4,000.00
			Subtotal		$137,970.00
			20% Contingency		$27,594.00
			Total Construction Cost		**$165,564.00**

City of Larkspur- Doherty Drive Buffered Bike Lanes

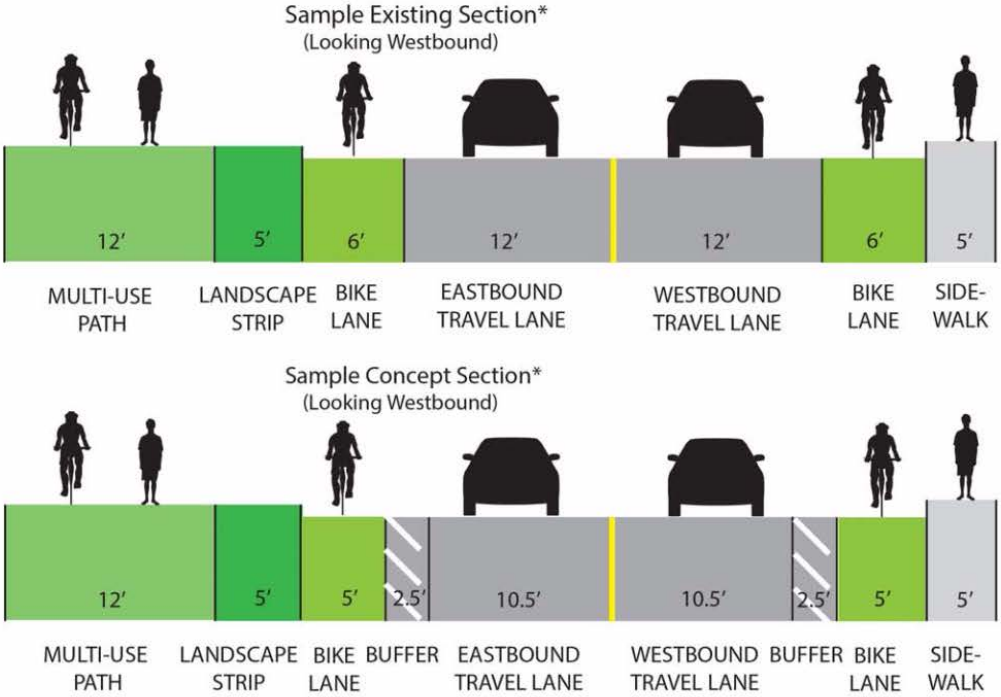
Doherty Drive from Magnolia Avenue to Riviera Circle

Vicinity Map and Project Extents



Project extents and key features.

Project Concept



*All concepts are preliminary in nature and are approximate dimensions. This concept serves as an example location; roadway widths vary throughout corridor.

Existing conditions

Doherty Drive between Magnolia Avenue and Riviera Circle is a key east-west corridor serving four schools and connecting Larkspur with Crote Madera and Highway 101. The following existing conditions apply:

- One lane of traffic in each direction with center left-turn pockets from Magnolia Avenue to Rose Lane
- Class II bike lanes with no separation from vehicular traffic in both directions
- Multi-use path on south-side of Doherty Drive from Rose Lane to Redwood High School
- Five-foot-wide sidewalk on east-side of Doherty Drive
- High peak traffic volumes and speeds make it uncomfortable for bicyclists to ride immediately adjacent to vehicles

Project Description

Enhanced bicycle facilities improve safety and connectivity on the Doherty Drive corridor.

- Where applicable, re-stripe the 0.6-mile long roadway corridor to reduce vehicular lane widths to 10.5 feet to assist in lowering travel speeds, and provide a buffered area between the vehicle travel lanes and bike lanes to separate motor vehicles and cyclists.

Cost estimate

Item No.	Item Description	Estimated Quantity	Unit of Measure	Unit Cost	Item Total
1	Mobilization (5%)	1	LS	$6,225.00	$6,225.00
2	Traffic Control	1	L.S.	$10,000.00	$10,000.00
3	Remove existing markings and buttons	1	L.S.	$8,000.00	$8,000.00
4	SWPPP & Temporary Erosion Control	1	L.S.	$3,500.00	$3,500.00
5	Bike Lane Lines (6")	6200	LF	$3.00	$18,600.00
7	Buffer Hatching Lines (4")	12400	LF	$3.00	$37,200.00
8	Bike Lane Edge Lines (4")	6200	LF	$2.00	$12,400.00
9	Center Line	6200	LF	$4.00	$24,800.00
10	Signs	10	Each	$200.00	$2,000.00
11	Pavement Markings	1	L.S.	$8,000.00	$8,000.00
			Subtotal		$130,725.00
			20% Contingency		$26,145.00
			Total Construction Cost		**$156,870.00**

13. A CALL TO ACTION: RECOMMENDED ACTIVE TRANSPORTATION POLICIES AND PROGRAMS

A DESCRIPTION OF THE PROJECTS AND PROGRAMS PROPOSED IN THE PLAN AND A LISTING OF THEIR PRIORITIES FOR IMPLEMENTATION, INCLUDING THE METHODOLOGY FOR PROJECT PRIORITIZATION AND A PROPOSED TIMELINE FOR IMPLEMENTATION. (N)*

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, FREEDOM FROM ENCROACHING VEGETATION, MAINTENANCE OF TRAFFIC CONTROL DEVICES INCLUDING STRIPING AND OTHER PAVEMENT MARKINGS, AND LIGHTING. (J)*

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. (F)*

Bicycle commuters traveling longer distances appreciate additional amenities to make commuting more viable and enjoyable. Showers, changing rooms, and bicycle and clothing storage areas are welcomed. The concept of a full-service "bicycle commuting center" offering these conveniences and other services such as cafes, bike shops, bicycle rentals, has spurred considerable interest in the country. Cities in California that have built Bikestations® include Palo Alto, Long Beach, and Berkeley. Golden Gate Transit, Larkspur, the Marin County Bicycle Coalition, and other interested parties have discussed the feasibility and need for a Bikestation® at the Larkspur Landing Ferry Terminal. Further feasibility work and the pursuit of grant funding for the project are recommended to aid current bicycle commuters who use the ferry system, and increase the potential for further bicycle commuting through better transit integration.

Bicycle parking and services at the Long Beach Bikestation®

Although public restrooms are located at several locations in Larkspur, including downtown, Dolliver Park, Piper Park, and the Larkspur Ferry Terminal, no official shower or locker facility for bicycle commuters is known to exist in Larkspur. It is likely that some employers provide these facilities, and that some bicycle commuters use facilities in local health clubs.

No new facilities for changing and storing clothes and equipment are planned as a part of this Plan.

* Required Active Transportation Plan component.

* Required Active Transportation Plan component.

* Required Active Transportation Plan component.

This plan recommends the following policies in order to maintain and improve the quality, operation, and integrity of walkway facilities.

1. Undertake routine maintenance of walkway facilities, such as sweeping sidewalks and pathways and removing vegetation which impinges on pedestrian rights-of-way.
2. Undertake regular periodic maintenance of pedestrian facilities such as signing and surface condition to avoid safety issues for users including integrating into the existing Public Works maintenance process a regular inspection of the walkway network for cracks that might pose a trip-and-fall risk for pedestrians.
3. Ensure that repair or construction of any transportation facility minimizes disruption to the walking environment and that safe, direct detour routes are signed for walking through or around construction zones for the duration of the project.
4. Ensure that repair or construction of any transportation facility does not result in the permanent removal of an existing pedestrian facility.
5. Ensure that the pedestrian walkway network is accessible to, and usable by, persons with disabilities as technically feasible, in compliance with ADA requirements.

TABLE 7
RECOMMENDED PEDESTRIAN PROGRAMS AND POLICIES

Topic Area	Policy	Details
Enforcement	Enforcement of bicyclist behavior on shared-use paths	On shared-use paths, bicyclists are the fastest-moving mode. Pedestrians, such as walkers and users of wheelchairs and skateboards, are slower and more vulnerable in the event of a collision. In addition to the Marin County Path & Trail Conduct, Larkspur should conduct an enforcement campaign that targets high-speed travelers on shared-use paths.
Engineering	Improve lighting on sidewalks	Provide consistent illumination along all pedestrian routes through the installation of pedestrian-scale lighting. Prioritize upgrades around locations where substandard lighting presents a collision or public safety hazard.
Engineering	Establish intersection and sidewalk spot improvement program	The City should ensure that a mechanism exists to evaluate the sidewalk network, to alleviate potential hazards and to improve conditions for pedestrians at specific intersections and locations. Training should be provided if necessary to ensure that public works employees recognize walking hazards such as: • Incomplete or narrow sidewalks • Missing or improperly designed crosswalks and curb ramps • Long, unprotected crossings • Faded or illegible street markings, including crosswalks • Cracks or buckles in the sidewalk • Overhanging tree limbs or other obstacles on

TABLE 7 RECOMMENDED PEDESTRIAN PROGRAMS AND POLICIES		
Topic Area	**Policy**	**Details**
		the sidewalk • Locations where motor vehicles block the sidewalk on a regular basis • Locations of low visibility and/or limited sightlines (e.g. where vehicles are permitted to park too close to a crosswalk)
Engineering	Identify pedestrian priority corridors	The City should adopt a more rigorous policy for pedestrian accommodation, including specific streets where ADA-compliant sidewalks or pathways are a priority. These recommendations should be included in the City's Standard Specifications as permitted/desired treatments.
Maintenance	Monitor and manage vegetation	Require property owners to trim vegetation that threatens to encroach upon the sidewalk or that limits visibility on curves. For City buildings, proactively manage landscaping to avoid obstructing pedestrian facilities.
Planning and Evaluation	Develop Steps, Lanes and Paths project priorities	Continue to improve the top 25 Steps, Lanes and Paths (SLPs) and identify at least one construction project for development per year.
Planning and Evaluation	Collect pedestrian data	Pedestrian counts are important because they provide documentation of actual pedestrian activity, allowing the City to make informed decisions to target improvements in areas where they will be most beneficial. Project-specific "before and after" counts are also valuable to assess progress in encouraging active transportation, and are increasingly required to compete for outside grant funding (including the statewide Active Transportation Program, or ATP). • Create a program to conduct regular pedestrian data collection efforts at strategic screen lines to assess activity level trends. • Update citywide traffic counts for all modes, including automobile counts, to assist the feasibility and design for including pedestrian facilities in new projects. • Create and maintain a regularly updated sidewalk inventory and sidewalk condition database, as well as a maintenance plan to address identified issues.

TABLE 8 RECOMMENDED BICYCLE PROGRAMS AND POLICIES		
Topic Area	**Policy**	**Details**
Bicycle Parking and End-of-Trip Facilities	Maintain a bicycle parking inventory	Create an inventory of existing bicycle parking and update the inventory annually. The inventory should be geo-located and include bike parking type (rack, locker, etc.), designation (short-term, long-term), and capacity. The inventory should be maintained by the City of Larkspur.
Bicycle Parking and End-of-Trip Facilities	Provide valet bike parking at public events	A formal program should be instituted to provide closed-in secure bicycle corrals at all large public events to encourage residents and visitors to bicycle rather than drive. The City should work with the bicycle coalition in Marin County to offer free bicycle parking at events. The valet parking works much like a vehicle valet: the cyclist gives their bicycle to the attendant, who tags the bicycle with a number and gives the cyclist a claim stub. When the bicyclist returns to get her or his bicycle, she or he presents the claim stub and the attendant retrieves her or his bicycle for them. Locks are not needed. The Bicycle Coalition can also park strollers, rollerblades, electric scooters and other human- or electric-powered transportation devices. Valet parking could be sponsored by the City in partnership with the Marin County Bicycle Coalition and/or other providers or sponsors. Volunteers are critical to the success of such a program as they are typically used to staff the corral during the events.
Bylaw	Condition construction projects on development of bicycle facilities	Private development presents an excellent opportunity to integrate active transportation into newly constructed or redeveloped environments. A policy should be developed concerning bikeway construction as a part of redevelopment or new construction. Based on specific criteria, bikeways could be required for development permits or bicycle facilities could be incorporated into the City's traffic mitigation strategies. Bikeways to be constructed should be identified in the Larkspur Bicycle and Pedestrian Master Plan and be reviewed by staff with the involvement of the B/PAC. End of trip facilities should be integrated according to national and international best practices.
Bylaw	Protect bicycle facilities from removal	The City should implement a practice that prohibits the removal of existing bikeway facilities. For example, Class II bicycle lane facilities would not be removed at a future date to increase motor vehicle capacity without a thorough study analyzing the

TABLE 8
RECOMMENDED BICYCLE PROGRAMS AND POLICIES

Topic Area	Policy	Details
		alternatives and unless the bicycle accommodation is replaced by another facility of equal or greater utility to people using bicycles.
Education	Educate all travelers on road-sharing	The City should continue to partner with TAM on implementing the Street Smarts Marin program in Larkspur. The campaign targets motorist, bicyclist and pedestrian behavior and educates the public on safe conduct through banners and signs.
Education	Host bicycle safety events	CMPA and the MCBC will work together to offer Bicycle Rodeos and Youth Bicycle Safety Education Classes at different locations in CMPA jurisdiction.
Encouragement	Host bicycle fairs and races	Hosting bike fairs and races in Larkspur can raise the profile of bicycling in the area and provide entertainment for all ages at the same time. These events contribute to the local economy by bringing visitors to Larkspur and provide an opportunity to educate and encourage current and potential bicyclists.
Encouragement	Bike-to-work and bike-to-school days	The City of Larkspur should participate in the annual Bike-to-Work day in May, in conjunction with the California bike-to-work week activities. City staff should be present at energizer stations along the route to promote the plan and other programs. The City may also consider implementing bike-to-school days and bike-to-shop days.
Encouragement	Larkspur bicycle facilities map	Producing a bicycle facilities map is the primary tool for showing bicyclists all the designated bikeways in Larkspur. On an annual basis, the City of Larkspur should work with the Marin County Bicycle Coalition (MCBC) to produce a Larkspur-specific bicycle map. The Larkspur Bicycle Map should clearly show the type of facility (path, lane, or route) as well as include basic safety information, significant destinations, and location of bicycle parking facilities, public bathrooms, water fountains, transit stops, and bicycle facilities in the neighboring communities. Selling advertising space on the map to local restaurants, shops and bicycle stores could offset the cost of the map's development and printing. The map could also be sold for a nominal fee. Distribution points for the map include: City offices, the library, the community center, local schools, bicycle shops and other recreational retail outlets. In addition, the City should work with Google Maps, OpenStreetMap, and other online map application program interfaces (APIs).

TABLE 8
RECOMMENDED BICYCLE PROGRAMS AND POLICIES

Topic Area	Policy	Details
Enforcement	Enforcement of motorist behavior on City streets	The City should enforce existing traffic laws, targeting behaviors that present a clear hazard to other road users. Behaviors emphasized should include, but not be limited to, moving violations (e.g. speeding and failure to yield), parking violations (e.g. parking in bike lane), and aggressive, impaired and/or distracted driving.
Engineering	Enhance multi-modal connections	The City of Larkspur should work with Golden Gate Transit and Marin County Transit District to continue to expand bicycle access to buses. Bicycle travel to transit stops and stations should be enhanced in order to make the transfer between bicycle and transit travel as convenient as possible. Key components to enhancing transit-bicycle connections include: providing long-term bicycle parking at transit stops, including covered and secured bike parking such as lockers or bike cages at key bus stops and transfer points; providing educational materials regarding transit and bikes-on-transit, including maps to and from stations and stops. Improvements to bicycle rack capacity on buses will benefit Larkspur cyclists who use Marin Transit and Golden Gate Transit. SMART trains will also have the capability to carry bikes inside its cars.
Engineering	Develop Policy of Installing Bicycle-Calibrated Loop Detectors or Video Detection with Bicycle Zones at Signalized Intersections	The City should develop a policy of installing bicycle-calibrated loop detectors at intersections along designated bike routes as they are repaved. For new installations it is recommended that the City use Type D for lead loops in all regular travel lanes shared with bicycles. Within bike lanes it is recommended that the City install Bicycle Loop Detectors (BLDs) using narrow Type C loops. Where video detection is currently or planned to be in use, it is recommended that the City implement a practice of incorporating additional detection zones for bicycles, especially for intersections with sidepath, wide curb lane or Class II bicycle lane facilities. Video image detection should sense bicycles in all approach lanes and also on the left side of right-turn channelization islands. Some video systems can estimate approach speed, and this capability could be used to extend the green time for slow objects assumed to be bicycles. This policy was included in the 2008 Bicycle and Pedestrian Plan.
Engineering	Apply pavement stenciling to	All detector loops and video detection areas expected to be used by cyclists should be marked by a

TABLE 8 RECOMMENDED BICYCLE PROGRAMS AND POLICIES		
Topic Area	**Policy**	**Details**
	indicate detection areas	pavement stencil such as the Caltrans Standard Plan A24C bicycle detection marking that shows cyclists where to stop to activate the loop or video detection. Educational materials distributed by the City should describe how to activate bicycle detectors. Stencils should be repainted as needed by the City along with other roadway markings. This policy was included in the 2008 Bicycle and Pedestrian Plan.
Engineering	Ensure that all existing loops and video detection devices are calibrated and operable for bicycle users	Detector loops and video detection devices can facilitate faster and more convenient motorist trips, but if they aren't calibrated properly or stop functioning, they can frustrate cyclists waiting for signals to change, unaware that their bicycle is not being detected. This policy was included in the 2008 Bicycle and Pedestrian Plan.
Engineering	Intersection and bikeway spot improvement program	The City should ensure that a mechanism exists to evaluate the bikeway network, to alleviate potential hazards and to improve conditions for bicyclists at specific intersections and locations. Training should be provided if necessary to ensure that public works employees recognize bicycle hazards such as: • Improperly designed or placed drainage grates • Cracks or seams in the pavement • Overhanging tree limbs or other obstacles located along bikeways • Areas where lane changes are difficult (e.g., bicycle lane to left-turn pocket) • Signal timing problems (e.g. green phase too short) • Locations where motor vehicle traffic blocks bike facilities on a regular basis
Engineering	Traffic calming measures	Traffic calming programs are beneficial for bicyclists, especially if programs succeed in reducing the speed differential between automobile and bicyclist travel speeds. Physical traffic calming solutions should take into account cyclists' needs; incorporate design features and signage that ensure that cyclists and motorists have enough room to share the lane; and clearly establish right-of-way priorities. The City of Larkspur should adopt a traffic calming

TABLE 8
RECOMMENDED BICYCLE PROGRAMS AND POLICIES

Topic Area	Policy	Details
		program that identifies roadways with a history of unsafe motor vehicle operations, roadway configurations that encourage speeding, poor delineation of pedestrian crossings, and other potential bicycle- and pedestrian-related safety issues. Traffic calming should also be targeted on recommended Class III routes, particularly for those routes identified as enhanced "bicycle boulevards." Once identified, the traffic calming program should provide a toolbox of potential countermeasures, and designate a clear process for implementing traffic calming measures.
Maintenance	Develop a funding source for the bicycle maintenance program	Bikeways are an integral part of Larkspur's transportation network, and maintenance of the bikeway network should be part of the ongoing maintenance program for all city transportation facilities. As such, bikeway network maintenance should be adequately funded. In addition to maintenance funds from general revenue, the City may also want to consider pursuing other methods of securing funding for bikeway and pathway maintenance. Examples of alternative funding include "adopt-a-trail" programs, implementing recreational fees on the purchase of recreational equipment in the city, project-specific fundraising, and the sale of city-developed bicycle maps. The Transportation Authority of Marin has undertaken development of maintenance strategies for countywide pathways which may provide insights into development of a similar program for bikeways in Larkspur.
Maintenance	Integrate bikeway maintenance into DPW maintenance requests	In the future, all printed and online bicycle education materials and maps should include the Department of Public Works maintenance request website and phone number.
Planning and Evaluation	Provide recommendations in planning of regional routes	Work with City staff to prioritize and identify next steps for the MV-CM B/P Corridor Study & the B/P Plan.
Planning and Evaluation	Periodically analyze bicycle collision data	The City should evaluate bicycle collision data on an annual basis to determine if any specific intersection locations appear to have higher collision rates that could be due to design problems.

TABLE 9
RECOMMENDED ACTIVE TRANSPORTATION (PEDESTRIAN AND BICYCLE) PROGRAMS AND POLICIES

Topic Area	Policy	Details
Bylaw	Provide accessible detours.	Condition construction projects on implementation of the City of Larkspur's construction detour policy, which ensures that pedestrians and cyclists are provided safe temporary detours around construction or road maintenance sites.
Education	Educate all travelers on road-sharing.	The City should continue to partner with TAM on implementing the Street Smarts Marin program in Larkspur. The campaign targets motorist, bicyclist and pedestrian behavior and educates the public on safe conduct through banners and signs.
Education	Educate and engage youth	Partnering with local student groups can provide youth engagement opportunities, bring enthusiasm to projects, and help build community buy-in. Environment-focused groups, such as Larkspur Recreation or the Conservation Corps North Bay, may be natural partners for the goals of increasing active transportation in Larkspur.
Education	Adopt the Marin County Path & Trail Code of Conduct.	The Draft Marin County Path & Trail Code of Conduct (**Appendix D**) is intended to promote safety among all users of shared-use paths. It includes the following high-level provisions: • Be Courteous and Predictable • Don't Block the Trail • Keep Right • Pass on the Left • Give Audible Warning BEFORE Passing • Obey All Traffic Signs and Signals • Use Lights at Night • Keep Animals Safe and Under Control • Have you Outgrown Trails?
Education	Create a Trail Ambassador program	A Trail Ambassador program promotes local stewardship of trails, allowing for targeted maintenance, issue reporting, and assistance with education efforts (e.g. promoting the Marin County Path & Trail Code of Conduct). Partnering with local organizations provides opportunities to staff Larkspur trails on a volunteer basis.
Education	Harness social media	CMPA continues to be active on several social media websites to provide community

TABLE 9
RECOMMENDED ACTIVE TRANSPORTATION (PEDESTRIAN AND BICYCLE) PROGRAMS AND POLICIES

Topic Area	Policy	Details
		members with public safety information, current education and enforcement campaigns, and to encourage the safe use of the roadways and multi-use paths.
Education	Continue and expand existing education programs	Existing school education programs should be continued, and funding for Safe Routes to School programming should be actively supported by City officials. For adult education, the City should work with law enforcement and the Marin County Bicycle Coalition to publicize local adult bicycle education and safety programs, including "Share the Road" and "Street Skills" classes. Larkspur should offer "Bicycle Traffic School" in lieu of fines.
Encouragement	Support community groups and schools.	Create a strong pedestrian culture that welcomes and celebrates walking through: • Supporting local advocacy groups by reaching out to local schools or groups in order to promote pedestrian-related projects and to maximize public-private funding opportunities such as development of walking maps and/or path maintenance. • Supporting bike-to-work and walk-to-work Days by hosting energizer stations and by promoting the events through available media outlets. • Supporting International Walk and Roll to School Day in October through coordinated efforts with Larkspur schools.
Encouragement	Develop web and print information for residents and visitors.	Distribute educational materials that encourage walking and cycling, discuss safety and publicize upcoming workshops. Establish a City webpage containing bicycle and pedestrian safety and access information.
Encouragement	Safe Routes to School	CMPA and the Safe Routes to Schools program will continue to work to encourage children to get to school by walking, bicycling, or carpooling.
Enforcement	Involve law enforcement	CMPA will continue with its commitment to programs such as the Marin Bicycle Collation

TABLE 9
RECOMMENDED ACTIVE TRANSPORTATION (PEDESTRIAN AND BICYCLE) PROGRAMS AND POLICIES

Topic Area	Policy	Details
		and Safe Routes to Schools.
Enforcement	Target enforcement at problem spots	CMPA is committed to conducting targeted enforcement at locations known for noncompliance with traffic laws and at high conflict or high pedestrian- or bicycle-related collision areas. The Department currently targets enforcement of vehicle code violations that are considered as primary collision factors.
Enforcement	Enforcement of motorist behavior on City streets and sidewalks.	The City should enforce existing traffic laws, targeting behaviors that present a clear hazard to other road users. Behaviors emphasized should include, but not be limited to, moving violations (e.g. speeding, failure to yield), parking violations (e.g. parking on the sidewalk), and aggressive, impaired and/or distracted driving.
Engineering	Maintain and improve existing Class I paths	Maintain and improve existing Class I paths, using signs and striping to guide sharing by pedestrians and cyclists. Identify locations where conflicts exist between trail users and use centerlines or physical delineation to separate Class III path users by mode and/or direction of travel.
Engineering	Improve lighting on shared-use paths	Provide consistent illumination along all Class I routes through the installation of pedestrian-scale lighting. Prioritize upgrades around locations where substandard lighting presents a collision or public safety hazard.
Engineering	Implement traffic calming measures	The City of Larkspur should adopt a traffic calming program that identifies roadways with a history of unsafe motor vehicle operations, roadway configurations that encourage speeding, poor delineation of pedestrian crossings, and other potential bicycle- and pedestrian-related safety issues. Traffic calming should also be targeted on recommended Class III routes, particularly for those routes identified as enhanced “bicycle boulevards.” Once identified, the traffic calming program should provide a toolbox of potential countermeasures, and designate a clear process for implementing traffic calming

TABLE 9
RECOMMENDED ACTIVE TRANSPORTATION (PEDESTRIAN AND BICYCLE) PROGRAMS AND POLICIES

Topic Area	Policy	Details
		measures.
Engineering	Targeted speed limit reduction	Consider a 15/20 mph zone speed limit for application in select school zones and active transportation corridors.
Planning and Evaluation	Collaboration between City of Larkspur and CMPA	CMPA will work with Larkspur Department of Public Works to identify areas that could benefit from increased signage, public outreach, education, enforcement and to evaluate the effectiveness of these programs.
Safe Routes to School	Provide enhanced infrastructure near schools and along routes to schools	Identifying and improving routes for children and school staff to walk or bicycle to school is an effective means of reducing morning traffic congestion and addressing safety problems around schools. Enhanced infrastructure may include, but not be limited to, street markings, signage, refuge medians, curb extensions, adjustments to traffic signals, and other safety measures.
Wayfinding	Support wayfinding enhancements along pedestrian and bicycle routes	In collaboration with Marin County, develop informational kiosks that contain details about walking and bicycling in Larkspur. The kiosk may safety information and a facilities map showing pedestrian and bicycle routes, significant destinations, location of bicycle parking facilities, public bathrooms, water fountains, transit stops, and pedestrian and bicycle facilities in neighboring communities.

14. IMPLEMENTATION

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. (P)*

This chapter identifies steps towards implementation of the recommended facilities and programs identified in this plan. Estimated costs for the recommended improvements are provided in the Recommended Active Transportation Section, while funding and financing strategies are included in Appendix B: Funding Sources.

The steps between the network improvements and concepts identified in this Plan and the final completion of the improvements will vary from project to project, but typically include:

1. Adopting the Larkspur Bicycle and Pedestrian Master Plan at Larkspur City Council;
2. Conducting additional public outreach to understand the needs and concerns of residents and business owners in the immediate project area;
3. Preparing feasibility studies for individual projects that include conceptual designs and cost estimates;
4. Securing, as necessary, outside funding and any applicable environmental approvals;
5. Considering the parking needs of businesses and residents in the development of new active transportation facilities;
6. Approving individual projects (by the Larkspur City Council) and commiting to provide for any unfunded portions of project costs;
7. Including project(s) in the City's Capital Improvement Plan;
8. Completing final plans, specifications and estimates;
9. Advertising for bids and awarding of contract(s);
10. Constructing project(s);
11. Monitoring project performance (e.g. through bicycle counts).

* Required Active Transportation Plan component.

APPENDIX A: ATP COMPLIANCE CHECKLIST

The State of California adopted Active Transportation Program (ATP) guidelines that encourage increased use of active modes of transportation, such and bicycling and walking, and provide guidance on the inclusion of specific active transportation plan elements in order to apply for grant funding. The *Larkspur Bicycle and Pedestrian Master Plan* includes the following provisions to fully comply with ATP guidelines:

	TABLE 10 CALIFORNIA ACTIVE TRANSPORTATION PROGRAM (ATP) ACTIVE TRANSPORTATION PLAN CHECKLIST	
	Required Plan Elements	**Location Within this Plan**
(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.	p. 95
(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.	p. 26
(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.	p. 12
(d)	A map and description of existing and proposed bicycle transportation facilities.	p. 19
(e)	A map and description of existing and proposed end-of-trip bicycle parking facilities.	p. 30
(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.	p. 46
(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, 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.	p. 33
(h)	A map and description of existing and proposed pedestrian facilities at major transit hubs. These must include, but are not limited to, rail and transit terminals, and ferry docks and landings.	p. 33

	TABLE 10 CALIFORNIA ACTIVE TRANSPORTATION PROGRAM (ATP) ACTIVE TRANSPORTATION PLAN CHECKLIST	
	Required Plan Elements	**Location Within this Plan**
(i)	A description of proposed signage providing wayfinding along bicycle and pedestrian networks to designated destinations.	p. 88
(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, freedom from encroaching vegetation, maintenance of traffic control devices including striping and other pavement markings, and lighting.	p. 46
(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 accidents involving bicyclists and pedestrians.	p. 28
(l)	A description of the extent of community involvement in development of the plan, including disadvantaged and underserved communities.	p. 8
(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 plans, including, but not limited to, general plans and a Sustainable Community Strategy in a Regional Transportation Plan.	p. 10
(n)	A description of the projects and programs proposed in the plan and a listing of their priorities for implementation, including the methodology for project prioritization and a proposed timeline for implementation.	p. 35 & 46
(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.	p. 61
(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.	p. 58
(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.	p. 97

APPENDIX B: FUNDING SOURCES

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. (O)*

Over the past ten years (2006 to 2015, inclusive), the City of Larkspur has invested approximately $2.85 million on active transportation improvements. These expenditures have included the following projects, most of which serve both pedestrians and bicyclists:

CITY OF LARKSPUR ACTIVE TRANSPORTATION PROJECTS, 2006-2015		
Project	**Construction Cost**	**Total Cost**
Doherty Drive Bridge Multi-Use Path	$700,000	$840,000
Doherty Drive Multi-Use Path	$915,000	$1,098,000
Wooden Bridge at E Sir Francis Drake Boulevard	$133,000	$159,600
Sandra Marker Trail	$250,000	$300,000
Doherty to Heatherwood Park Multi-Use Path	$65,000	$78,000
Redwood Hwy Improvement	$100,000	$120,000
Sharrows and Striping improvements City Wide	$150,000	$180,000
Resurfacing of Bike Paths Citywide	$65,000	$78,000
Total	**$2,378,000**	**$2,853,600**

In addition to these City-led projects, three other significant regionally- or privately-sponsored projects have been funded and constructed within Larkspur City limits:

1. Cal Park Hill Tunnel
2. Central Marin Ferry Connection Multi-Use Pathway
3. Rose Lane development Multi-Use Pathway on Doherty Drive (developer-funded at approximately $384,000)

This chapter provides information on potential funding sources for bicycle and pedestrian improvements. Federal, state and local government agencies invest billions of dollars every year in the nation's transportation system. Only a fraction of that funding is used for projects that improve conditions for pedestrians and bicyclists. Even though appropriate funds are limited, they are available. To support agency efforts to find outside funding sources to implement bicycle and pedestrian improvements, a summary by source type is provided below. The types of funding sources reviewed include Federal, State, Regional & Local, and Private.

* Required Active Transportation Plan component.

FEDERAL FUNDING SOURCES

MOVING AHEAD FOR PROGRESS IN THE TWENTY-FIRST CENTURY (MAP-21)

The largest source of federal funding for bicycle and pedestrian projects is the USDOT Federal-Aid Highway Program, which Congress has reauthorized roughly every six years since passage of the Federal-Aid Road Act of 1916. The latest act, Moving Ahead for Progress in the Twenty-First Century (MAP-21) was enacted in July 2012 as Public Law 112-141. The Act replaces the Safe, Accountable, Flexible, and Efficient Transportation Equity Act – a Legacy for Users (SAFETEA-LU), which was valid from August 2005 - June 2012. SAFETEA-LU contained dedicated programs including Transportation Enhancements, Safe Routes to School, and Recreational Trails, all commonly tapped sources of funding to make active transportation alterations nationwide. MAP-21 combines these programs into a single source called the Transportation Alternatives Program (TAP).

MAP-21 authorizes funding for federal surface transportation programs including highways and transit for the 27 month period between July 2012 and September 2014. A recent congressional bill extended Map-21 authorization through May 2015. It is not possible to guarantee the continued availability of any listed MAP-21 programs or to predict their future funding levels or policy guidance. Nevertheless, many bicycle and pedestrian transportation improvements programs have been included in some form since the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 and thus may continue to provide capital for active transportation projects and programs.

In California, federal monies are administered through the California Department of Transportation (Caltrans). Most, but not all, of these programs are oriented toward transportation versus recreation, with an emphasis on reducing auto trips and providing inter-modal connections. Federal funding is intended for capital improvements and safety and education programs, and projects must relate to the surface transportation system. There are a number of programs identified within MAP-21 that are applicable to bicycle and pedestrian projects. These programs are discussed on the following pages.

More information: http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm

TRANSPORTATION ALTERNATIVES

Transportation Alternatives Program (TAP) is a new funding source under MAP-21 that consolidates three formerly separate programs under SAFETEA-LU: Transportation Enhancements (TE), Safe Routes to School (SR2S and SRTS), and the Recreational Trails Program (RTP). These funds may be used for a variety of pedestrian, bicycle, and complete street projects including sidewalks, bikeways, multi-use paths, and rail-trails. TAP funds may also be used for selected education and encouragement programming such as Safe Routes to School, despite the fact that TAP does not provide a guaranteed set-aside for this activity as SAFETEA-LU did. MAP-21 provides $85.0 million nationally for the RTP.
Eligible activities under the TAP Program include:

1. **Transportation Alternatives** as defined by Section 1103 (a)(29). This category includes the construction, planning, and design of a range of bicycle and pedestrian infrastructure including "on–road and off–road trail facilities for pedestrians, bicyclists, and other active forms of transportation, including sidewalks, bicycle infrastructure, pedestrian and bicycle signals, traffic calming techniques, lighting and other safety–related infrastructure, and transportation projects to achieve compliance with the Americans with Disabilities Act of 1990." Infrastructure projects and systems that provide "Safe Routes for Non-Drivers" is a new eligible activity.

   More information:
   http://www.fhwa.dot.gov/environment/transportation_enhancements/legislation/map21.cfm

2. **Recreational Trails Program (RTP).** TAP funds may be used to develop and maintain recreational trails and trail-related facilities for both active and motorized recreational trail uses. Examples of trail uses include hiking, bicycling, in-line skating, equestrian use, and other active and motorized uses. These funds are available for both paved and unpaved trails but may not be used to improve roads for general passenger vehicle use or to provide shoulders or sidewalks along roads.

   RTP funds may be used for:

   - Maintenance and restoration of existing trails
   - Purchase and lease of trail construction and maintenance equipment
   - Construction of new trails, including unpaved trails
   - Acquisition or easements of property for trails
   - State administrative costs related to this program (limited to seven percent of a state's funds)
   - Operation of educational programs to promote safety and environmental protection related to trails (limited to five percent of a state's funds)

   Under MAP-21, dedicated funding for the RTP continues at FY2009 levels – roughly $85.0 million annually. California will receive $5,756,189 in RTP funds per federal fiscal year through FY2014.

   More information:
   http://www.fhwa.dot.gov/environment/recreational_trails/funding/apportionments_obligations/recfunds_2009.cfm

3. **Safe Routes to School.** There are two separate Safe Routes to School programs administered by Caltrans. There is the federal program referred to as SRTS, and the state-legislated program referred to as SR2S. Both programs are intended to achieve the same basic goal of increasing the number of children walking and bicycling to school by making it safer for them to do so. All projects must be within two miles of primary or

middle schools (K-8). The Safe Routes to School Program funds active transportation facilities in conjunction with improving access to schools through the Caltrans Safe Routes to School Coordinator. Eligible projects may include:

- **Engineering improvements.** These physical improvements are designed to reduce potential bicycle and pedestrian conflicts with motor vehicles. Physical improvements may also reduce motor vehicle traffic volumes around schools, establish safer and more accessible crossings, or construct walkways, trails or bikeways. Eligible improvements include sidewalk improvements, traffic calming/speed reduction, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle and pedestrian facilities, and secure bicycle parking facilities.

- **Education and Encouragement Efforts.** These programs are designed to teach children safe bicycling and walking skills while educating them about the health benefits, and environmental impacts. Projects and programs may include creation, distribution and implementation of educational materials; safety based field trips; interactive bicycle/pedestrian safety video games; and promotional events and activities (e.g., assemblies, bicycle rodeos, walking school buses).

- **Enforcement Efforts.** These programs aim to ensure that traffic laws near schools are obeyed. Law enforcement activities apply to cyclists, pedestrians and motor vehicles alike. Projects may include development of a crossing guard program, enforcement equipment, photo enforcement, and pedestrian sting operations.

More information: http://www.dot.ca.gov/hq/LocalPrograms/saferoutes/saferoutes.htm

4. **Planning, designing, or constructing roadways within the right-of-way of former Interstate routes or divided highways.** At the time of writing, detailed guidance from the Federal Highway Administration on this new eligible activity was not available.

Average annual funds available through TAP over the life of MAP-21 equal $814 million nationally, which is based on a 2% set-aside of total MAP-21 authorizations. Projected MAP-21 apportionments for California total $3,546,492,430 for FY2013 and $3,576,886,247 for FY2014 *(http://www.fhwa.dot.gov/MAP21/funding.cfm)*. The 2% set-aside for TAP funds in California will be about $71,000,000 for the next two fiscal cycles. State DOTs may elect to transfer up to 50% of TAP funds to other highway programs, so the amount listed above represents the maximum potential funding. TAP funds are typically allocated through MPOs and require a 20% local match.

SURFACE TRANSPORTATION PROGRAM

The Surface Transportation Program (STP) provides states with flexible funds which may be used for a variety of highway, road, bridge, and transit projects. A wide variety of bicycle and pedestrian improvements are eligible, including on-street bicycle facilities, off-street trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities. Modification of sidewalks to comply with the requirements of the Americans with Disabilities Act

(ADA) is also an eligible activity. Unlike most highway projects, STP-funded bicycle and pedestrian facilities may be located on local and collector roads which are not part of the Federal-aid Highway System. 50% of each state's STP funds are sub-allocated geographically by population. These funds are funneled through Caltrans to the MPOs in the state. The remaining 50% may be spent in any area of the state.

More information:
http://www.dot.ca.gov/hq/transprog/federal/rstp/Official_RSTP_Web_Page.htm

HIGHWAY SAFETY IMPROVEMENT PROGRAM

MAP-21 doubles the amount of funding available through the Highway Safety Improvement Program (HSIP) relative to SAFETEA-LU. HSIP provides $2.4 billion nationally for projects and programs that help communities achieve significant reductions in traffic fatalities and serious injuries on all public roads, bikeways, and walkways. MAP-21 preserves the Railway-Highway Crossings Program within HSIP but discontinues the High-Risk Rural Roads Program unless safety statistics demonstrate that fatalities are increasing on these roads. HSIP is a data-driven funding program, and eligible projects must be identified through analysis of crash experience, crash potential, crash rate, or other similar metrics. Infrastructure and non-infrastructure projects are eligible for HSIP funds. Bicycle and pedestrian safety improvements, enforcement activities, traffic calming projects, and crossing treatments for active transportation users in school zones are examples of eligible projects. All HSIP projects must be consistent with the state's Strategic Highway Safety Plan.

More information:
http://www.dot.ca.gov/hq/traffops/survey/SHSP/SHSP_Final_Draft_Print_Version.pdf

PILOT TRANSIT-ORIENTED DEVELOPMENT PLANNING

MAP-21 establishes a new pilot program to promote planning for Transit-Oriented Development. At the time of writing, the details of this program are not fully clear; although, the bill text states that the Secretary of Transportation may make grants available for the planning of projects that seek to "facilitate multimodal connectivity and accessibility," and "increase access to transit hubs for pedestrian and bicycle traffic."

TRANSPORTATION INVESTMENTS GENERATING ECONOMIC RECOVERY

The Transportation Investment Generating Economic Recovery (TIGER Discretionary Grant Program) provides a unique opportunity for the U.S. Department of Transportation to invest in road, rail, transit and port projects that promise to achieve critical national objectives. The U.S. Congress has dedicated more than $4.1 billion to the program since inception: $1.5 billion for TIGER I, $600.0 million for TIGER II, $526.9 million for FY2011, $500.0 million for FY2012, $473.8 million for FY2013, and $600.0 million for the FY2014 round to fund projects that have a significant impact on the nation, a region or a metropolitan area. The TIGER Discretionary Grant Program's highly competitive process, galvanized by tremendous applicant interest, has allowed USDOT to fund 271 innovative capital projects throughout the nation. Each project is multi-modal, multi-jurisdictional or otherwise challenging to fund through existing programs. The

TIGER Discretionary Grant Program enables USDOT to use a rigorous process to select projects with exceptional benefits, explore ways to deliver projects faster and save on construction costs, and make investments in the nation's infrastructure that make communities more livable and sustainable. Many awards have been made to construct bicycle and pedestrian infrastructure, including projects in Atlanta, GA, Birmingham, AL, Fresno, Indianapolis, IN, and Philadelphia, PA.

PARTNERSHIP FOR SUSTAINABLE COMMUNITIES

Founded in 2009, the Partnership for Sustainable Communities is a joint project of the Environmental Protection Agency (EPA), the U.S. Department of Housing and Urban Development (HUD), and the U.S. Department of Transportation (USDOT). The partnership aims to "improve access to affordable housing, provide more transportation options, and lower transportation costs while protecting the environment in communities nationwide." The Partnership is based on five Livability Principles, one of which explicitly addresses the need for bicycle and pedestrian infrastructure - "Provide more transportation choices: Develop safe, reliable, and economical transportation choices to decrease household transportation costs, reduce our nation's dependence on foreign oil, improve air quality, reduce greenhouse gas emissions, and promote public health." The Partnership is not a formal agency with a regular annual grant program. Nevertheless, it is an important effort that has already led to some new grant opportunities (including the TIGER grants). MCOG and Caltrans should track Partnership communications and be prepared to respond proactively to announcements of new grant programs.

More information: http://www.epa.gov/smartgrowth/partnership/

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM

The Rivers, Trails and Conservation Assistance Program (RTCA) is the community assistance arm of the National Park Service. RTCA provides technical assistance to communities in order to preserve open space and develop trails. The assistance that RTCA provides is not for infrastructure, but rather building plans, engaging public participation, and identifying other sources of funding for conversation and outdoor recreation projects.

More information: http://www.nps.gov/pwro/rtca/who-we-are.htm

COMMUNITY DEVELOPMENT BLOCK GRANTS

The Community Development Block Grants (CDBG) program provides money for streetscape revitalization, which may be largely comprised of pedestrian improvements. Federal CDBG grantees may "use Community Development Block Grant funds for activities that include (but are not limited to): acquiring real property; reconstructing or rehabilitating housing and other property; building public facilities and improvements, such as streets, sidewalks, community and senior citizen centers and recreational facilities; paying for planning and administrative expenses, such as costs related to developing a consolidated plan and managing Community Development Block Grant funds; provide public services for youths, seniors, or the disabled; and initiatives such as neighborhood watch programs." Trails and greenway projects that

enhance accessibility are the best fit for this funding source. CDBG funds could also be used to write ADA Transition Plans.

More information: www.hud.gov/cdbg

COMMUNITY TRANSFORMATION GRANTS

Community Transformation Grants administered through the Centers for Disease Control (CDC) support community–level efforts to reduce chronic diseases such as heart disease, cancer, stroke, and diabetes. Active transportation infrastructure and programs that promote healthy lifestyles are a good fit for this program, particularly if such improvements benefit groups experiencing the greatest burden of chronic disease.

More information: http://www.cdc.gov/communitytransformation/

NATIONAL SCENIC BYWAYS PROGRAM

The Federal Highway Administration (FHWA), part of the USDOT manages the National Scenic Byways Grant Program, which recognizes roads having outstanding scenic, historic, cultural, natural, recreational, and archaeological qualities by providing grants that support projects that manage and protect these roads and improve visitor facilities.

More information: http://www.fhwa.dot.gov/discretionary/2012nsbp.cfm

FEDERAL RECOVERY ACT STATE FISCAL STABILIZATION FUNDING

As part of the Federal Recovery Act of 2009, states will be receiving $53.6 billion in state fiscal stabilization funding. States must use 18.2% of their funding – or $9.7 billion – for public safety and government services. An eligible activity under this section is to provide funding to K-12 schools and institutions of higher education to make repairs, modernize, and make renovations to meet green building standards. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System, developed by the U.S. Green Building Council (USGBC), addresses green standards for schools that include bicycle and pedestrian facilities and access to schools. Another $5.0 billion is provided for the Energy Efficiency and Conservation Block Grant Program. This provides formula funding to cities, counties and states to undertake a range of energy efficiency activities. One eligible use of funding is for bicycle and pedestrian infrastructure.

More information: http://www2.ed.gov/policy/gen/leg/recovery/factsheet/stabilization-fund.html

STATE FUNDING SOURCES

ACTIVE TRANSPORTATION PROGRAM

With the consolidation of federal funding sources in MAP-21, the California State Legislature has moved to consolidate a number of state-funded programs centered on active transportation into a single program. The resulting Active Transportation Program (ATP) will consolidate the federal programs, Bicycle Transportation Account, the Safe Routes to Schools Program, and the Recreational Trails Program. The ATP's authorizing legislation (signed into law by the Governor on September 26, 2013) also includes placeholder language to allow the ATP to receive funding from the newly established Cap-and-Trade Program in the future. The Statewide Competitive ATP will have $180 million available statewide for the 2014/2015 and 2015/2016 fiscal cycles. The Regional Competitive ATP will have $30 million available for the Metropolitan Transportation Commission (MTC) region 2014/2015 and 2015/2016 fiscal cycles. The California Transportation Commission writes guidelines and allocates funds for the ATP, while the ATP will be administered by the Caltrans Division of Local Assistance. Goals of the ATP are currently defined as the following:

1) Increasing the proportion of trips accomplished by biking and walking;
2) Increasing safety and mobility for active transportation users;
3) Advancing active transportation efforts of regional agencies to achieve the greenhouse gas reduction goals;
4) Enhancing public health;
5) Ensuring that disadvantaged communities fully share in the benefit of the program; and,
6) Providing a broad spectrum of projects to benefit many types of active transportation users.

More information: http://www.dot.ca.gov/hq/LocalPrograms/atp/index.html

STATE HIGHWAY OPERATIONS & PROTECTION PROGRAM

The State Highway Operations and Protection Program (SHOPP) is a four year program that funds projects on the state highway system to maintain and preserve the asset. The program is primarily funded by federal highway trust funds. The federal funds that make up the SHOPP are National Highway Performance Program (NHPP), the Surface Transportation Program (STP), and the Highway Safety Improvement Program (HSIP). The new federal act, Moving Ahead for Progress in the 21st Century (MAP-21), requires that the states implement targets based on performance measures that will be forthcoming. This will dictate how funds need to be programmed based on meeting the targets. The emphasis of the federal bill is to maintain and/or improve the current asset condition and to address the safety needs. The cycle includes identification of rehabilitation and reconstruction needs in the ten year plan, the estimation of available funding in the fund estimate, and finally a financially-constrained portfolio of projects in the four-year SHOPP. As required by statutes, the SHOPP is updated every two years. The SHOPP project funding process is internal to Caltrans. SHOPP projects are originally scoped through the ten year SHOPP plan process. The ten year SHOPP plan has a fiscally-

constrained list of program areas that have specific estimated amounts of funding. The determination of the balance of funds for each of the areas is based on federal funding programs, priorities as agreed between the Caltrans and the CTC, and direction from the Caltrans SHOPP Executive Committee. The priorities are:

1. Collision reduction, major damage restoration, and mandates such as ADA and storm water management
2. Pavement, bridge, roadside, and facility preservation
3. Mobility

There is clearly not enough funding to fund the SHOPP needs and thus each category has constrained funding.

More information:
http://www.dot.ca.gov/hq/transprog/SHOPP/2014%20SHOPP/SHCC%20SHOPP%20issue%20paperpdf.pdf

CALTRANS PLANNING GRANTS

Caltrans also administers the Transportation Planning Grant Program that funds projects to improve mobility. In the past year, Caltrans awarded $10.0 million in grant funding to 70 applicants, in two sub-categories: Environmental Justice grants and Community Based Transportation Plan grants.

More information: http://www.dot.ca.gov/hq/tpp/grants.html

ENVIRONMENTAL JUSTICE GRANT PROGRAM

The Environmental Justice (EJ) Grant Program promotes the involvement of low-income, minority communities, and Native American tribal governments in the planning for transportation projects. EJ grants have a clear focus on transportation and community development issues to prevent or mitigate disproportionate, negative impacts while improving mobility, access, safety, and opportunities for affordable housing and economic development. Grants are available to cities, counties, transit districts, and tribal governments.

More information: http://www.dot.ca.gov/hq/tpp/offices/ocp/completed_projects_ej.html

COMMUNITY BASED TRANSPORTATION PLANNING GRANT PROGRAM

The Community Based Transportation Planning (CBTP) grant program promotes transportation and land use planning projects that encourage community involvement and partnership. These grants include community and key stakeholder input, collaboration, and consensus building through an active public engagement process. CBTP grants support livable and sustainable community concepts with a transportation or mobility objective to promote community identity and quality of life.

More information: http://www.dot.ca.gov/hq/tpp/offices/ocp/completed_projects_cbtp.html

PETROLEUM VIOLATION ESCROW ACCOUNT

In the late 1970s, a series of federal court decisions against selected United States oil companies ordered refunds to the states for price overcharges on crude oil and refined petroleum products during a period of price control regulations. To qualify for Petroleum Violation Escrow Account (PVEA) funding, a project must save or reduce energy and provide a direct public benefit within a reasonable time frame. In the past, the PVEA has been used to fund programs based on public transportation, computerized bus routing and ride sharing, home weatherization, energy assistance and building energy audits, highway and bridge maintenance, and reducing airport user fees. In California, Caltrans Division of Local Assistance administers funds for transportation-related PVEA projects. PVEA funds do not require a match and can be used as match for additional federal funds.

More information: www.dot.ca.gov/hq/LocalPrograms/lam/prog_g/g22state.pdf

OFFICE OF TRAFFIC SAFETY GRANTS

The Office of Traffic Safety (OTS) distributes grants statewide to establish new traffic safety programs or fund ongoing safety programs. OTS grants are supported by federal funding under the National Highway Safety Act and MAP-21. Grants are used to establish new traffic safety programs, expand ongoing programs or address deficiencies in current programs. Bicycle safety is included in the list of traffic safety priority areas. Eligible grantees are governmental agencies, state colleges, state universities, local city and county government agencies, school districts, fire departments, and public emergency services providers. Grant funding cannot replace existing program expenditures, nor can traffic safety funds be used for program maintenance, research, rehabilitation, or construction. Grants are awarded on a competitive basis, and priority is given to agencies with the greatest need. Evaluation criteria to assess need include potential traffic safety impact, collision statistics and rankings, seriousness of problems, and performance on previous OTS grants. The California application deadline is January of each year. There is no maximum cap to the amount requested; however, all items in the proposal must be justified to meet the objectives of the proposal.

More information: http://www.ots.ca.gov/Grants/Apply/default.asp

ENVIRONMENTAL ENHANCEMENT AND MITIGATION FUNDS

The Environmental Enhancement Mitigation Program (EEMP) provides grant opportunities for projects that indirectly mitigate environmental impacts of new transportation facilities. Projects should fall into one of the following three categories: highway landscaping and urban forestry, resource lands projects, or roadside recreation facilities. Funds are available for land acquisition and construction. The local Caltrans district must support the project. The average award amount is $250,000.

More information: http://www.dot.ca.gov/hq/LocalPrograms/EEM/homepage.htm

LAND AND WATER CONSERVATION FUND

The Land and Water Conservation Fund is a federal program that provides grants for planning and acquiring outdoor recreation areas and facilities, including trails. The fund is administered by the California State Parks Department. Cities, counties, and districts authorized to acquire and develop park and recreation space are eligible for grant funding. While non-profits are ineligible, they are allowed to apply in partnerships with eligible agencies. Applicants must fund the project entirely and will be reimbursed for half of the cost. Up to $2.0 million was available in California in the 2012 round of grant funding.

More Information: http://www.parks.ca.gov/?Page_id=21360

CALIFORNIA STRATEGIC GROWTH COUNCIL

The Strategic Growth Council is a state agency that manages the Sustainable Communities Planning Grant and Incentives Program, as well as the Affordable Housing and Sustainable Communities (AHSC) program. The first program provides grants for development and implementation of plans that lead to significant reductions in greenhouse gas emissions, improve air and water quality, promote public health, promote equity, increase housing affordability, increase infill and compact development, revitalize urban and community centers, protect natural resources and agricultural lands, reduce automobile usage and fuel consumption, improve infrastructure systems, promote water conservation, promote energy efficiency and conservation, and strengthen the economy. The second program provides funding for land use, housing, transportation, and land preservation projects to support infill and compact development that reduces greenhouse gas emissions.

More information: http://sgc.ca.gov/m_grants.php

CLIMATE READY GRANT PROGRAM - CALIFORNIA STATE COASTAL CONSERVANCY

Climate Ready grants are intended to encourage local governments and non-governmental organizations to advance planning and implementation of on-the-ground actions that reduce greenhouse gas emissions and lessen the impacts of climate change on California's coastal communities. The grant program makes eligible "development of multi-use trails with clearly identified greenhouse gas (GHG) reduction goals; (and) protecting and managing open space lands with clearly identified GHG reduction goals." A total of $1,500,000 is available on a competitive basis, with a minimum award of $50,000 and a maximum of $200,000. The size of awarded grants will be based on each project's needs, its overall benefits, and the extent of competing demands for funds. Applications were due November 17, 2014. It is not clear whether additional application solicitations will be made.

More information: http://scc.ca.gov/webmaster/pdfs/Climate_Ready_Announcement3.pdf

REGIONAL & LOCAL FUNDING SOURCES

DEVELOPER IMPACT FEES

As a condition for development approval, municipalities can require developers to provide certain infrastructure improvements, which can include bikeway projects. These projects have commonly provided Class II facilities for portions of on-street, previously-planned routes. They can also be used to provide bicycle parking or shower and locker facilities. The type of facility that should be required to be built by developers should reflect the greatest need for the particular project and its local area. Legal challenges to these types of fees have resulted in the requirement to illustrate a clear nexus between the particular project and the mandated improvement and cost.

ROADWAY CONSTRUCTION, REPAIR AND UPGRADE

Future road widening and construction projects are one means of providing improved pedestrian and bicycle facilities. To ensure that roadway construction projects provide these facilities where needed, it is important that the review process includes input pertaining to consistency with the proposed system. In addition, California's 2008 Complete Streets Act and Caltrans's Deputy Directive 64 require that the needs of all roadway users be considered during "all phases of state highway projects, from planning to construction to maintenance and repair."

More information: http://www.dot.ca.gov/hq/tpp/offices/ocp/complete_streets.html

UTILITY PROJECTS

By monitoring the capital improvement plans of local utility companies, it may be possible to coordinate upcoming utility projects with the installation of bicycle and pedestrian infrastructure within the same area or corridor. Often times, the utility companies will mobilize the same type of forces required to construct bikeways and sidewalks, resulting in the potential for a significant cost savings. These types of joint projects require a great deal of coordination, a careful delineation of scope items and some type of agreement or memorandum of understanding, which may need to be approved by multiple governing bodies.

CABLE INSTALLATION PROJECTS

Cable television and telephone companies sometimes need new cable routes within public right-of-way. Recently, this has most commonly occurred during expansion of fiber optic networks. Since these projects require a significant amount of advance planning and disruption of curb lanes, it may be possible to request reimbursement for affected bicycle facilities to mitigate construction impacts. In cases where cable routes cross undeveloped areas, it may be possible to provide for new bikeway facilities following completion of the cable trenching, such as sharing the use of maintenance roads.

MARIN COUNTY MEASURE A

A one-quarter cent retail transactions and use tax passed as Measure A in November 2012 to care for Marin's existing parks and open spaces, support regional community parks projects and programs, and further farmland preservation. An expenditure plan guides the use of the funds, as follows:

- 65 percent will be used by Marin County Parks to restore natural resources, maintain county parks and open space preserves, restore and improve public access, and protect natural lands.

- 20 percent will be dedicated to saving family farms and ranches through the purchase of agricultural conservation easements in voluntary transactions and landowners.

- 15 percent will be used by cities, towns, and applicable special districts to enhance and manage parks, nature preserves, recreation programs, and vegetation to reduce wildfire risk.

Several grant programs have been established to distribute funds including the Breathe/Respira Community Grant Program, Marin County Park and Open Space Program, and the City, Town, and Special District Program.

More information: http://www.marincountyparks.org/depts/pk/about-us/main/measurea

BAAQMD GRANTS

The Bay Area Air Quality Management District (BAAQMD) established several grant programs aimed at reducing emissions of oxides of nitrogen, reactive organic gasses, and particulate matter.

- Transportation Fund for Clean Air (TFCA) – provides grants to projects that implement the most cost-effective projects in the Bay Area that will decrease motor vehicle emissions, and thereby improve air quality. Projects must be consistent with the 1988 California Clean Air Act and the Bay Area Ozone Strategy.

- Environmental Justice Small Grants Program – provides up to $20,000 in grants to eligible community-based grassroots organizations and federally recognized tribal governments that are located in areas adversely affected by environmental pollution and hazards and are involved in addressing environmental justice concerns.

More information: http://www.baaqmd.gov/Divisions/Strategic-Incentives/Funding-Sources.aspx

MTC GRANTS

The OneBayArea Grant Program (OBAG) established program commitments and policies for investing roughly $800 million over the four-year Cycle 2 period (FY's 2012-13 through 2015-16), funded by federal funds authorized by Congress in Moving Ahead for Progress in the 21st Century (MAP 21).

OBAG is a new funding approach that integrates the region's federal transportation program with California's climate law (Senate Bill 375, Steinberg, 2008) and the Sustainable Communities Strategy. Funding distribution to the counties will consider progress toward achieving local land use and housing policies by:

- Rewarding jurisdictions that accept housing allocations through the Regional Housing Need Allocation (RHNA) process and produce housing using transportation dollars as incentives.

- Supporting the Sustainable Communities Strategy for the Bay Area by promoting transportation investments in Priority Development Areas (PDAs) and by initiating a pilot program that will support open space preservation in Priority Conservation Areas (PCAs)

- Providing a higher proportion of funding to local agencies and additional investment flexibility by eliminating required program investment targets. The OBAG program allows flexibility to invest in transportation categories such as Transportation for Livable Communities, bicycle and pedestrian improvements, local streets and roads preservation, and planning activities, while also providing specific funding opportunities for Safe Routes to Schools (SR2s) and Priority Conservation Areas.

More information: http://www.mtc.ca.gov/funding/onebayarea/

PRIVATE FUNDING SOURCES

Private funding sources can be acquired by applying through the advocacy groups such as the League of American Bicyclists and the Bikes Belong Coalition. Most of the private funding comes from foundations seeking to enhance and improve bicycle facilities and advocacy. Grant applications will typically be through the advocacy groups as they leverage funding from federal, state and private sources. Following are several examples of private funding opportunities available.

PEOPLEFORBIKES COMMUNITY GRANT PROGRAM

PeopleForBikes is a coalition of bicycle suppliers and retailers that has awarded $2.5 million in grants and leveraged an additional $650.0 million since its inception in 1999. The program funds small corridor improvements, mountain bike trails, BMX parks, trail, and park access. PeopleForBikes also administers the Green Lane Project, which is a technical support and peer exchange program for U.S. cities working on the installation of protected bicycle lanes and cycle tracks. PeopleForBikes is funded through private donations.

More information: http://www.peopleforbikes.org/pages/community-grants

BANK OF AMERICA CHARITABLE FOUNDATION, INC.

The Bank of America Charitable Foundation is one of the largest in the nation. The primary grant program is called Neighborhood Excellence, which seeks to identify critical issues in local communities. Another program that applies to greenways is the Community Development Program, and specifically the Program Related Investments subcategory. This program targets low- and moderate-income communities and seeks to encourage entrepreneurial business development.

More information: http://www.bankofamerica.com/foundation

THE ROBERT WOOD JOHNSON FOUNDATION

The Robert Wood Johnson Foundation was established as a national philanthropy in 1972, and today, it is the largest U.S. foundation devoted to improving the health and health care of all Americans. Grant making is concentrated in four areas:

- To assure that all Americans have access to basic health care at a reasonable cost
- To improve care and support for people with chronic health conditions
- To promote healthy communities and lifestyles
- To reduce the personal, social and economic harm caused by substance abuse: tobacco, alcohol, and illicit drugs

More information: http://www.rwjf.org/applications/

THE WAL-MART FOUNDATION

The Wal-Mart Foundation offers a Local, State, and National Giving Program. The Local Giving Program awards grants of $250 to $5,000 through local Wal-Mart and Sam's Club Stores. Application opportunities are announced annually in February with a final deadline for applications in December. The State Giving Program provides grants of $25,000 to $250,000 to 501c3 nonprofits working within one of five focus areas: Hunger Relief & Nutrition, Education, Environmental Sustainability, Women's Economic Empowerment, or Workforce Development. The program has two application cycles per year: January through March and June through August. The Wal-Mart Foundation's National Giving Program awards grants of $250,000 and more, but does not accept unsolicited applications.

More information: http://foundation.walmart.com/apply-for-grants

THE KODAK AMERICAN GREENWAYS PROGRAM

The Conservation Fund's American Greenways Program has teamed with the Eastman Kodak Corporation and the National Geographic Society to award small grants ($250 to $2,000) to stimulate the planning, design and development of greenways. These grants can be used for activities such as mapping, conducting ecological assessments, surveying land, holding conferences, developing brochures, producing interpretive displays, incorporating land trusts, and building trails. Grants cannot be used for academic research, institutional support, lobbying or political activities.

More information: http://www.conservationfund.org

COMMUNITY ACTION FOR A RENEWED ENVIRONMENT (CARE)

CARE is a competitive grant program that offers an innovative way for a community to organize and take action to re-duce toxic pollution in its local environment. Through CARE, a community creates a partnership that implements solutions to reduce releases of toxic pollutants and minimize people's exposure to them. By providing financial and technical assistance, EPA helps CARE communities get on the path to a renewed environment. Transportation and "smart-growth" types of projects are eligible. Grants range between $90,000 and $275,000.

More information: http://www.epa.gov/care/

CORPORATE DONATIONS

Corporate donations are often received in the form of liquid investments (i.e. cash, stock, bonds) and in the form of land. Employers recognize that creating places to bike and walk is one way to build community and attract a quality work force. Bicycling and outdoor recreation businesses often support local projects and programs. Municipalities typically create funds to facilitate and simplify a transaction from a corporation's donation to the given municipality. Donations are

mainly received when a widely supported capital improvement program is implemented. Such donations can improve capital budgets and/or projects.

OTHER FUNDING SOURCES

Local sales taxes, fees and permits may be implemented as new funding sources for pedestrian and bicycling projects, such as Measure A approved by voters in 2004. However, any of these potential sources would require a local election. Volunteer programs may be developed to substantially reduce the cost of implementing some routes, particularly multi use paths. For example, a local college design class may use such a multi-use route as a student project, working with a local landscape architectural or engineering firm. Work parties could be formed to help clear the right of way for the route. A local construction company may donate or discount services beyond what the volunteers can do. A challenge grant program with local businesses may be a good source of local funding, in which the businesses can "adopt" a route or segment of one to help construct and maintain it.

APPENDIX C: MUNICIPAL CODE

MUNICIPAL CODE - BICYCLE POLICIES

CHAPTER 10.12 ENFORCEMENT AND OBEDIENCE

Section 10.12.050 - Persons Riding Bicycles or Animals - Applicability

Every person riding a bicycle or riding or driving an animal upon the street or highway has all of the rights and shall be subject to all of the duties applicable to the driver of a vehicle by this title, except those provisions which by their very nature can have no application. (Ord. 526 § 1 (part), 1975)

Chapter 10.20 Bicycle License Regulations

Section 10.20.010 - License Required

No person shall operate or use a bicycle propelled wholly or in part by muscular power upon any street or public highway of the City without first obtaining from the Police Department a license therefor. (Ord. 526 § 1 (part), 1975)

Section 10.20.020 - Issuance

The police department is hereby authorized and directed to issue, upon written application, bicycle licenses, which shall be effective for one calendar year. All such licenses shall be dated January 1st of the year issued. When issued, such licenses shall entitle the licensee to operate such bicycle for which the license has been issued, upon all the streets and public highways, in the city. (Ord. 526 § 1 (part), 1975)

Section 10.20.030 - License Decal

The city shall provide a decal each year, together with registration cards. Said decal license and registration cards shall have numbers stamped thereon in numerical order, beginning with Number 1, and shall indicate the year for which they are issued. It shall be the duty of the police department to attach one such decal license to the frame of each bicycle and issue a corresponding registration card to the licensee upon the payment of the license fee. Such decal license shall remain attached during the valid period of such license. The police department shall keep a record of the date of issuance of each license, the person to whom issued and the number thereof. (Ord. 526 § 1 (part), 1975)

Section 10.20.070 - Removal of Numbers

No person shall willfully or maliciously remove, destroy, mutilate or alter the number of any bicycle frame licensed pursuant to this chapter. (Ord. 526 § 1 (part), 1975)

Section 10.20.080 - Destruction of Plates

No person shall remove, destroy, mutilate or alter any license plate, seal or registration card during the time in which such plate, seal or card is operative. Nothing in this section shall prohibit the police from stamping numbers on the frames of bicycles where no serial number can be found or on which the number is illegible or insufficient for identification purposes. (Ord. 526 § 1 (part), 1975)

Section 10.20.100 – Condition of License

Every license issued pursuant to this chapter shall be deemed to be granted subject to the following conditions:

1. Every person propelling or riding a bicycle upon a public roadway in the City shall be subject to the provisions of all City and state laws applicable to the operator of any vehicle except those provisions with reference to the equipment of vehicles and except those provisions which by their nature would have no application.

2. Every bicycle operated upon the public roadways of the City during any of the time between one-half hour after sunset until one-half hour before sunrise shall be equipped with a lamp firmly attached or affixed on the front of each vehicle, exhibiting a white light visible from a distance of at least three hundred feet to the front and with a lamp on the rear, exhibiting a red light visible from a distance of three hundred feet to the rear, except that the red reflector may be used in lieu of a rear light.

3. Every bicycle when operated upon a public roadway shall be equipped with a brake adequate to control the movement of and to stop such vehicle whenever necessary. Such brake shall be maintained in good working order at all times.

4. Every bicycle when operated on a public roadway shall be kept as close to the right-hand curb or edge as possible.

5. Every person when operating a bicycle upon a public roadway shall ride such bicycle in single file only. At no time shall bicycles be operated two or more abreast.

6. It is unlawful for any person riding a bicycle to cling to or attach himself or his bicycle to any other moving vehicle or street car upon a public roadway.

7. The operator of a bicycle shall not carry another person on the bicycle when operating such bicycle upon any public roadway in the city, nor shall the operator of any such bicycle tow or draw any coaster, sled, person on roller skates, toy vehicle or other similar vehicle on a public roadway.

8. No person operating a bicycle upon a public roadway shall participate in any race, speed or endurance contest with any other vehicle excepting organized racing or endurance contests upon the sponsoring organization first obtaining a permit thereof from the chief of police.

9. No rider of a bicycle shall remove both hands from the handlebars or feet from the pedals, or practice any acrobatic or fancy riding on any public roadway.

10. Every person operating a bicycle upon a public roadway shall stop for all arterial highway and automatic traffic signals and shall observe and obey all other traffic signals and signs.

11. No person shall operate a bicycle upon any public roadway unless it is equipped with either:

a) An amber reflector on each side forward of the center of the bicycle, and a red reflector on each side to the rear of the center of the bicycle;
b) An amber reflector mounted on the outside end of each pedal of said bicycle. Such reflectors shall be visible from a distance of five hundred feet when directly in front of lawful lower beams on a motor vehicle. (Ord. 526 § 1 (part), 1975)

Section 10.20.110 - License suspension
The chief of police shall have authority to suspend the registration of and remove the license tag from any bicycle operated contrary to any city or state law, such suspension and removal to continue for a period not to exceed ten days. Such suspension and removal shall be in addition to other penalties provided by this chapter. Registration cards shall be shown to any police officer on demand or when ordered to appeal for any violation of this chapter. (Ord. 526 § 1 (part), 1975)

Section 10.20.120 - Inspection of Bicycles
Every bicycle in the City shall be inspected and examined prior to registration at the Police Department and any other location designated by the Police Department to ascertain its serial number and mechanical condition. If such bicycle has no serial number, a serial number shall be stamped on the frame of such bicycle by any qualified mechanic, and if such bicycle is not in good mechanical condition, a license may be refused until necessary repairs are made. (Ord. 526 § 1 (part), 1975)

Sections 10.20.40 - Violation - Penalty
Any person violating any provision of this chapter is guilty of an infraction and, upon conviction thereof, shall be punished as specified in Section 1.01.110 of this code. In addition to the aforedescribed penalty, the court upon conviction of any person may prohibit such person from riding a bicycle for a period not to exceed six months and may order such person's license plate and registration card confiscated. (Ord. 723 § 10, 1985; Ord. 526 § 1 (part), 1975)

CHAPTER 10.24 TRAFFIC CONTROL DEVICES

Section 10.24.030 - Obedience to traffic control devices
The operator of any vehicle, train, or bike, or the person in control of any animal or animal-drawn conveyance, shall obey the instructions of any official traffic control device placed in accordance with this ordinance unless otherwise directed by a police officer or other authorized person subject to the exceptions granted the operator of an authorized emergency vehicle when responding to emergency calls. (Ord. 526 § 1 (part), 1975)

Chapter 10.40 DRIVING AND SAFETY RULES

Section 10.40.040 - Use of Coasters, roller skates, bicycles and toy vehicles

a. Bicycles may be ridden on city sidewalks, with the following exceptions:
   1) Magnolia Avenue, from Madrone Avenue to Doherty Drive,
   2) Bon Air Shopping Center,
   3) Bon Air Bridge

Section 10.40.050 - Bicycle and pedestrian lanes
Bicycle and pedestrian lanes are established. The bicycle and pedestrian lanes shall be appropriately signed and it is unlawful for any person to operate or park any motor vehicle (including, without limitation, an automobile, motorcycle, motor scooter and motorized two and three-wheel vehicles) upon the bicycle and pedestrian lanes, except maintenance and emergency vehicles. It is unlawful for any person to ride or walk any horse upon the bicycle and pedestrian lanes. (Ord. 526 § 1 (part), 1975)

CHAPTER 17.12 DEDICATIONS, RESERVATIONS AND EASEMENTS

Section 17.12.090 - Bicycle Paths.

As a condition of approval of the subdivision map, the City shall require dedication of bicycle paths for the use and safety of residents of the subdivision, if the subdivision contains two hundred or more parcels. (Ord. 896 § 2 (part), 1998; Ord. 584 § 1 (part), 1977)

CHAPTER 18.13 TRIP REDUCTION

Section 18.13.040 - Definitions

K. Employer Trip Reduction Program - A group of measures developed and implemented by an employer that are designed to provide transportation information, assistance, and incentives to employees. The purpose of such measures is to reduce the number of motor vehicles driven to the work site by increasing AVR or decreasing VER. An Employer Trip Reduction Program may include, but is not limited to, any or all of the following services, incentives and measures.

5. Bicycle and Pedestrian:
    a. Bicycling financial subsidies or rewards;
    b. Financial subsidy to employees for the purchase of bicycles for commute trip use;
    c. Bicycle lockers or other secure, weather-protected bicycle parking facilities;
    d. Bicycle access to building interior;
    e. Bicycle and/or walking route information;
    f. On-site bicycle registration

6. On-site Facilities/Services:
    a. Employee shower facilities and clothes lockers;
    b. Site modifications that would encourage walking, transit, carpool, vanpool, and bicycle use.

CHAPTER 18.56 OFF STREET PARKING AND LOADING

Section 18.56.140 - Bicycle Parking Requirements

Bicycle parking is required in non-residential zones based upon the following ratios:

A. Ratio.

1. Short-Term Bicycle Parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within two hundred feet of the visitors' entrance, readily visible to passersby, for five percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.

    a. Design and Location. The design and location of bicycle racks shall conform to the following conditions:

        i. Designed so that a bicycle can be backed into the space;

ii. Designed so that both rear wheel and frame can be locked to the bike rack;
ii. Firmly anchored in concrete or by other approved means;
iv. Location shall provide easy access, out of pedestrian and auto traffic, provide space for necessary circulation, and be behind curbing or other barrier so as to prevent vehicular damage.

2. Long-Term Bicycle Parking. For new development with over ten tenant occupants, provide secure bicycle parking for five percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include:

a. Covered, lockable enclosures with permanently anchored racks for bicycles;
b. Lockable bicycle rooms with permanently anchored racks; and
c. Lockable, permanently anchored bicycle lockers. (Ord. 977 § 1(5), 2011; Ord. 857 § 6, 1993; Ord. 513 § 1 (part), 1975)

MUNICIPAL CODE - PEDESTRIAN POLICIES

CHAPTER 10.4 DEFINITIONS

Section 10.4.160 - Pedestrian
"Pedestrian" as any person afoot. (Ord. 526 S 1 (part) 1975)

CHAPTER 10.44 PEDESTRIANS

Section 10.44.1010 - Marked Crosswalks established by traffic engineer

a. The city traffic engineer shall establish, designate and maintain crosswalks at intersections and other places by appropriate devices, marks or lines upon the surface of the roadway.

b. Crosswalks shall be established and maintained at all intersections within the central traffic district and at such intersections outside such district, and at other places within or outside said district where the city traffic engineer determines that there is particular hazard to pedestrians crossing the roadway subject to the limitation contained in subsection (c) of this section.

c. Other than crosswalks at intersections, no crosswalk shall be established in any block which is less than four hundred feet in length and such crosswalk shall be located as nearly as practicable at midblock. (Ord. 526 § 1 (part), 1975)

Section 10.44.020 - Use of crosswalks by pedestrians.
No pedestrian shall cross a roadway other than by a crosswalk in the central traffic district or in any business district. (Ord. 526 § 1 (part), 1975)

Section 10.44.030 - Crossing at right angles
No pedestrian shall cross a roadway at any place other than by a route at right angles to the curb or by the shortest route to the opposite curb, except in a marked crosswalk. (Ord. 526 § 1 (part), 1975)

Section 10.44.040 - Standing in roadways
No person shall stand in any roadway other than in a safety zone or a crosswalk if such action interferes with the lawful movement of traffic. This section shall not apply to any public officer or employee, or employee of a public utility when necessarily upon a street in line of duty. (Ord. 526 § 1 (part), 1975)

APPENDIX D: SHARED-USE PATH AND TRAIL ETIQUETTE

Notifying bicyclists, pedestrians, skaters, equestrians, and other users of acceptable behavior and etiquette is a common issue on a shared-use paths and trails. The purpose of a code of conduct is to promote user safety and enhance enjoyment for all. Yielding the right-of-way is not only a courtesy, but a necessary part of a safe path and trail experience.

EXISTING PATH AND TRAIL RULES

The Marin County Code (2015) includes ordinances for path and trail use and are shown in the table below. Important elements include a) the classification of shared-use paths as "parks," b) the delegation of enforcement to any authorized department employee, official designee or peace officer, and c) the application of the California Vehicle Code.

MARIN COUNTY CODE – TRAILS AND PATHS	
Code Location*	**Code**
10.05.050 - Bicycles	No person shall operate any bicycle or similar vehicle within parks except upon paved roads, fire protection roads, designated bicycle pathways or public roads not signed against such use. Furthermore, no person shall operate or possess any bicycle or similar vehicle elsewhere within parks, including trails, unless signed specifically to permit such operation.
10.05.040 – Speed limits	No person shall operate any land vehicle, including bicycles, at speeds in excess of fifteen miles per hour within parks, unless otherwise posted. No vehicle shall be operated at a speed greater than is reasonable for safe operation, nor in any manner which may endanger the safety of others of the protection of facilities and environmental resources.
10.05.050 – Parking and vehicle removal	No person shall park, leave, abandon, possess or otherwise store any vehicle within parks, except in locations designated for such use. No person shall park any vehicle within parks during periods when parking areas or lands are closed, nor in the following locations: A. Within the traveled portion of any road; B. On any service road or trail; C. In front of any gate; D. On any undisturbed or natural hillside; E. In areas designated for persons with disabilities, unless the person has appropriate authorization; F. In more than one parking space per vehicle; G. Within posted "no parking" areas; H. In a manner that obstructs the use of a boat ramp; I. In any manner obstructing the free flow of traffic. Except in designated overnight parking areas, no person shall park any

MARIN COUNTY CODE – TRAILS AND PATHS	
Code Location*	**Code**
	vehicle for more than twelve consecutive hours. Any enforcement officer mentioned in California Vehicle Code Section 22651 is authorized to remove any vehicle parked in violation of this section.
10.05.060 – California Vehicle Code	Except as otherwise provided in these regulations, the provisions of the California Vehicle Code shall be applicable to the operation of vehicles within parks.
13.24.020 - Compliance with Vehicle Code.	Any person operating a bicycle or motorized bicycle within the County of Marin shall comply with all provisions of the California Vehicle Code which pertain to bicycles and motorized bicycles. The provisions of Section 21201 of the Vehicle Code requiring lighting equipment on highways shall apply to the operation of bicycles on a paved bicycle path or paved multipurpose recreational trail within the County of Marin.
13.24.040 - Multipurpose recreational trails.	Any person operating a bicycle on a multipurpose recreational trail shall yield the right-of-way to pedestrians and horses.
13.24.050 - Use of trails.	a) It shall be unlawful for any person to operate, ride, propel or park a motorized bicycle on any county multipurpose recreational trail or bicycle trail, except the bike paths from: 1. Gate Six in Sausalito to the former Marin County Heliport; 2. The west shoulder of Highway 101 from Lincoln Avenue to Los Ranchitos Road; and 3. The west shoulder of Highway 101 from Miller Creek Road to Alameda Del Prado; and 4. Highway 37 to Hamilton Drive. b) Any motorized bicycle which is authorized to be operated on a multipurpose recreational trail or bicycle trail shall not exceed a maximum speed of fifteen miles per hour on said trail. c) For the purposes of this section, vehicles not registered with the department of motor vehicles being used by and designed primarily for the purpose of assisting persons with disabilities are exempted.
15.53.040 - Enforcement.	Any employee of the Marin County fire department or any other duly constituted public agency having jurisdiction over a fire trail or

MARIN COUNTY CODE – TRAILS AND PATHS	
Code Location*	**Code**
	hiking trail, shall be deemed to be a peace officer for the purpose of enforcing this chapter. [2]
02.02.070 – Running and Jogging.	No school, club or other organization shall hold running, jogging, or cross-country meets, events or practice sessions on district lands without prior written approval of the district. No person shall run or jog in such a way as to endanger hikers, equestrians, bicyclist or other using district lands.
2.02.080 – Games and miscellaneous activities.	No person shall engage in games or other activities which interfere with others using district lands or which endanger property, public safety or environmental resources. Non-permitted activities include: A. Participating in volleyball, baseball, softball, soccer, football and other similar organized sports; B. Participating in bicycle races; C. Hitting golf balls; D. Operating self-propelled model airplanes, boats, automobiles or other model craft; E. Throwing, releasing or discharging missiles, rockets, stones, paintballs or other similar projectiles; F. Hang-gliding, paragliding or parachuting; G. Operating or landing aircraft of any nature; H. Skateboarding, roller skating, in-line skating or any similar activity; I. Participating in any activity or operating any device in such fashion which interferes with others using district lands or endangers property, public safety or environmental resources.
02.03.035 – Tools and trail building equipment.	No person shall possess, use or carry while on district lands any shovel, rake, pick, mattock, Pulaski, or other trail building equipment without prior written approval of the district.
02.04.020 – Bicycles and similar vehicles.	No person shall operate any bicycle on district lands except upon fire protection roads, designated bicycle pathways or public roads not signed against such use. Furthermore, no person shall operate or possess any bicycle else here on district lands, including trails, unless signed specifically to permit such possession. All person operating a bicycle on district lands during hours of darkness shall carry and use a lamp which emits a white light visible from a distance of three hundred feet.

[2] "Parks" as referred to in this code means any park, playground, bicycle and multi-use path, recreation center or any other area or facility owned or managed by the county and devoted to active or passive recreation. Marin County Municipal Code 10.01.030 - Definitions.

MARIN COUNTY CODE – TRAILS AND PATHS	
Code Location*	**Code**
	No person shall operate or possess roller-skates, inline skates, grass skates, or any self-propelled or motorized skateboard, scooter or other similar device on district lands.
02.04.040 – Speed limits.	No person shall operate any land vehicle, including bicycles, at speeds in excess of fifteen miles per hour unless otherwise posted. Bicycles and similar vehicles shall slow to five miles per hour when passing others or approaching blind turns. No person shall operate any watercraft or other vessel in excess of five miles per hour. No vehicle, including bicycles shall be operated at a speed greater than is reasonable for safe operation, no in any manner which may endanger the safety of others or the protection of environmental resources.
02.04.050 – Right-of-way	All person operating vehicles on district lands, including bicycles, shall yield the right-of-way to hikers and equestrians. Hikers shall yield the right-of-way to equestrians. District and emergency vehicles have the right-of-way on district lands at all times.
02.05.010 - Dogs and other animals.	Dogs and other domestic animals are allowed on District lands when under the direct and immediate control of a responsible person. Up to three dogs per individual are allowed, with exceptions beyond that number granted only through issuance by the District General Manager of a Special or Commercial Use Permit. On maintained and designated fire protection roads three dogs off-leash per individual are allowed. In all other areas, dogs and other domestic animals must be fastened to and restrained by a chain or leash not exceeding six feet in length. No person shall do any of the following on District lands: a) allow any dog or other domestic animal to enter environmentally sensitive or restricted areas of District lands; b) allow any dog or other domestic animal to interfere with, bother or disturb others using District lands; c) allow any dog or other domestic animal to hunt, pursue or harass other animals or wildlife; d) bring or keep a noisy, vicious or dangerous dog or other animal; e) bring or keep a dog four months of age or more without proof that the dog has a valid rabies inoculation and a valid license; f) fail to promptly remove from District lands any dog or other domestic animal after being ordered by District personnel to do so. g) allow excrement from dogs under their control to remain on District land. h) bring dogs or other domestic animals onto district lands without possessing a chain or leash not exceeding six feet in length for each dog or animal so that they shall be prepared to restrain their animals, if necessary.

PROPOSED SHARED-USE PATH AND TRAIL GUIDELINES

In addition to the rules, this plan also proposes additional guidelines for path and trail users. As paths and trails become more popular and congested, they can also become more hazardous. These guidelines will help users behave safely and courteously to make for an enjoyable experience for all. Some of the items in the code of conduct are based on the existing and proposed path and trail rules, but are rephrased into simpler sentences. The table below shows the proposed path and trail guidelines:

For more information regarding the proposed Shared-Use Path and Trail Guidelines, visit sharethepathmarin.org.

PROPOSED SHARED-USE PATH AND TRAIL GUIDELINES	
Rule*	**Description**
Be Courteous and Predictable	Bicyclists always yield to pedestrians. The speed limit is 15 mph, and <10mph when passing pedestrians. No vehicle shall be operated at a speed greater than is reasonable for safe operation, nor in any manner which may endanger the safety of others of the protection of facilities and environmental resources.
Don't Block the Trail	Ride, walk, or run no more than two abreast and single file when passing others. When stopping, move off of the trail. Beware of others approaching you from behind and make sure they know you are pulling over.
Keep Right	Stay as near to the right side of the trail as is safe, except when passing another user.
Pass on the Left	Pass others, going your direction, on their left. YIELD TO SLOWER AND ON-COMING TRAFFIC. Use hand signals to alert those behind you of your moves. Look ahead and back to make sure the lane is clear before you pull out and pass. Pass with ample separation and do not move back to the right until safely past. REMEMBER: KIDS AND PETS CAN BE UNPREDICTABLE.
Give Audible Warning BEFORE Passing	Give a clear signal by announcing “on your left” and ringing bell before passing.
Obey All Traffic Signs and Signals	Use extra caution where trails cross streets. Stop at all STOP signs and intersections and be cautious when crossing driveways. When entering or crossing a trail yield to traffic already on the trail.
Use Lights at Night	If on a trail at any time from dusk to dawn, make yourself visible to others.

PROPOSED SHARED-USE PATH AND TRAIL GUIDELINES	
Rule*	**Description**
Keep Animals Safe and under Control	Keep pets on a short leash less than six feet long. Walk pets on the right-hand shoulder and be aware of the potential hazard of leashes for passing bicyclists, skaters, and equestrians. Clean animal waste from the trail.
Have You Outgrown Trails?	Trails have engineering and design limits. If your speed or style endangers other users, check for alternative routes better suited to your needs. Selecting the right location is safer and more enjoyable for all concerned.

* Alta Planning + Design; International Bike Fund (*http://www.ibike.org/education/trail-sharing.htm*)

EDUCATION AND AWARENESS

The education of path and trail users is a critical part of creating a safe environment for all users. A code of conduct should be clearly posted at path and trail access points and intersections. Additionally, informational signs can help communicate basic etiquette along the way, such as the two examples shown below.

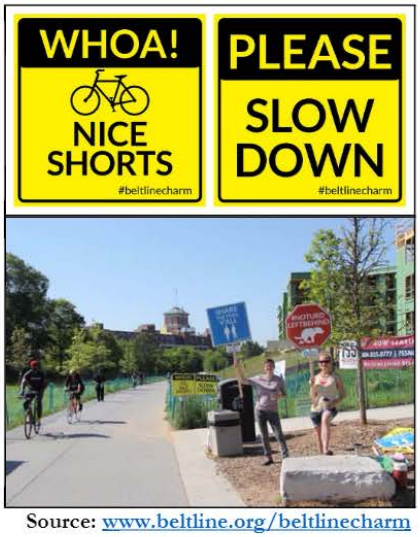
Bikes yield to pedestrians; Crescent Trail, Bethesda, MD; photo by Stuart Macdonald, 16 June 2007

Walkers keep right, cyclists pass on the left on West River Parkway, Minneapolis; photo by Stuart Macdonald, 29 Oct 2010

Educational curricula, similar to Safe Routes to School programs, could be used to encourage safe practices by various path and trail users. Below is an example brochure from the City of Portland's Share the Path campaign. The brochure communicates trail etiquette using illustrations and captions, which are easy to read and understand. Marin County Parks will be launching a new safety, education, and etiquette campaign regarding shared-use paths. This campaign is expected to launch in May 2015.

Share the Path campaign, City of Portland www.portlandoregon.gov

A kickoff campaign can be used to advertise the new etiquette guidelines. The City of Atlanta held the #BeltLineCharm campaign to remind users of the Atlanta BeltLine shared-use path to be safe while walking and biking. Volunteers held up positive, humorous and attention-grabbing signs along the trail reminding users of appropriate trail etiquette. Examples from the #BeltLineCharm campaign are shown below.



Source: www.beltline.org/beltlinecharm

SAMPLE ETIQUETTE AND SPEED MANAGEMENT SIGNAGE

The following signage was derived from the East Bay Regional Park District Sign Manual. In addition to describing expected behavior by posting trail rules, this set of signage clearly explains yield priority, identifies prohibited users at select locations, and limits the speed of wheeling users in certain circumstances. Posting such signage helps to inform users about appropriate behavior and serves as the basis for further enforcement efforts.

FIGURE 7: EAST BAY REGIONAL PARK DISTRICT ETIQUETTE AND SPEED MANAGEMENT SIGNAGE

FIGURE 7: EAST BAY REGIONAL PARK DISTRICT ETIQUETTE AND SPEED MANAGEMENT SIGNAGE (CONTINUED)

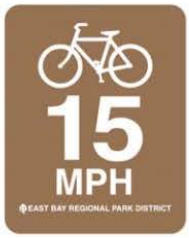
F-03 REGIONAL TRAIL RULES
SIZE: 15" x 19", Polyplate
POLICY: Use to inform the public of Ordinance 38 trail rules on regional trails.
LOCATION: Install on roads or pathways, or fence mount at trailheads or other appropriate locations.
SOURCE: Environmental Graphics

F-04 INTERNAL TRAIL RULES
SIZE: 15" x 19", Polyplate
POLICY: Use to inform the public of Ordinance 38 trail rules on internal trails.
LOCATION: Install on roads or pathways, or fence mount at trailheads or other appropriate locations.
SOURCE: Environmental Graphics

F-05 YIELD TO
SIZE: 15" x 15", Polyplate
POLICY: Use to establish a priority of which trail user group yields to other groups on multipurpose trails.
LOCATION: Install on multipurpose trails only.
SOURCE: Environmental Graphics

F-10 NO BICYCLES
SIZE: 15" x 15", Polyplate
POLICY: Use to inform park users of areas where bicycles are prohibited.
LOCATION: Install in the standard position for use on pathways.
SOURCE: Central Stores
STOCK NO: 2504170

F-12 NO HORSES
SIZE: 15" x 15", Polyplate
POLICY: Use to inform park users of areas where horses are prohibited.
LOCATION: Install in the standard position for use on pathways.
SOURCE: Central Stores
STOCK NO: 2504175



F-13 BICYCLE SPEED LIMIT
SIZE: 15" x 19", Polyplate
POLICY: Use to give notice of a 15 mph bicycle speed limit.
LOCATION: Install in the standard position for use on trails at the beginning of the speed zone. When the speed zone is longer than one mile, intermediate signs may be posted.
SOURCE: Environmental Graphics

F-14 BICYCLE REDUCE SPEED
SIZE: 15" x 19", Polyplate
POLICY: Use to give notice to reduce speed and of oncoming traffic.
LOCATION: Install as needed on trails.
SOURCE: Environmental Graphics

F-15 WALK BICYCLE
SIZE: 15" x 19", Polyplate
POLICY: Use as advisory to bicyclist to walk bicycle on steep trail.
LOCATION: Install as needed.
SOURCE: Environmental Graphics

F-07 REDUCE SPEED AND CALL OUT
SIZE: 15" x 19", Polyplate
POLICY: Used to remind bicycle users to warn other trail users when they are about to pass on multipurpose trails.
LOCATION: Install on multipurpose trails only. Install in the standard position for use beside either roads or pathways or fence mount at trailheads or other appropriate locations as needed.
SOURCE: Environmental Graphics

F-08 DOWN GRADE REDUCE SPEED
SIZE: 15" x 15", Polyplate
POLICY: Use to warn bicyclist of steep grades.
LOCATION: Install prior to the down grade.
SOURCE: Environmental Graphics

APPENDIX E: MARIN COUNTY WAYFINDING PROGRAM

A DESCRIPTION OF PROPOSED SIGNAGE PROVIDING WAYFINDING ALONG BICYCLE AND PEDESTRIAN NETWORKS TO DESIGNATED DESTINATIONS. (I)*

Marin County is implementing a countywide bicycle route signage program. The City is committed to developing a link in the north/south bikeway route through Marin County (Route 5). The goal of the project is to encourage commuting by bicycle through Marin and to make recreational biking more attractive to the public. The bikeway route network can be viewed at http://www.marinbike.org/map.

The County of Marin received $189,000 in grant funding for the program. Improved wayfinding will help cyclists identify destinations at key intersections and navigate the bicycle network more easily. The Marin Public Works Directors Association selected a uniform sign for the County, including a logo of Mount Tamalpais in the background.

FIGURE 8: MARIN COUNTY WAYFINDING SIGN

* Required Active Transportation Plan component.

APPENDIX F: POTENTIAL FUTURE PROJECTS BASED ON FEASIBILITY ANALYSIS

This section describes potential future projects requiring further feasibility analysis, based on feedback heard from Larkspur residents.

POTENTIAL FUTURE PROJECTS BASED ON FEASIBILITY ANALYSIS
General
Right Turn on Red Restrictions
Implementation of Idaho Stop (Bicycles Yield at Stop Signs)
Separation between faster and slower users on Class I paths
Conversion of existing Class II bike lanes to Class IV separated bike lanes
Introduce traffic calming in residential neighorhoods
Implemention of "crossrides" (crosswalks for wheeled users)
Installation of curb extensions at pedestrian crossings with parking lane present
Site-specific
Bridge from Piper Park to east end of S Eliseo Drive
Improve accessibility to public dock at Marin Rowing Association
Trailhead improvements at Doherty Drive and Lucky Drive
Improvements on Sir Francis Drake from Bon Air Road to US 101
Improve transitions along Magnolia Drive between Class II and Class III facilities
Connection from Camellia Circle to Meadowood Drive
Improve pedestrian overcrossing of US 101 at Lucky Drive
Other jurisdictions
Construct Lucky Drive Class IV
Improve connections to Marin General Hospital
Add facilities on Tamal Vista Boulevard
Open the Alto Tunnel
Modify intersection of Tamalpais Drive/San Clemente Drive/Redwood Highway

APPENDIX G: PLAN ADOPTION

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. (Q)*

< Placeholder – City of Larkspur City Council Resolution >

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* Required Active Transportation Plan component.