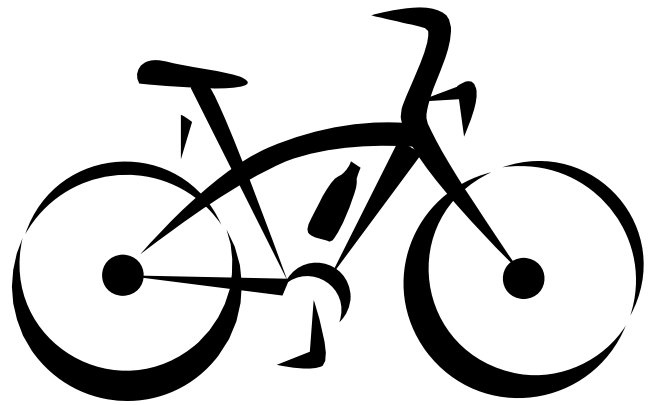


# ***Del Norte County and Crescent City***

## **2010 Bicycle Facilities Plan Update**



*Final  
July 2010*

*Del Norte Local Transportation Commission*  
1225 Marshall Street, Suite 8  
Crescent City, CA 95531

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## **1. INTRODUCTION**

In Del Norte County, where abundant natural resources, clean air and incomparable park lands are treasured points of pride, people who choose to bicycle find a perfect venue. Cyclists from all over the world are drawn to this area, for the chance to ride near old growth redwoods, crowd-free beaches and wild, scenic rivers. Del Norte County residents have that enviable opportunity on a daily basis, and practical, pleasurable routes have become valued amenities, as more and more people incorporate the bicycle alternative into their routines and their lifestyles.

The choice of cycling for transportation and recreation, whether frequent or occasional, benefits a community on multiple levels. It helps offset the use of fossil fuels, is a healthy activity, and promotes a unique sense of community. Now, by continuing to improve and expand its bikeways system, Del Norte County's potential as an exceptional cycling environment, will be fully realized.

For a bikeways system to be truly viable, safety and convenience issues are paramount – along with the provision of facilities that support cycling and encourage bicycle commuting, recreating and touring. To help further these aims, the Del Norte Local Transportation Commission (DNLTC) periodically updates the *Del Norte County and Crescent City Bicycle Facilities Plan* (Bike Plan). First adopted in 1987, the Bike Plan has been updated several times since then.

This 2010 Bike Plan contains a bikeway system assessment of Del Norte County routes. It sets forth goals, policies and objectives, and an implementation schedule of proposed bikeway system improvements. The needs of both commuting and recreational bicyclists are considered. Routes in the Bike Plan were selected to accommodate existing and future needs, especially in areas where development activity or growth is anticipated (See Figure 1. Crescent City Planning Area, and Figure 2. Del Norte County Area).

### **1A. PURPOSE**

The purpose of the 2010 Bike Plan is to guide bicycle facilities development, and promote bicycling for commuting, recreation and touring.

Within this Plan, the commuting designation includes regular back and forth travel for work, school, shopping, and routine community services. The recreation designation includes local, road cycling and mountain biking. The touring designation applies primarily to non-local, excursion cyclists.

This Bike Plan conforms to the requirements of the California Bicycle Transportation Act, as defined in the Streets and Highways Code and the California Vehicle Code. A Bike Plan that meets the requirements of the California Bicycle Transportation Act makes the area agencies eligible for federal, state, and local funds. (Funding sources and programs are discussed in Chapter 4, Implementation.)

## **Expected Bike Plan Benefits**

Planning and upgrading bicycle facilities, as described in this plan, will benefit Del Norte County in the following ways:

Reduce Accidents: According to the Statewide Integrated Traffic Records System (SWITRS) statistics for Del Norte County, from 2005 through 2008 (the most recent reports available)<sup>1</sup>, injury collisions involving bicycles averaged 7.5 annually (see Section 2C for a more detailed discussion). Improved bicycle facilities will reduce the potential for collisions between bicycles and motor vehicles.

Provide Needed Facilities: The demand for safer and more convenient facilities has increased with the growing popularity of bicycling for both transportation and recreation.

Improve Quality of Life and Public Health: Replacing motor vehicle trips with bike trips reduces noise, energy consumption and automobile emissions. Moreover, bicycling is a healthy activity. The development of a safe, convenient, and attractive bikeway system encourages more people to bike rather than drive, resulting in a cleaner environment, and a healthier population.

Maximize Funding Sources for Implementation: The 2010 Bike Plan contains the most current information about state and federal funding sources. Federal transportation funding programs are governed by the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), providing \$286.5 billion nationwide for surface transportation projects, including highways, public transportation and road safety programs. The Recreational Trails Program (RTP), the Surface Transportation Program (STP), the Transportation Enhancement Program (TE), and the Safe Routes to Schools (SR2S) relate most directly to bicycle facilities and programs. State programs such as the State Transportation Improvement Program (STIP), Bicycle Transportation Account and State Safe Routes to Schools programs are described as well.

## **1B. PLAN ORGANIZATION**

The Bike Plan is organized in the following manner:

Chapter 1, “Introduction,” describes the purpose of the Plan, briefly describes the setting in Del Norte County and Crescent City, and gives a brief overview of the scope of the bikeway facilities and bicyclists’ needs being addressed in this Plan.

Chapter 2, “Bicycle Facilities Assessment and Planning,” describes bicycle facilities planning coordination efforts by local, state, and federal agencies and organizations. This is followed by plan policies and bicycle facilities conditions, including land use and settlement patterns; existing and planned bicycle facilities (bikeways, parking, rest, and support facilities); and the level of coordination with other transportation modes. After establishing these existing conditions, the chapter includes a needs assessment of bicycle facilities, and proposes specific

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<sup>1</sup> [www.chp.ca.gov/html/publications.html](http://www.chp.ca.gov/html/publications.html)

improvements. The chapter concludes with an assessment of the effectiveness of the bicycle route network in terms of connectivity, safety, coordination with other transportation modes, and availability of bicycle support facilities.

Chapter 3, “Goals, Policies, and Objectives,” details the DNLTC’s goals, policies, and objectives for its bicycle facility planning efforts. The DNLTC has developed policies and objectives to guide bicycle facility planning; promote bicycle safety and education; guide program implementation, funding and site acquisition; encourage interagency coordination; and promote citizen/community involvement. For each policy, a set of objectives (specific actions that can be undertaken in support of these policies) has been developed.

Chapter 4, “Implementation,” describes a project implementation program for accomplishing Bike Plan goals, policies, and objectives. The chapter lists and describes proposed bicycle projects, including estimated cost, funding source, responsible agency, and year of implementation. An analysis of the DNLTC’s past expenditures and an estimate of future financial needs are included. Chapter 4 also describes proposed bicycle safety and education programs, as well as opportunities for involving citizens and the community in the implementation of the Bike Plan. Coordination between implementing agencies is discussed in terms of planning, maintenance, and law enforcement. This Bike Plan’s consistency with the DNLTC 2007 Regional Transportation Plan Update is also discussed. Finally, the chapter evaluates the beneficial effects of proposed facilities for both recreational and commuter bicyclists.

## **1C. REQUIRED BICYCLE PLAN CONTENTS**

State law requires that a bicycle plan must contain certain specific items of information to be eligible for use in applying for state funds (California Bicycle Transportation Act, Section 891.2 (a) – (k) of the Streets and Highway Code). The following list describes the required items and their location in this Bike Plan.

- A. *The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan.* Del Norte County recognizes the need to encourage non-motorized transportation. One way to achieve this goal is to encourage and accommodate bicycling for reasons of energy conservation, health, economy, enjoyment and as an alternative means of commuting by automobile.

According to the Federal Highway Administration, incentives motivating bicycle usage are exercise, enjoyment, traffic and environmental concerns. Personal reasons people give for choosing not to bicycle include: distance, safety, convenience, time, physical condition, family circumstances, habits, attitudes, lack of access and linkage, and transportation alternatives. The national average for bicycle commuters is 0.44 percent, while the California average is 0.81 percent, according to the 2000 Census. Per the 2002 California Budget Act report: “California Blue Print for Bicycling and Walking”, the state has a goal of increasing bicycling and walking trips by 50% by 2010. According to the 2000 U.S. Census data and 2008 U.S. Census estimates there are approximately 105

bicycle commuters in the County.

Chapter 4 includes an evaluation of the effects of implementing the Bicycle Facilities Plan. With safer, more convenient and more available bicycle facilities, the number of commuter cyclists, as well as recreational and touring cyclists is expected to increase. Additionally, many of the bicycle facility improvements will also improve conditions for pedestrians, and in some cases, horseback riders and/or skaters.

- B. *A map and description of existing and proposed land use and settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings, and major employment centers.*

Del Norte County contains a mix of land uses including residential neighborhoods, public uses such as parks and schools and commercial uses such as shopping centers and industry. Table 2.5 and Table 2.6 describe the spatial orientation of land uses in relation to bikeways.

- C. *A map and description of existing and proposed bikeways.*

Chapter 2 of the Bicycle Facilities Plan contains written and graphic representation of existing and proposed bikeways. Figure 1 and Figure 2 show the existing and proposed bicycle routes in Crescent City and the County respectively. Figure 3 identifies trailways that area either existing or proposed.

- D. *A map and description of existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings, and major employment centers.*

Chapter 2 contains written representation of existing and proposed bicycle parking facilities. Table 2.10 and 2.11 contain information regarding bicycle parking and support facilities as it relates to the aforementioned figures.

- E. *A map and description of existing and proposed bicycle transport and parking facilities for connections with and use of other transportation modes. These shall include, but not be limited to, parking facilities at transit stops, rail and transit.*

Chapter 2 contains written representation of existing and proposed facilities that link public transportation and other transportation modes with bikeways and bicycle parking.

- F. *A map and description of existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom, and shower facilities near bicycle parking facilities.*

Chapter 2 contains written representation of existing, proposed and needed bicyclist support facilities.

- G. *A description of bicycle safety and education 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 Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.*

Chapter 2 and Chapter 4 include a description of bicycle safety and education programs.

Bicycle safety and education programs are sponsored by the Del Norte Unified School District in conjunction with the California Highway Patrol. During the four year period from 2005 to 2008 motor vehicle collisions with a bicycle involved have remained generally the same. Although the numbers are relatively low, a reduction or elimination of bicyclists involved in collisions with motor vehicles is desired. This supports the need for the County to continue to promote bicycling safety and support projects that will minimize cyclist/motorist conflicts.

- H. A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.*

Chapter 4, Section D contains an overview of the methods for citizen and community involvement in the development and update of the Bicycle Facilities Plan. One of the primary updates to the 2010 Bicycle Facilities Plan was the inclusion of Bicycle Boulevards which was spawned by a presentation to the DNLTC by a community member.

- I. A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.*

Chapter 4 Section C describes the interagency and consistency with other local and regional plans and programs, in particular the Regional Transportation Plan and Pacific Coast Bicycle Route Shoulder Study.

- J. A description of the projects proposed in the plan and a listing of their priorities for implementation.*

Chapter 2 and Chapter 4 contain descriptions of the proposed projects and Table 4.3 and Table 4.4 prioritize short and long range project implementation respectively.

- K. A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.*

Chapter 4 includes tabular and text descriptions of past, current and future expenditures for bicycle facilities

## **1D. SETTING – DEL NORTE COUNTY & CRESCENT CITY**

Del Norte County is situated on California's far northern coast, adjacent to the California-Oregon border. Covering approximately 1,070 square miles, this famously scenic county includes the Redwood National & State Park, the pristine Smith River, and lower Klamath River, watersheds. The canyons of these river systems extend from the eastern mountains to the Pacific Ocean, creating Del Norte's dramatically mountainous terrain. A narrow coastal plain borders the Pacific Ocean, and two large wetland areas, Lake Earl and Lake Tolowa, are located in the northwestern corner of the coastal plain.

Del Norte County temperatures are generally moderate along the coast, with higher summer temperatures inland. October through April is the rainy season, during which approximately 90% of the area's annual precipitation falls.

The Yurok and the Tolowa Native American peoples were this region's earliest known residents. The Yuroks, who have lived near the Klamath River for centuries, are today the largest federally recognized Indian tribe in California. The Yurok Reservation covers a small portion of the aboriginal Yurok territories in Del Norte and Humboldt counties. It includes one mile on each side of the Klamath River, from the east at its confluence with the Trinity River, all the way to the Pacific Ocean. Members of the Tolowa tribe manage the Smith River Rancheria near the mouth of the Smith River, and the Elk Valley Rancheria east of Crescent City.

Crescent City is the only incorporated city in Del Norte County, and the northernmost city on the California coast. The City is approximately 900 acres in size, bounded by the ocean, broad beaches, coastal bluffs, Crescent City Harbor, forests and rural residences.

Major unincorporated communities in the county are Fort Dick, Gasquet, Hiouchi, Klamath, and Smith River; smaller rural population centers include Big Flat, Requa, and Klamath Glen.

Del Norte County's 2006 population was approximately 29,328 residents. To project future populations, several planning resources and published data were reviewed. These projections will help define Del Norte County's future economic and demographic characteristics for the next 20 years. Resources used for projections include the State Department of Finance's 20 year forecasts for Del Norte County, U.S. Census Bureau economic census data, California Department of Transportation (Caltrans) *Long-Term Socio-Economic Forecasts by County*, and the Del Norte *Comprehensive Economic Development Strategy (CEDS) for Del Norte County, California, 2006-2008*.

The largest Del Norte County employment sectors include: Government services, tourism, commercial fishing and sport fishing, dairy farming, bulb farming, and forest products. Recent declines in the forest products and fishing industries have been offset to some degree by jobs generated through the operation of Pelican Bay State Prison. Tourism is an increasingly important industry for the County and City. Tourists, including a growing number of touring bicyclists, are attracted to the rugged coastline, ancient redwood forests with the world's tallest trees, and the officially designated wild and scenic Smith River.

The area's national and state Parks draw visitors from all over the world, as do the National Forest campgrounds along the rugged Smith River Canyon and the Lake Earl Wildlife Area. In Crescent City, tourist attractions also include Battery Point Lighthouse, the Crescent City Marine Mammal Rescue Center, the Historical Society Museum, and historic landmarks relating to early settlement. Plans for increasing recreation and tourism opportunities include a multi-use trail network on the old Del Norte Southern Railroad right-of-way, which was part of the Hobbs, Wall and Company's lumber operations in the 1900's.

## 1E. BICYCLE FACILITIES OVERVIEW

Bicycle facilities that improve access, safety, and the convenience of bicycle travel increase the attractiveness of bicycle use. Facilities may include infrastructure improvements such as paved roadways, trails, bike lanes, and road shoulders, with uniform signing and road striping. Vehicle traffic calming techniques can also be effective for increasing bicycle safety. Street and intersection design that moderates or reduces vehicle speeds and/or volumes has a positive impact on bicycle or pedestrian movement. Traffic calming facilities may include roundabouts, intersection islands, ‘bulb-out’ curbs, speed bumps or tables, pavement treatments, lower speed signal timing, narrow travel lanes, and landscaping. The traffic calming facilities may be initiated as individual components or as a complete street treatment in an effort to establish a bicycle boulevard.

Bicycle facilities may also include amenities such as bike parking, air pumps, changing and shower facilities, and bike racks on public transportation vehicles. The range of available facilities will influence both the amount of use and the range of user types (e.g. recreational, touring and commuter cyclists).

### Bicyclist Characteristics and User Types

The Bike Plan addresses cyclist needs and, to the extent that resources permit, offers a program to encourage bicycle use. Bicyclists can be generally categorized in three groups: touring cyclists, commuter cyclists, and recreational cyclists.

*Touring Cyclists* – These bicyclists typically travel long distances on major routes, with occasional side trips on local streets and roads. Because of the long distances traveled, such riders are concerned with roadway conditions on their primary routes, and access to alternate, or side, routes. Shoulder width, large vehicle traffic, sight distance, and rest facilities are also important to these cyclists.

*Commuter Cyclists* – Bicycle commuters -- whether riding to school, work or shops and services -- travel mostly in and around Crescent City. Commuters typically ride in all weather and traffic conditions. Their preferred streets tend to be on the most direct routes between residential areas and community centers, have the fewest stop signs (or stop lights), and have pavement in good condition. Commuter cyclists are typically concerned with pavement condition, cross traffic, traffic volumes and speed, debris, roadway width, available bicycle parking, as well as the “directness” of a route.

*Recreational (or “Convenience”) Cyclists* – These are the cyclists who ride regularly for fun and fitness. Recreational cyclist usage levels tend to increase during seasonally favorable weather, as well as when cycling facilities are close to attractions such as parks, beaches, shops, and civic centers. Cyclists who only ride recreationally are most attracted to designated bike trails and may not feel comfortable riding on streets with vehicle traffic.

All groups of riders are concerned with safety and convenience. The safest bikeways are those that have the most separation from vehicular traffic and fewest pedestrian conflicts. Attractive routes are those with the widest travel lanes, good visibility, and paths or pavement in good condition (e.g. no potholes, free of debris, visible striping, etc.).

## **2. Bicycle Facilities Assessment and Planning**

### **2A. BICYCLE FACILITIES PLANNING AGENCIES**

Bicycle planning in the Del Norte area is a cooperative effort by a number of agencies. They include the DNLTC, the County of Del Norte, the City of Crescent City, the Harbor District, and Caltrans. In addition, the State and National Parks, the Bureau of Land Management, the Bureau of Indian Affairs, Native American Indian Tribes/Rancherias, and the US Forest Service have a role in planning bike facilities in Del Norte County. The DNLTC encourages all agencies to work towards connecting all bicycle trail systems within the area.

### **Consistency with Current City, County, and Regional Plans**

The *Del Norte County and Crescent City Bicycle Facilities Plan* is consistent with the City and County General Plans and the 2007 Regional Transportation Plan.

#### *Del Norte County General Plan*

The Bike Plan supports and is consistent with applicable County General Plan policies. The Draft General Plan contains a list of existing and proposed bicycle routes that matches this Bike Plan's list of proposed bicycle routes under the County's jurisdiction, except where updates have occurred. Information on potential development patterns in the County's jurisdiction, as well as existing land use and employment patterns were derived from the County's General Plan.

#### *City of Crescent City General Plan – Policy Document*

The Bike Plan supports and agrees with the City's General Plan policies (policies 3.C.1 through 3.C.11). Updating the Bicycle Facilities Plan every two years is part of the City's Bicycle Transportation Implementation Programs (Item 3.3, Crescent City General Plan, page 3-13). General Plan policy includes a commitment to maintaining the Harbor Trail-City bicycle route. It is also City policy to work cooperatively with the DNLTC and Del Norte County, to determine the adequacy of existing bicycle facilities and to plan new ones. For this Bike Plan, the City's General Plan was used to identify development patterns, land use, and activity centers.

#### *Del Norte Local Transportation Commission 2007 Regional Transportation Plan Update*

This Bike Plan is consistent with the 2007 Regional Transportation Plan Update (RTP), which was adopted by the DNLTC in 2007. The RTP addresses transportation systems and future transportation needs. It contains goals and policies, an Action Element and a Financial Element to implement solutions to regional transportation needs, including bicycle facilities.

### **2B. EXISTING CONDITIONS & PREVIOUSLY PLANNED IMPROVEMENTS**

This section describes existing bicycle facilities conditions and previously planned improvements that have not been completed. These planned facilities improvements are still considered important, they are carried forward from the past Bike Plan and RTP.

## **Land Use / Settlement Patterns**

Del Norte County is a rural county with most of its residents residing in Crescent City, the northernmost incorporated city on the California Coast. The area offers an abundance of outdoor recreational activities utilizing the proximity of the Pacific Ocean, the Smith River and Klamath River, Redwood National and State Parks, and the Smith River National Recreation Area. Much of the remaining population resides in and around unincorporated communities: Smith River, approximately 13 miles north; Fort Dick, approximately 8 miles northwest; Hiouchi, approximately 8 miles east; and Gasquet, approximately 18 miles east of Crescent City.

Del Norte County and Crescent city are in transition from a resource production economy to a more diversified economy. Government, retail trade, and services have now become the largest employers in the county. Supported is the pursuit of diversified manufacturing, tourism, technology, telecommunication-based business, and small business development.

The historical growth rate of Del Norte County is 2.0 percent. Del Norte County population is expected to grow to approximately 42,000 persons and 16,000 dwelling units by the year 2020. Of these, 1,089 new dwelling units and new commercial, industrial and public facility development is to be expected in Crescent City. Since Crescent City has a very limited land supply, it will need to become a more compact city by promoting infill, intensification or reuse of land, and annexing county land. Increased density will have several benefits including limiting sprawl, creating a more walk-able community, increasing public transit opportunities including public bikeways, reducing the cost of public services by limiting infrastructure expansion, and minimizing the impact of new development on the natural environment.

## **Bicycle Facilities**

Land use is an important factor in bicycle route planning. The County bicycle route network links employment centers, commercial centers, residential areas, and recreational areas.

## **Definitions of Bicycle Paths, Lanes, and Routes**

The State of California Bikeways Act recognizes three standard bikeway classes. These bikeways classifications are described in the Table 2.1. It should be noted that although each bicycle classification has a specific associated name (e.g. bike path, bike lane, bike route), the standardized names are not always used. For example, a Class I bikeway, which is technically a “bike path” or “bike trail,” might also be called a “bike route”, or A Class III Bike route may include design considerations, signage and traffic calming measures that might be called a Bicycle Boulevard. A bicycle boulevard is a shared roadway which has been optimized for bicycle traffic. In contrast with other shared roadways, bicycle boulevards discourage cut-through motor vehicle traffic, but typically allow local motor vehicle traffic.

**Table 2.1 Categories of Bikeways as Defined in the California Bikeways Act<sup>1</sup>**

Classification	Name	Description
<b>Class I</b>	Bike path or bike trail	Provides a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflow by motorists minimized.
<b>Class II</b>	Bike lane	Provides a striped lane for one-way bike travel on a street or highway
<b>Class III</b>	Bike route	Provides for shared use with pedestrian or motor vehicle traffic.

<sup>1</sup> Division I, Chapter 8 of the California Streets and Highways Code, Section 890.4.

## Existing Bikeways

There is an existing system of bicycle routes in Del Norte County, extending north to south, from the Oregon border to the Humboldt County line, and west to east, from the Pacific Ocean to Gasquet. Many of these routes are Class III bikeways, but ongoing efforts are being made to upgrade to Class I and Class II bikeways where appropriate. Some bikeway routes are planned but only partially completed, and in some cases, current bikeway segments have been built to a lower classification than is ultimately planned.

### Pacific Coast Bike Route (PCBR)

The Pacific Coast Bicycle Route (PCBR) is the most significant bike route in Del Norte County. It extends from Vancouver, British Columbia to Imperial Beach, California, near the California/Mexico border, winding along the Pacific Ocean coastline for approximately 1,830 miles.<sup>2</sup> The Del Norte County segment features breathtaking cliffs, ocean vistas, redwood forests, lighthouses, beaches, and a rugged coastline. This all-weather accessible route offers varied terrain, including steep ascents, moderate climbs, and gentle grades. It includes State highways, county roads, city streets, rural side roads, and designated bike paths. The route also offers rest stops, which are necessary for distance cycling. Touring cyclists typically travel north, taking advantage of the tailwinds from the prevailing wind patterns.

In California the PCBR is a state designated bike route of Class II and III bikeways, beginning at the California-Oregon border in Del Norte County. The Del Norte County segment runs along Highway 101, except at two locations where it uses county roads. In the vicinity of the Town of Smith River, the PCBR is linked by Fred Haight Drive, First Street, and Sarina Road. In the area north of Crescent City, it runs along Lake Earl Drive and continues south on Northcrest Drive through Crescent City to Highway 101, which takes it all the way to Humboldt County.

<sup>2</sup> Adventure Cycling Association, <http://www.adv-cycling.org/routes/pacific.cfm>

When Caltrans improves Highway 101, it widens the shoulders for bicyclists, wherever possible. Caltrans is currently evaluating priorities for shoulder improvements along Highway 101 (this is discussed further in this chapter under “Planned Bikeway Facilities Improvements”).

#### Coastal Trail (Harbor Trail, Lighthouse Trail, & Pebble Beach Trail Segments)

The Coastal Trail is a joint Crescent City, Harbor District, and Del Norte County project. It has three segments: Harbor Trail, Lighthouse Trail, and Pebble Beach Trail (see Figure 4). The Coastal Trail provides a combination of Class I, 2, and III bikeways, from the north along Pebble Beach Drive to Point St. George, running south of the city limits, along the harbor, past the Battery Point Lighthouse parking lot. Some segments are linked by existing streets; some segments have not yet been constructed. Improvements are planned for segments that use existing streets. Table 2.2 lists the existing bikeway segments.

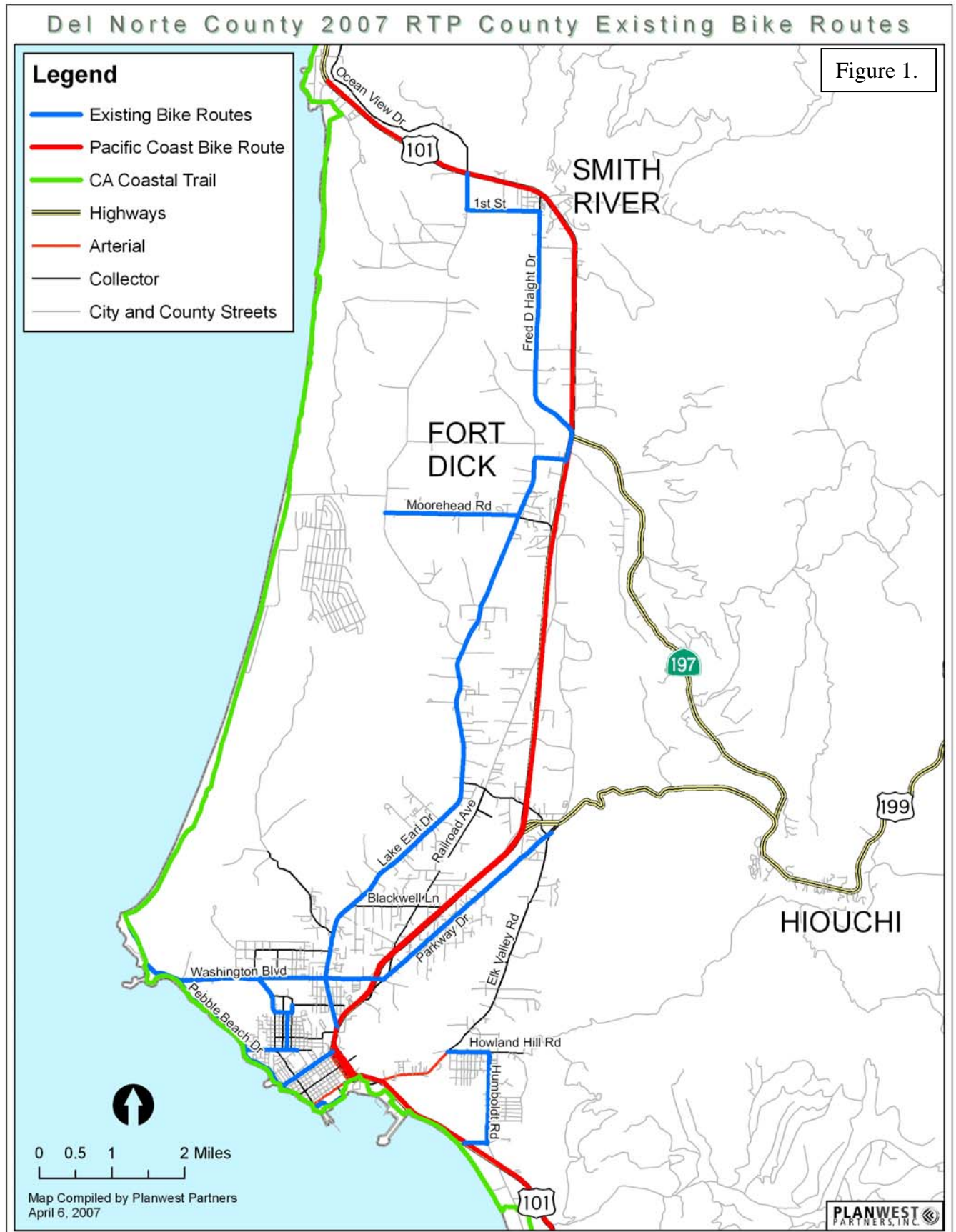
**Table 2.2 Existing Bikeway Segments of the Coastal Trail (Pebble Beach Trail, Harbor Trail, and Lighthouse Trail)**

<b>Bikeway</b>	<b>Existing Segment</b>
<b><i>Pebble Beach Trail</i></b>	<ul style="list-style-type: none"> <li>• B Street from Lighthouse Trail to 2nd Street;</li> <li>• 2nd from B Street to A Street;</li> <li>• A Street from 2nd Street to 5th Street;</li> <li>• 5th Street from A Street to Pebble Beach;</li> <li>• Pebble Beach from 5th to City Limits.</li> </ul>
<b><i>Harbor Trail</i></b> (parallel to west side of Hwy 101 South)	<ul style="list-style-type: none"> <li>• Front Street (from the Cultural Center) to Sunset Circle and Vance;</li> <li>• Through the Harbor;</li> <li>• Starfish Way to Anchor Way;</li> <li>• Anchor Way to Highway 101.</li> <li>• Class I &amp; III: From Cultural Center to City Limits via Sunset Circle</li> </ul>
<b><i>Lighthouse Trail</i></b>	<ul style="list-style-type: none"> <li>• Front Street (from the Cultural Center) to Battery Point Lighthouse.</li> </ul>
<b><i>Coastal Trail</i></b>	<ul style="list-style-type: none"> <li>• Pebble Beach</li> <li>• South Beach to Enderts Beach</li> <li>• False Klamath Cove to Regua</li> </ul>

Points of interest along this trail include South Beach, Crescent City Harbor, the marina, the Cultural Center/Visitor’s Center, the municipal pool, Beachfront Park, Marine Mammal Rescue Center, Battery Point Lighthouse, Brother Jonathan Cemetery Park, Point St. George, and numerous scenic vistas north of Crescent City, along the Pacific Coast. This trail system will be used by commuter, recreational and touring bicyclists.

#### **Other Bikeways in the Crescent City Planning Area**

There is a system of existing Class II and Class III bikeways in unincorporated Crescent City . Table 2.3 describes these bikeway locations. These bikeways provide access to schools, businesses, and residential areas in Crescent City. These routes are predominantly used by bicycle commuters and recreational riders.



**Table 2.3 Other Existing Bikeways in the Crescent City Planning Area**

<b>Classification</b>	<b>Location</b>
<i>Class II</i>	<ul style="list-style-type: none"> <li>• Washington Blvd. from Parkway Drive to Pebble Beach Drive.</li> <li>• Inyo Street from Hamilton Avenue to Washington Blvd.</li> <li>• Hamilton Avenue from Inyo Street to Eldorado Street (north side).</li> </ul>
<i>Class III</i>	<ul style="list-style-type: none"> <li>• Fresno Street from Hamilton Avenue to Pacific Avenue.</li> <li>• Pacific Avenue from H Street, and Meridian Street intersection to Pebble Beach Drive.</li> <li>• Northcrest Drive from Washington to Blackwell Road.</li> </ul>

## Other Existing Bikeways in Del Norte County

There are Class II and Class III bikeways in several areas of rural Del Norte County. The Smith River area bikeway on Fred Haight Drive provides a scenic route near the coast and north of Smith River. Fort Dick area bikeways include Lower Lake Road and Lake Earl Drive. These are scenic routes with access to the Lake Earl area, as well as to the community of Fort Dick.

**Table 2.4 Existing Bikeways in Del Norte County**

<b>Classification</b>	<b>Location of Bikeway Segment</b>
<i>Class II</i>	<ul style="list-style-type: none"> <li>• Parkway Drive from Hwy 101 North to Hwy 199.</li> <li>• Northcrest Drive from Washington Blvd. to Blackwell Lane.</li> <li>• Lake Earl Drive from Blackwell Lane to Hwy 101 North (at Dr. Fine Bridge).</li> </ul>
<i>Class III</i>	<ul style="list-style-type: none"> <li>• Smith River: First Street, and Sarina Road.</li> <li>• Fred Haight Drive from north intersection/Hwy 101 to Wilson Lane.</li> </ul>

## Bike Routes to Schools

During the 2008-2009 school year 3,893 children in Del Norte County attend public elementary, middle, and high schools.<sup>3</sup> Several of these schools are not located on bicycle routes. While many children walk to and from school, others are driven, drive themselves (High School), or take school buses or public transit, increasing vehicle traffic on county roads and city streets. Providing safe bicycle routes to schools will give students the option of biking to school. The benefits of these routes include: increased opportunities for exercise, reduced fuel consumption, less traffic on the roadways, and time savings for those transporting students.

Public and private schools, ranging from kindergarten to college, are located in most communities. Del Norte County has two high schools, one middle school, five K-8 schools, and four elementary schools (K-5 or K-6). Four of these schools are served directly by existing bike routes: Bess Maxwell (K-5) in Crescent City, Redwood School (K-8) in Fort Dick, Smith River School (K-8) in Smith River, and the College of the Redwoods campus in Crescent City. Del

<sup>3</sup> Source: Personal communication, E. Weinreb telephone call to Del Norte Unified School District, July 17, 2002.

Norte High School and Sunset High School are located on proposed bike routes. Currently, no other elementary or middle schools in the county have direct access to existing or proposed bike routes. Table 2.5 shows the schools' locations in relation to existing and proposed bikeways.

**Table 2.5 Proximity of Schools to Bikeways**

<b>School &amp; Address</b> (CC = Crescent City; DNC = Del Norte County)	<b>Grade Level</b>	<b>On Existing (or Proposed) Bikeway</b>	<b>Nearest Existing (or Proposed) Bikeway (in miles)</b>
Bess Maxwell – 1124 El Dorado, CC	K-5	El Dorado Street	----
Crescent Elk – 994 G Street, CC	6-8	9th Street	----
Del Norte High School – 1301 El Dorado, DNC	9-12	(Extension of El Dorado)	----
Joe Hamilton – 1050 E Street, CC	K-5		0.10 to 9th Street
McCarthy School 1115 Williams Street, CC	K-8		0.12 to Hwy 101
Margaret Keating – Klamath	K-8		0.12 to Hwy 101
Mary Peacock – 1720 Arlington, CC	K-6		0.32 to Washington Blvd.
Mountain School – 55 Azalea, Gasquet	K-8		0.40 to Hwy 199 (0.34 to Coast-to-Caves Route)
Pine Grove – 900 Pine Grove Rd., CC	K-6		0.10 to Northcrest/Lake Earl
Redwood School – 6900 Lake Earl Dr., Fort Dick	K-8	Lake Earl Drive	----
Smith River School – 564 1st Street, Smith River	K-8	First Street	----
Sunset High School 2500 Elk Valley Crossroad, DNC	9-12	(Elk Valley Crossroad)	----
College of the Redwoods 883 W. Washington, CC		Washington Blvd.	----

## Bike Routes to Other Public Facilities

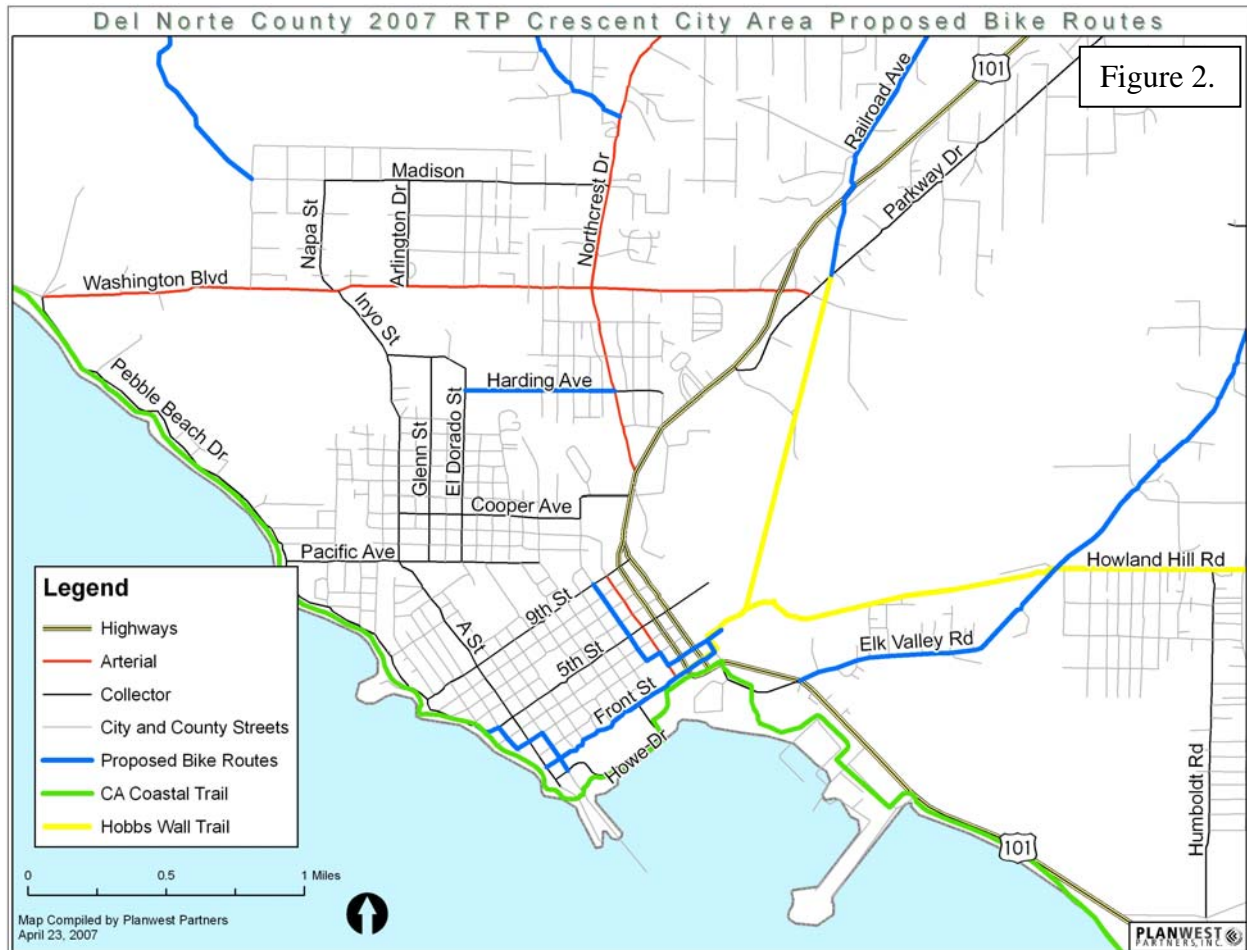
Many of the County's public beach and recreation areas, public buildings, civic centers and shopping areas are located on existing or proposed bicycle routes. In addition, some facilities without direct access are only a few blocks away from a bicycle route. Table 2.6 on the following page shows the proximity of public facilities to existing and proposed bikeways.

## Planned Bikeway Facilities Improvements

The DNLTC Technical Advisory Committee (TAC) provides guidance in selecting, planning, and implementing bicycle facilities. The TAC considers the needs of all bicyclists, along with the land use and settlement patterns of Del Norte County. Routes are selected not only to accommodate existing development, but also to meet future needs in the areas north of Crescent City where continued growth is anticipated. Route selection factors include rider safety (lightest traffic, widest shoulders, and fewest parked cars) and rider convenience (most destination points, fewest stop signs, most side streets with stop signs, and least debris on shoulders). Limited funding affects the number of bicycle routes that can be built; therefore routes with the highest

anticipated bicycle volumes, and/or lowest construction costs, are selected. Route segments are also selected for their scenic nature and their low volumes of motor vehicle traffic.

New bicycle facilities and upgrades to existing facilities are planned in Crescent City and the County jurisdiction. In Crescent City, the main planned bikeway improvements are for the Coastal Trail and the proposed Hobbs Wall Trail. In the County, bikeway upgrades are planned for many county roadways. In addition, improvement areas have been identified for the PCBR along Highway 101. A summary of planned bikeway improvements follows.



### Coastal Trail (Harbor Trail, Lighthouse Trail and Pebble Beach Trail Segments)

The proposed Coastal Trail combines the coastal Harbor Trail, Lighthouse Trail, and Pebble Beach Trail. The Coastal Trail will extend northward on the Pacific Coast from the end of the County's Pebble Beach Trail segment to Point St. George. The Pebble Beach Trail, which follows existing streets, will be improved to Class II and III standards.

The Harbor Trail alignment was defined in the Harbor Master Plan updated in 2006. It will provide more complete bicycle access to the Harbor Area and southern Crescent City. The trail parallels Highway 101 between the Cultural Center/Elk Creek and Anchor Way, crossing

Citizens Dock Road. The County's portion that follows existing streets along Anchor Way and Starfish Way will be Class III with a Class I Bicycle Path north of Citizens Dock Road to the City limits. The City plans to build a highway crossing that will connect the Harbor Trail to Magruder Street trail east of Highway 101.

**Table 2.6 Proximity of Public Facilities to Bikeways**

Facility	Located on Existing Bikeway	Located on Proposed Bikeway	Nearest Existing (or Proposed) Bikeway (in miles)
<b><i>Parks and Beaches</i></b>			
Florence Keller Park	n/a	n/a	(0.15 to Elk Valley Crossroad)
Peterson Park	n/a	n/a	0.11 (2 blocks) to 9th St.
Beachfront Park	Lighthouse Trail	n/a	
Crescent Beach	PCBR	Harbor Trail	
Redwood National & State Parks Crescent Beach	n/a	Coast-to-Caves	0.53 to Humboldt Road/Hwy 101 intersection; (2.0 to Coastal Trail south)
Redwood National & State Parks –Howland Hill Road	n/a	Coast-to-Caves	(0.20 to Hobbs Trail East/Howland Hill Rd)
Smith River National Recreation Area	n/a	Coast-to-Caves	
Lake Earl Wildlife Refuge	n/a	n/a	0.83 to Lake Earl Dr.
<b><i>Public Buildings</i></b>			
Library	n/a	n/a	(0.10 mile (1 block) to Front Street)
Post Office	n/a	n/a	(0.05 mile (1 block) to Front Street)
County Social Services	n/a	n/a	0.10 to PCBR; (0.15 to Harding Ave)
City Offices	n/a	n/a	0.27 (5 blocks) to 9th St.; (0.11 (2 blocks) to J St.)
County Offices	Ninth Street	n/a	
Sutter Coast Hospital	Washington Blvd.	n/a	
Courthouse	n/a	n/a	0.22 (4 blocks) to 9th St.; (0.11 (2 blocks) to J St.)
Visitor's Center	Lighthouse Trail	n/a	
Redwood National & State Park – Headquarters	Harbor Trail (Front Street)	n/a	
<b><i>Other Destinations</i></b>			
Jedediah Smith Shopping Center	PCBR (M Street)	Hobbs Trail North (0.11 (1 block) to 2nd St.)	
Price Mall	n/a	n/a	0.11 (1 block) Front Street; (0.11 (1 block) to 2nd St.)

Facility	Located on Existing Bikeway	Located on Proposed Bikeway	Nearest Existing (or Proposed) Bikeway (in miles)
City Pool	Lighthouse Trail	n/a	
Battery Point Lighthouse	Lighthouse Trail	n/a	
Marina / Harbor	Harbor Trail	n/a	
Del Norte County Fairgrounds	PCBR (Hwy 101)	Approx. 0.33 to Hobbs Trail North	

The following table describes the planned improvements (also see Figure 2).

**Table 2.7 Planned Harbor, Lighthouse, and Pebble Beach Bikeway Segment Improvements**

Bikeway	Improvements / Upgrades
<i>Pebble Beach Trail</i>	<ul style="list-style-type: none"> <li>• Class I &amp; II: Pebble Beach Drive from the City Limit to Hemlock Street</li> </ul>
<i>Harbor Trail</i>	<ul style="list-style-type: none"> <li>• Class I: Harbor Crossing across Hwy 101 to Magruder Trail</li> <li>• Class I &amp; II: Parallel to west side of Hwy 101 from City Limits to Anchor Way via Starfish Way and Harbor basin</li> <li>• Class III: Anchor Way from Starfish Way to Highway 101</li> </ul>

### Hobbs Wall Trail

The County is seeking funding to design and construct the Hobb's Wall Trail, a portion of an abandoned railroad right-of-way to a multi-use trail (see Figure 5). However, because of funding constraints, the construction schedule is unknown. The trail will eventually link the northern and southern portions of the Crescent City Planning Area, as well as link the City and Jedediah Smith Redwoods State Park at Stout Grove. The proposed bicycle path will have an asphalt surface. The proposed adjacent and parallel multi-use path will be surfaced with crushed rock or reused crushed asphalt, for hikers and equestrians.

Plans for the trail include two branches (north and east) that will extend from an alignment on existing City streets. The north branch will follow an old railroad right-of-way. The east branch will cross the Elk Creek Wetland and connect with Howland Hill Road. The segment connecting to Jedediah Smith Redwoods State Park at Stout Grove is a Class II route that intersects with Howland Hill Road.

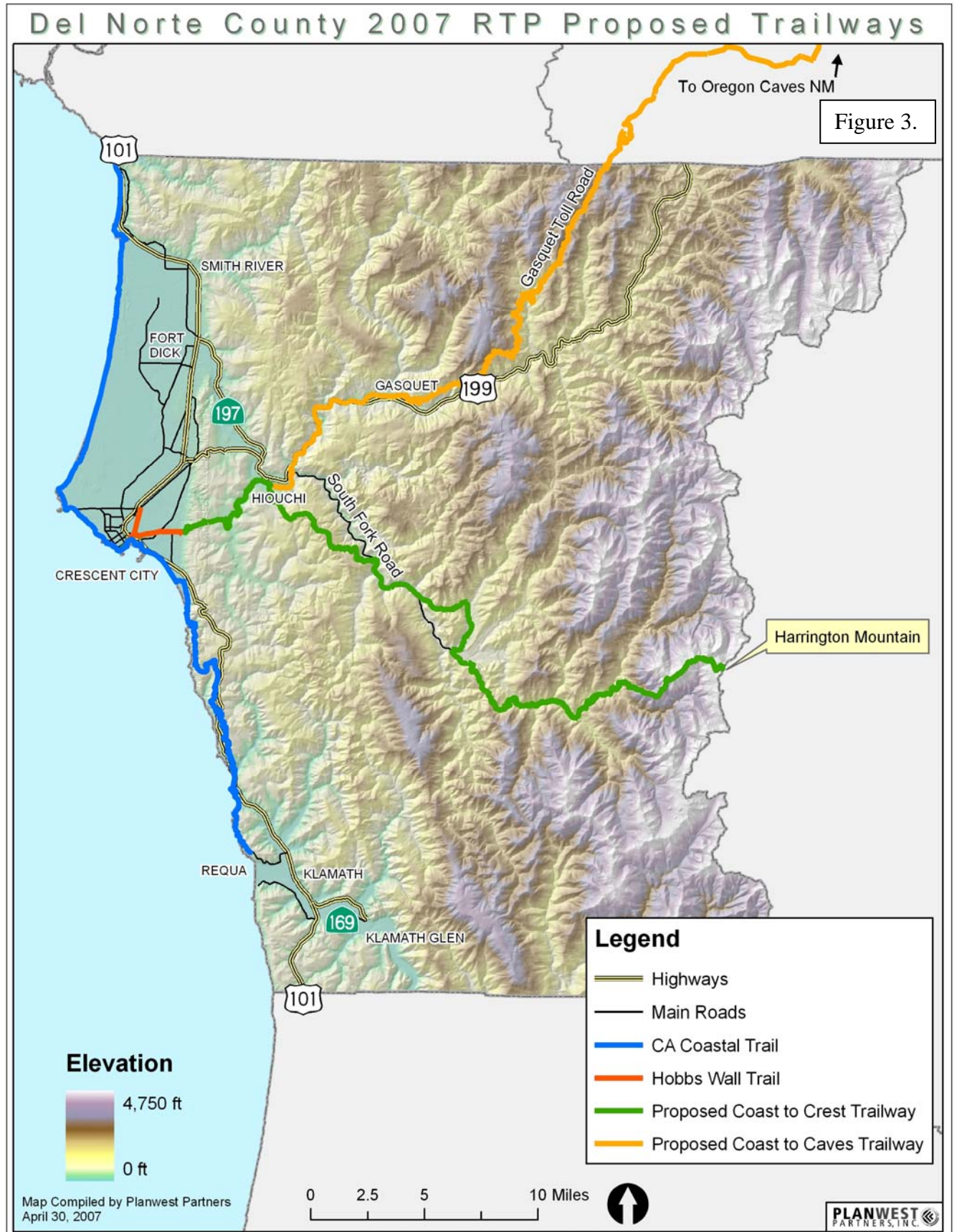
**Table 2.8 Proposed Bikeway Improvements for Segments of the Hobbs Wall Trail**

<b>Proposed Classification</b>	<b>Segment</b>
<i>Class I</i>	<ul style="list-style-type: none"> <li>• North segment along abandoned railroad right-of-way from Parkway Dr. to Second Street (construct).</li> <li>• East segment from abandoned railroad right-of-way to Howland Hill Road (construct).</li> </ul>
<i>Class I &amp; II</i>	<ul style="list-style-type: none"> <li>• East segment from City limits through Elk Creek Wetland to abandoned railroad right-of-way (construct).</li> </ul>
<i>Class II</i>	<ul style="list-style-type: none"> <li>• East segment from N Street to City limits in Elk Creek Wetlands.</li> <li>• East segment along Howland Hill Road (upgrade; eventually upgrade to Class I).</li> </ul>
<i>Class III</i>	<ul style="list-style-type: none"> <li>• Second Street from K Street to N Street.</li> <li>• K Street from Second Street to Front Street.</li> </ul>

#### Coast to Caves and Coast to Crest Trailway

The proposed “Coast to Crest and Coast to Caves Trailway” (Trailway) is a vision of the Del Norte County Resource Advisory Committee (RAC), in conjunction with the Redwood Economic Development Institute (REDI), to establish a pre-eminent recreational Trailway providing public access along a safe, maintained route that highlights the scenic beauty and natural assets of the Pacific Northwest.

The Trailway is actually two major trails: the Coast to Crest Trail and the Coast to Caves Trail. Both trails will originate on the California coast in Crescent City, Del Norte County. As envisioned, the Coast to Crest Trail will extend to Harrington Mountain, located on the crest of the Coast Ranges in Siskiyou County, California. The Coast to Caves Trail will extend to Oregon Caves National Monument (OCNM) in Josephine County, Oregon. Trail users will have the additional option of completing the loop by following existing trails and roads between OCNM and Harrington Mt. (figure 3).



In tandem, these two trails make up the Trailway, which is intended to resurrect historic linkages between the Crescent City harbor and the Oregon mining country and the Klamath/Trinity mining country. The Coast to Crest and Coast to Caves Trailway will offer a “must experience” recreational opportunity for all levels of hikers, walkers, off road cyclists, equestrians, and nature enthusiasts. The setting is a world heritage site with the potential to be a world class destination. The Trailway has the elements to become a regional trail asset that will attract hikers and mountain bicyclists to Del Norte County from all around California, Oregon, the nation, as well as the world.

## Other Crescent City Planning Area Bikeway Improvements

Additional bikeway improvements for Crescent City include:

- Harding Avenue within the City limits – upgrade to Class II Bicycle Lane;
- El Dorado Street between Hamilton and Del Norte High School – upgrade to Class III Bicycle Route;
- Magruder Street between Elk Valley Road and Kent Street – upgrade to Class I; and
- Harbor Cross Trail between the Harbor and Magruder Trails – Class I crossing.

## Planned Del Norte County Bikeway Improvements

Several existing bikeways are proposed for upgrading to Class I or Class II in northern and eastern Del Norte County. Bicycle routes are planned to connect the town of Smith River to downtown Crescent City and Enderts Beach, and Gasquet to the east. When completed, bicyclists will have use of a variety of scenic routes. The locations of planned bikeway upgrades are described in Table 2.9, and illustrated in Figure 2.

**Table 2.9 Planned Bikeway Upgrades and Additions in Del Norte County**

Upgrade to Classification	Segment
<i>Class I &amp; II</i>	<ul style="list-style-type: none"> <li>• Northcrest/Lake Earl Drive from Washington Blvd. to Blackwell Lane.</li> <li>• Railroad Ave. from Parkway to Elk Valley Crossroad.</li> <li>• Riverside Street from Washington Blvd. to Dead Lake.</li> <li>• Lake Earl Drive from Blackwell Lane to Hwy 101 (North).</li> </ul>
<i>Class II</i>	<ul style="list-style-type: none"> <li>• Blackwell Lane from Lake Earl Drive to Railroad Avenue.</li> <li>• Moorehead Road from Lake Earl Drive to Lower Lake Road.</li> <li>• Lower Lake Road from Lake Earl Drive to Kellogg Road.</li> <li>• Gasquet Flat Road from Hwy 199 to Middle Fork.</li> <li>• Middle Fork Gasquet Road from Hwy 199 to Gasquet Flat.</li> <li>• Smith River: First Street and Sarina Road.</li> <li>• Harding Avenue (outside City limits).</li> </ul>
<i>Class III</i>	<ul style="list-style-type: none"> <li>• From South Fork Road and Douglas Park Road intersection (along the South Fork) to Big Flat.</li> <li>• Kellogg Road from Lower Lake Road to Beach.</li> </ul>

Upgrade to Classification	Segment
	<ul style="list-style-type: none"> <li>• Fred Haight Drive.</li> <li>• Rowdy Creek Road from Hwy 101 to Smith River National Recreation Area.</li> <li>• Elk Valley Crossroad from Hwy 101 to Lake Earl Drive.</li> <li>• Old Mill Road from Dillman Road to Wildlife Area.</li> </ul>

### Pacific Coast Bike Route (PCBR)

As described earlier under Existing Bikeways, the PCBR is a state designated bike route that is located on Highway 101 for most of the Del Norte County segment. Whenever possible, Caltrans widens the shoulders to produce more room for cyclists. Bicycle improvements also include pavement striping, to more clearly define the bike lanes.

Caltrans is currently evaluating priorities for shoulder improvements along Highway 101. The agency prepared the *Draft Pacific Coast Bike Route Shoulder Study* (2002). The study reports that shoulder widths along the bike route are generally a minimum of four feet and are adequate for bicycle travel; however, narrow shoulders exist at some locations. Widening is proposed at some locations, primarily at southbound shoulders, to improve bicycle travel and safety. Caltrans has identified approximately 10 miles of Highway 101, in Del Norte County, where possible shoulder improvements are needed.

## Bicycle Parking, Rest, and Support Facilities

Bicycle parking, rest stops, restrooms, showers and lockers, as well as maps and guides are key facilities for supporting bicycle use. The following section discusses the existing conditions and proposed improvement for these types of facilities.

### Bicycle Parking Facilities

Bicycle parking is an important support facility used by all types of cyclists. Bicycle parking is most usable when placed in highly visible, well-lit locations. Covered bicycle parking areas are particularly attractive, given Del Norte County's wet weather patterns. Outdoor racks are the most common type of bike parking. Bike racks are anchored to the ground and allow for the locking of both frame and wheels. Bike lockers provide covered parking for the entire bike, providing security and weather protection.

In the Crescent City Planning Area, there are currently bicycle racks at seven locations. The racks are located at coastal vista points, in City parks, at the harbor, and at the Price Mall. The County currently offers bicycle racks at two locations, Marhoffer Creek Vista and the Harbor Area at Starfish Way and Anchor Way.

## Bicycle Rest and Support Facilities

Showers and lockers primarily benefit those commuting to work or to school by bicycle. These proposed public shower facilities also serve touring cyclists. There are currently no existing locker facilities specifically for bicyclists. However, there are public restrooms in most public buildings and parks, and public showers are available in park campgrounds, at the city pool and at the harbor.

Maps and guides enable bicyclists to better plan their travel. Caltrans has published a Bicycle Touring Guide (Guide), available for free from any Caltrans office. Included in the Guide are many maps of specific bicycle routes throughout California, and points of interest along the routes. The Guide also offers bicycle safety tips and lists contacts for bicycling information.

**Table 2.10 Existing & Proposed Bicycle Parking**

Location	Jurisdiction	Parking	Status
Jedediah Square (downtown)	City	7-bike rack	Existing
Beachfront Park (coast)	City	5-bike rack	Existing
Cultural Center (downtown/coast)	City	3-bike rack	Existing
Peterson Park (downtown)	City	10-bike rack	Existing
Marhoffer Creek Vista (coast)	County	5-bike rack	Existing
Harbor Area (Starfish Way & Anchor Way)	County	15-bike rack	Existing
Brother Jonathan Cemetery Park (coast)	City	5-bike rack	Proposed
Brother Jonathan Vista Area (coast)	City	5-bike rack	Proposed
Battery Point (coast)	City	5-bike rack	Proposed

## Coordination with Other Transportation Modes

Some cyclists combine bicycle travel with other transportation modes. For example, public transportation may be used for portions of a trip. Providing facilities such as secure bicycle parking at transit stops, and bike racks on public transit vehicles, can encourage this type of intermodal use.

The City and County are served by the public transit system Redwood Coast Transit (RCT). RCT currently provides three fixed routes. The existing fixed routes include the Klamath commuter service, a Crescent City route, and a Howland Hill route. RCT fixed-route buses are equipped with bicycle racks.

Park-and-ride lots are another way to encourage multi-modal transportation use. Park-and-ride lots allow individuals to park their vehicles (usually at a transit hub) and then use an alternate mode of transportation, such as carpooling or riding public transit. Currently, Del Norte County has no park-and-ride lots.

## **Bicycle Safety and Education Programs**

Bicycle safety and education programs have been sponsored by the Del Norte Unified School District in conjunction with the California Highway Patrol. The California Highway Patrol sends representatives to local schools to educate children on bicycle safety. Officers conduct bike rodeos, and speak in assemblies and classroom presentations.

## **2C. ASSESSMENT**

This bicycle facilities assessment considers: the existing bikeway system; the needs of residents and visitors; long-distance bicycle touring; local recreational bicycling; and commuting to schools, jobs, parks, civic centers, and shopping facilities. It also considers gaps on existing routes, bicycle parking, rest and support facilities. The section begins with a discussion of bicycle use opportunities and constraints and unmet facility needs. Bicycle accident records are considered as well.

### **General Opportunities and Constraints**

The following opportunities were considered in assessing bicycle facilities and needs.

- A multi-use regional trail system benefits bicyclists, pedestrians, hikers, and equestrians. The proposed Hobbs-Wall Trail, Coast to Caves and Coast to Crest Trails are examples of multi-use non-motorized trails.
- Crescent City's compact size and topography make most destinations easily accessible by foot or bicycle. Most public facilities are located within a few blocks of existing or planned bicycle routes. These factors make cycling to work, school, parks and shops viable.
- Enhancing bicycle facilities in Crescent City and Del Norte County will increase tourism. Completion of the Hobbs Wall, Harbor, Coastal, Coast to Caves and Coast to Crest Trails, as well as other local trail systems, will enhance Del Norte as a bicycling destination. Many of the recreational resources that grace Del Norte are accessible by bike, and still others will be accessible when proposed bikeway improvements are completed. For instance, points of interest along the Pacific coast will be accessible from the proposed Coastal Trail, Lighthouse Trail, and Harbor Trail. Additionally, improved bicycle routes to Jedediah Smith Redwoods State Park, Del Norte Coast Redwoods State Park, Redwood National Park, Smith River National Recreational Area, Lake Earl Wildlife Area, and Tolowa Dunes State Park are planned.
- Crescent City offers bicyclists a variety of cultural and historical destinations. The outlying communities such as Smith River, Fort Dick, Hiouchi, Gasquet, and Klamath also offer cultural and historical attractions.
- The area's relatively mild climate and moderate temperatures encourage year-round bicycling.

- The outstanding natural beauty of the area's forests, mountains, rivers, lakes, coastline and the world's tallest trees are strong attractions for both local and out-of-area bicyclists.

The following general constraints were also considered in assessing existing bicycle facilities and needs.

- The area has distinct seasonal weather patterns, and wet, foggy and windy conditions are constraints for some cyclists. Rainy weather discourages some potential bicycle commuters, and foggy or windy weather discourages some touring cyclists.
- Funds for bicycle improvements are limited; therefore, planned improvements may take years to implement.
- Many portions of Highways 101, 199, and 197, including the Dr. Fine Bridge on Highway 101 just south of Hwy 197, have narrow shoulders, large vehicle traffic, and/or limited visibility. These factors limit bicycling opportunities and safety for residents of the area's outlying communities (Klamath, Smith River, Hiouchi, and Gasquet), which are reached primarily by these state highways.
- The mountainous terrain in southern and eastern Del Norte County is a barrier to some bicyclists.
- Some destinations lack adequate bicycle parking facilities.
- Lack of bicycle support facilities at or near workplaces may limit bicycle commuting.

## **Bicycle Accidents**

Statistics for bicycle accidents in California are available through the Statewide Integrated Traffic Records System (SWITRS), which processes all reported fatal and injury collisions on state highways and all public roadways. SWITRS data is reported in the *California Highway Patrol Annual Report of Fatal and Injury Motor Vehicle Traffic Collisions*. Because these reports are based on motor vehicle collisions that involve bicycles, actual bicycle accidents may be underrepresented. In addition, it should be noted that minor accidents that do not result in injuries often go unreported to law enforcement agencies, and therefore the actual accident rate may be higher than detected by SWITRS.

Table 2.11 shows the number of injury collisions from 2005 to 2008 involving a motor vehicle and a bicycle in Del Norte County, as published in the CHP annual reports. All reported accidents involved injuries; none involved fatalities.

**Table 2.11 Motor Vehicle Collisions with a Bicycle Involved, Del Norte County 2005-2008**

Year	Crescent City Roadways	County Roadways	Unincorporated State Highway	Total
2008	0	5	2	7
2007	0	4	2	6
2006	0	7	1	8
2005	1	5	3	9

Source: *California Highway Patrol Bicycle Involved Collisions, Annual Reports, 2005 - 2008*<sup>4</sup>

## Gaps on Existing Routes

Redwood School in Fort Dick, and Smith River School are both served by existing bike routes. Other elementary and middle schools and Del Norte High School are located near but not on existing or proposed bike routes. (See Table 2.1)

## Gaps in Bicycle Parking, Rest, and Support Facilities

Having secure parking facilities encourages bicycling. Although some bicycle racks exist, most downtown and commercial area destinations lack these facilities. Bicycle racks have been proposed for Brother Jonathan Vista Area and Park, and Battery Point. More bicycle racks are needed at public activity centers, such as the Del Norte Fairgrounds, the library, and downtown Crescent City.

<sup>4</sup> <http://www.chp.ca.gov/html/publications.html>

### **3. Goal, Policies, and Objectives**

#### **3A. OVERALL GOAL**

The goal of the *Del Norte County and Crescent City Bicycle Facilities Plan* is to encourage the use of bicycles for transportation by providing a system of bikeways and support facilities that promote safe, convenient, and enjoyable cycling. The following policies have been established facilitate progress toward this goal.

#### **3B. POLICIES AND OBJECTIVES**

The following goals, policies, and objectives are from prior Bike Plan updates, the DNLTC 2007 *Regional Transportation Plan Update*, or have been developed for this update.

##### **I. Planning and Design Guidelines**

###### ***Policy I-1:***

Support bicycle planning as an integral part of community planning, including land use and regional transportation planning.

Objective I-1a. Update the *Del Norte County and Crescent City Bicycle Facilities Plan* at least every five years.

Objective I-1b. Encourage the City and County to implement the recommendations contained in the updated Bike Plan when considering new or upgraded facilities.

Objective I-1c. Continue to assess the adequacy of multi-use trail facilities, and identify multi-use trail opportunities throughout the County.

Objective I-1d. Make bikeway projects consistent with this Plan, for funding opportunities.

###### ***Policy I-2:***

Support the construction of bicycle facilities that connect work, school, shopping, recreation, and other activity centers.

Objective I-2a. Support Caltrans' development of non-motorized shoulders on state highways to accommodate bicycle traffic.

Objective I-2b. Develop bikeways that lead to and through outdoor recreational areas, including parks and schools.

Objective I-2c. Develop the Hobbs Wall Trail, the Coastal Trail, the Coast to Caves and Coast to Crest Trails as links to recreational areas, including the Redwood National and State Parks.

Objective I-2d. Coordinate with local school districts to assure that safe routes to schools are available to all students.

Objective I-2e. Develop bikeways that connect to major transit transfer points.

Objective I-2f. Encourage connectivity between federal, state and local bicycle and trail facilities.

***Policy I-3:***

Support bicycle facility improvements that increase convenience and safety, as well as safety education programs.

Objective I-3a. Develop bikeways, including shared routes and bicycle boulevards that comply with the standards of Sections 2374 – 2376 of the Streets and Highways Code pertaining to bikeways.

Objective I-3b. Provide bicycle parking as needed at public facilities, and encourage private entities to do the same.

Objective I-3c. Provide bicycle racks for all transit vehicles.

Objective I-3d. Provide bicycle parking facilities at major bus transfer points.

Objective I-3e. Encourage city, county, and state law enforcement agencies to offer programs that encourage safe bicycling.

Objective I-3f. Encourage major employers to provide support facilities that encourage bicycle commuting, such as lockers and showers and incentive programs.

## **II. Funding and Site Acquisition**

***Policy II-1:***

Pursue funding sources for plan implementation.

Objective II-1a. Maintain a current list of bicycle facility funding sources.

Objective II-1b. Pursue funding available specifically for recreational bicycle facilities.

Objective II-1c. Reserve 2% of the Transportation Development Act funds annually for pedestrian and bicycle projects.

Objective II-1d. Encourage development of abandoned rail right-of-ways for use as bicycle facilities.

Objective II-1e. Conduct periodic recreational travel demand surveys. Tabulate demand for facility improvements and state and federal funding sources.

### **III. Interagency Coordination (Planning, Maintenance, Enforcement)**

***Policy III-1:***

Support projects that promote bicycling as a mode of travel, including educating the public on bicycle safety.

Objective III-1a. Support active enforcement of bicycle use and safety laws.

Objective III-1b. Support bicycle safety education for all bicyclists.

Objective III-1c. Encourage sweeping of adopted bikeways on a regular basis.

Objective III-1d. Encourage maintenance of bikeways and bicycle support facilities in a condition favorable to use by bicyclists, assigning bikeways a higher maintenance priority than similar, non-bikeway routes.

Objective III-1e. Provide information including standards and vendors for bicycle parking facilities.

Objective III-1f. Maintain current and adequate maps and guides of all bicycle routes and facilities for the region.

### **IV. Citizen and Community Involvement**

***Policy IV-1:***

Support community and citizen involvement in the planning process.

Objective IV-1a. Encourage traditionally underserved groups, including racial and ethnic minorities, seniors, people with disabilities, and people who are low-income to participate in planning bicycle routes and support facilities.

Objective IV-1b. Encourage Native American groups to participate in the planning of bicycle routes that will serve Native American communities.

Objective IV-1c. Conduct Bike Plan public reviews as part of the periodic updating process.

## 4. IMPLEMENTATION

### 4A. BICYCLE FACILITY IMPLEMENTATION PROGRAM

The primary focus of this plan is to develop and maintain a safe and accessible system of bicycle routes and support facilities. This system includes multi-use trails that also accommodate pedestrians, joggers, hikers, and/or equestrians. The PCBR and the planned Coast to Caves and Coast to Crest Trailways will primarily serve recreation and touring bicyclists, as well as joggers and hikers. Bicycle routes in Crescent City will serve bicycle commuters, as well as pedestrians and joggers. The Coastal Trail, Lighthouse Trail, Harbor Trail, and Coast to Caves Trail, as well as planned routes in Del Norte County, will primarily serve local recreational bicyclists, and joggers and pedestrians. In many cases, routes will attract multiple user types.

Caltrans, the City, and the County have planned improvements for this system of routes. Caltrans' recommended bikeway improvements involve the PCBR on Highway 101. In most cases, City and County proposed bikeway improvements will involve upgrading existing bikeways to Class I or Class II standards, or new Class III routes will be designated. In a few cases, facilities will be constructed along new alignments.

Table 4.1 lists the locations along Highway 101 that Caltrans has identified as having possible shoulder improvement needs. Table 4.2 on the following pages describes the inventory of planned improvements, with the corresponding responsible agency, target date, and proposed funding source for each.

**Table 4.1 Recommended Shoulder Improvement Locations on Highway 101<sup>1</sup>**

Postmile Location Along Highway 101	Length (Miles)	Estimated Cost (\$1,000)	Funding Status*
DN-101- 7.80 – 7.93 a	0.13	200	Un-programmed
DN-101- 11.70 – 12.05	0.35	600	Un-programmed
DN-101- 18.90 – 19.89	0.99	1,700	Un-programmed
DN-101- 8.51 – 8.53	0.02	700	Part of programmed project to raise the grade and widen highway at Hunter Creek Bridge
DN-101-20.20 – 22.47	2.27	3,900	Cushing Creek Project - Completed
DN-101-22.47 – 23.60	1.23	2,000	Part of larger candidate highway widening project
DN-101-41.02 – 45.71	4.69	5,600	Part of larger candidate highway widening project

\*A project that is “programmed” means that funding has been secured but the project is not yet built.

<sup>1</sup>Source: *Draft Pacific Coast Bike Route Shoulder Study*, 2002.

## 4B. FUNDING

### Funding Sources for Bicycle Projects

A number of federal, state, and local programs are available for funding bicycle and pedestrian improvement projects. Federal funding sources that can be used for bicycle projects include the Safe, Accountable, Flexible, Efficient Transportation Equity Act- A Legacy for Users (SAFETEA-LU) programs; Proposition 116 funds (Clean Air & Transportation Improvement Act of 1990); Transportation Enhancement (TE), Safe Routes 2 Schools, and the Regional Surface Transportation Program (RSTP). State and local funding sources/programs include the State Transportation Improvement Programs (STIP), Local Transportation Fund, Bicycle Transportation Account, and Caltrans planning grants. Summaries of these funding sources follow.

#### Federal Sources/Programs

Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) – Enacted on August 10, 2005, SAFETEA-LU authorizes \$286 billion in federal transportation funding through fiscal year 2009, with current extensions through December 2010. SAFETEA-LU builds upon the framework of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), but with adjusted funding levels and additional programs needed to maintain and grow our vital transportation infrastructure. SAFETEA-LU promotes more efficient and effective federal surface transportation programs, while giving state and local transportation decision makers more flexibility to solve transportation problems in their communities.

#### SAFETEA-LU Funded Programs:

- *National Highway System (NHS) Program (SAFETEA-LU Sections 1101(a)(2), 1103, 6006)*: Intended funding for improvements to rural and urban roads that are part of the National Highway System, but a state may transfer up to 50 percent to Recreational Trails Apportionment served by a NHS road so long as it improves travel in the corridor.
- *Highway Safety Improvement Program (HSIP) (SAFETEA-LU Sections 1101(a)(6), 1401)*: Establishes a core program, separately funded for the first time, with flexibility provided to allow states to target funds to their most critical safety needs in order to reduce traffic fatalities and serious injuries on public roads. These funds may be used to carry out any highway safety improvement project on any public road or publicly owned bicycle or pedestrian pathway or trail. High priority projects under this program are railway-highway crossings, improvements on high-risk rural roads, and infrastructure needs related to highway safety improvement projects. The state prioritizes and selects projects for funding. Environmentally neutral and non-regionally significant projects may be included.
- *Safe Routes to Schools (SR2S) (SAFETEA-LU Sections 1101(a)(17), 1404)*: Provided to enable and encourage primary and secondary school children to walk and bicycle to school. Both infrastructure-related and behavioral projects will be geared toward providing a safe, appealing environment for walking and biking that will improve the

quality of our children's lives and support national health objectives by reducing traffic, fuel consumption, and air pollution in the vicinity of schools.

- *Congestion Mitigation and Air Quality (CMAQ) Improvement Program (SAFETEA-LU Sections 1101(a)(5), 1103(d), 1808)*: Created specifically to address congestion and air quality problems, intending to help achieve the goal of the 1990 federal Clean Air Act amendments. Funds must be used for projects that reduce congestion and/or vehicular emissions such as alternative transportation modes, including bicycle and pedestrian facilities. **This funding is only available to MPO's.**
- *Recreational Trails Program (RTP) (SAFETEA-LU Sections 1101(a)(8), 1109)*: Intended to develop and maintain trails for recreational purposes that include pedestrian, equestrian, bicycling, and non-motorized snow activities as well as off-road motorized vehicle activities. Funds may be used to maintain and restore trails, develop trailside and trailhead facilities, acquire easements or land for trails, and to construct new trails.
- *Highway Bridge Program (HBP) (SAFETEA-LU Sections 1101(a)(3), 1114)*: Provides funding to enable states to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventive maintenance. Beginning in 2006, \$100 million is to be set aside annually to fund designated projects.
- *Federal Lands Highway Program (FLHP) (SAFETEA-LU Section 1119)*: Provides for transportation planning, research, engineering, and construction of highways, roads, and parkways and transit facilities that provide access to or within public lands, national parks, and Indian reservations.
- *Transportation, Community, and System Preservation Program (TCSP) (SAFETEA-LU Section 1117)*: Intended to address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships. Funds must be equitably distributed to a diversity of populations and geographic regions. Eligible projects include practices that improve the efficiency of the transportation system, reduce the impacts of transportation on the environment, and provide efficient access to jobs, services, and centers of trade.
- *Transportation Enhancement Program (TE) (SAFETEA-LU Section(s): 1113, 1122, 6003)*: Established to strengthen the cultural, aesthetic, and environmental aspects of the Nation's intermodal transportation system. Requires that projects must relate to surface transportation and be one of the legislations 12 designated activities. Related bicycle activities include: Bicycle and Pedestrian Facilities; Bicycle and Pedestrian Safety and Education; Preservation of Abandoned Railway Corridors, including the conversion and use of the corridors for pedestrian or bicycle trails; Historic Preservation, including non-motorized access to historic sites and buildings; and Landscaping and Scenic Beautification.

Proposition 116: Clean Air & Transportation Improvement Act of 1990 – Under Proposition 116, non-urban county transit funds were made available in Del Norte County for transit or non-motorized facilities. These funds were provided on a per capita basis, using the 1990 Federal census. No additional Proposition 116 funds are available. However, the County of Del Norte has several projects in process that are being funded with recently allocated Proposition 116 funds (see Table 4.3).

## State and Local Sources/Programs

Transportation Development Act (TDA) – Also known as SB 325, provides two major sources of funding for public transportation: the Local Transportation Fund (LTF) and the State Transit Assistance fund (STA). These funds are for the development and support of public transportation needs that exist in California and are allocated to areas of each county based on population, taxable sales, and transit performance. Local entities may reserve 2% of the TDA funds allocated annually for pedestrian and bicycle projects.

Local Transportation Fund (LTF) - The Transportation Development Act creates in each county a Local Transportation Fund for the transportation purposes specified in the Act. Revenues to the LTF are derived from 1/4 percent of the retail sales tax collected statewide. The 1/4 percent is returned by the State Board of Equalization to each county according to the amount of tax collected in that county. The DNLTC allocates the funds to claimants to provide public and community transportation services. Local Transportation Funds may be allocated for local streets and roads purposes if there are no unmet transit needs that are reasonable to meet.

Department of Transportation – Section 887.8(b) of the California Streets and Highways Code permits the Department of Transportation to construct and maintain non-motorized facilities where such improvements will increase the capacity or safety of a state highway.

Bicycle Transportation Account (BTA) - Provides state funds for city and county projects that improve safety and convenience for bicycle commuters. Funds are made available through an annual competitive grant cycle. A 10 percent local match is required. Priority is given to projects serving a commuter purpose, in accordance with Section 2386 of the Streets and Highways Code.

The Habitat Conservation Fund Grant Program – This program originates from the California Wildlife Protection Act of 1990 (Prop 117). Eligible projects include the acquisition of various types of wildlife habitats, enhancement and restoration of various wildlife habitats, trails, and programs that attract recreationalists to park and wildlife areas, educating them about the state's resources. Projects must be incorporated into the RTP if they are regionally significant. The State Department of Parks and Recreation (DPR) administers this program. A local match of 50% is required and the local match cannot be from a state source.

Land and Water Conservation Fund: Provides funds to federal agencies, states, and six territories in the United States. The money allocated to states may be used for statewide planning, and for acquiring and developing outdoor recreation areas and facilities. Administered nationally by the National Park Service since 1964, allocation to California is administered by the State Liaison Officer, who is the Director of the State Department of Parks and Recreation. Funds are derived from federal recreation fees, the federal motorboat fuels tax, and the Outer Continental Shelf mineral receipts with priority projects including trails, campgrounds, picnic areas, natural areas, and cultural areas for recreational use. This is a reimbursement program with a 50 percent match requirement.

Non-Motorized Trails Grant Program – Under The Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000, program funds are appropriated for the development, improvement, rehabilitation, restoration, and enhancement of non-motorized trails, and associated interpretive facilities for the purpose of increasing public access to, and enjoyment of, public areas for increased recreational opportunities.

State Transportation Improvement Program (STIP) – The STIP is a five-year capital improvement program provided to assist the state and local entities to plan and implement transportation improvements and to utilize resources in a cost effective manner. Funded with revenues from the State Highway Account, the STIP is split 75 percent to Regional Transportation Improvement Program (RTIP), decided by regional agencies such as DNLTC, and 25 percent to Interregional Transportation Improvement Program (ITIP), projects nominated by Caltrans.

Regional Transportation Improvement Program (RTIP): The RTIP receives 75 percent of STIP funding. The 75 percent is further subdivided by formula of population (25 percent) and road mileage (75 percent) into county shares. A primary source of funding is the motor vehicle fuel excise tax.

Regional Surface Transportation Program (RSTP) Funds: Established by the State of California to utilize federal Surface Transportation Program funds for a wide variety of transportation projects. The state allows the Regional Transportation Planning Agency to exchange these federal funds for state funds to maximize the ability of local public works departments to use the funds on a wide variety of projects. The exchanged funds are distributed on a fair share and competitive basis. Annual apportionments of RSTP funds range from \$3-4 million. Approximately 76% (\$225 million dollars per year) of the state's RSTP funds must be obligated on projects that are located within the 11 urbanized areas of California with populations greater than 200,000 people.

Environmental Enhancement and Mitigation Program (EEMP): Offers funding to remedy environmental impacts of new or improved transportation facilities. State gasoline tax monies fund the EEMP. Grants are awarded in three categories. "Roadside Recreational" is applicable for bicycles including projects that provide for the acquisition and/or development of roadside recreational opportunities such as trails.

Mello-Roos Community Facilities Act of 1982: Allows any county, city, special district, school district, or joint powers authority to establish a Mello-Roos Community Facilities District (CFD), which allows for financing of public improvements and services when no other source of money is available. This is an enormously flexible tool placed at the disposal of local governmental agencies within the state to help them finance needed community facilities and services through the levy of voter approved special taxes.

Community-Based Transportation Planning (CBTP) Grant Program: Provides funding for planning projects statewide that support livable communities, coordinate land use and transportation planning, and involve the community. Caltrans annually awards approximately \$2.5 million in projects that address concepts such as improved mobility and transportation

choices for a wider range of users, increased transit- oriented/ mixed use development, and/ or enhanced community/ economic development.

Office of Traffic Safety (OTS) Grants: Provides bicycle and pedestrian grants to assist local agencies with safety and educational programs, including bicycle rodeos and bicycle helmet distribution programs. Grants are based on a statewide competitive basis, and not available for construction of bikeway facilities.

Table 4.2 on the following page summarizes federal, state, innovative, and private funding sources for bicycle and pedestrian facilities.

**Table 4.2**  
**Bicycle and Pedestrian Facility Eligible Programs**

<b>Funding Programs</b>	<b>Modes (Bicycle, pedestrian-walkways, trails)</b>	<b>Trip Types (Commute/Transportation, Recreational)</b>	<b>Project Types (Construction, Non-construction,)</b>	<b>Required Matching Funds</b>	<b>Available Annual Funding</b>	<b>Contact &amp; Website Information</b>
<b>FEDERAL FUNDING</b>						
Congestion Mitigation & Air Quality Improvement Program (CMAQ)	Both	Both	Both	20%	\$8.6 billion nationally FYs 2005-2009 <b>MPO's only</b>	<a href="http://www.house.gov/transportation_democrats/Bike%20Book%2006.pdf">http://www.house.gov/transportation_democrats/Bike%20Book%2006.pdf</a>
National Highway System (NHS)	Both	Transportation	Both	20%	\$2.8 billion for California FYs 2005-2009	<a href="http://www.fhwa.dot.gov/safetealu/factsheets.htm">http://www.fhwa.dot.gov/safetealu/factsheets.htm</a>
Federal Lands Highway Program (FLHP)	Both	Transportation	Construction	None	\$4.5 billion Nationwide FYs 2005-2009	<a href="http://www.fhwa.dot.gov/safetealu/factsheets.htm">http://www.fhwa.dot.gov/safetealu/factsheets.htm</a>
Highway Bridge Program (HBP)	Bicycle	Transportation	Construction	20%	\$1.9 billion for California FYs 2005-2009	<a href="http://ops.fhwa.dot.gov/safetea/hwy_provisions.htm">http://ops.fhwa.dot.gov/safetea/hwy_provisions.htm</a>
Recreational Trails Program (RTP)	Both	Both	Both	20%	\$370 million FYs nationally 2005-2006	<a href="http://www.fhwa.dot.gov/safetealu/factsheets/recreails.htm">http://www.fhwa.dot.gov/safetealu/factsheets/recreails.htm</a>
Highway Safety Improvement Program (HSIP)	Both	Both	Both	10%	\$5.1 billion nationally for FYs 2005-2009	<a href="http://www.house.gov/transportation_democrats/Bike%20Book%2006.pdf">http://www.house.gov/transportation_democrats/Bike%20Book%2006.pdf</a>

**Table 4.2**  
**Bicycle and Pedestrian Facility Eligible Programs**

<b>Funding Programs</b>	<b>Modes (Bicycle, pedestrian-walkways, trails)</b>	<b>Trip Types (Commute/Transportation, Recreational)</b>	<b>Project Types (Construction, Non-construction,)</b>	<b>Required Matching Funds</b>	<b>Available Annual Funding</b>	<b>Contact &amp; Website Information</b>
Safe Routes to Schools (SR2S)	Both	Both	Both	None	\$612 million nationally for FYs 2005-2009	<a href="http://www.fhwa.dot.gov/safetealu/factsheets/saferoutes.html">http://www.fhwa.dot.gov/safetealu/factsheets/saferoutes.html</a>
Transportation, Community, and System Preservation (TCSP) Program	Both	Transportation	Both	10%	\$270 million nationally for FYs 2005-2006	<a href="http://www.fhwa.dot.gov/tcsp/index.html">http://www.fhwa.dot.gov/tcsp/index.html</a>
<b>STATE FUNDING</b>						
State Transportation Improvement Program (STIP)	Both	Transportation	Construction	none	Varies	<a href="http://www.dot.ca.gov/hq/transprog/stip.htm">http://www.dot.ca.gov/hq/transprog/stip.htm</a>
Bicycle Transportation Act.	Bicycle	Transportation	Both	10%	\$7.2 million	<a href="http://www.dot.ca.gov/hq/LocalPrograms/bta/">http://www.dot.ca.gov/hq/LocalPrograms/bta/</a>
Land and Water Conservation Fund	Both	Both	Both (Including land acquisition)	50%	\$4,123,743 for FYs 2005-2006	<a href="http://www.parks.ca.gov/default.asp?page_id=21360">http://www.parks.ca.gov/default.asp?page_id=21360</a>
Environmental Enhancement and Mitigation Program	Both	Both	Both (Including land acquisition)	none	\$10 million	<a href="http://resources.ca.gov/eem/">http://resources.ca.gov/eem/</a>

**Table 4.2**  
**Bicycle and Pedestrian Facility Eligible Programs**

<b>Funding Programs</b>	<b>Modes (Bicycle, pedestrian-walkways, trails)</b>	<b>Trip Types (Commute/Transportation, Recreational)</b>	<b>Project Types (Construction, Non-construction,)</b>	<b>Required Matching Funds</b>	<b>Available Annual Funding</b>	<b>Contact &amp; Website Information</b>
Mello-Roos Community Facilities Districts	Both	Both	Both			
Community Based Transportation Planning (CBTP) Grant Program	Both	Both	Non-construction	20%	\$8,470,000 awarded in FYs 2009-2010	<a href="http://www.dot.ca.gov/hq/tpp/offices/ocp/cbtpg.htm">http://www.dot.ca.gov/hq/tpp/offices/ocp/cbtpg.htm</a>
Habitat Conservation Fund Grant Program	Both	Both	Both (Including land acquisition)	50%	\$2 million	<a href="http://www.parks.ca.gov/?page_id=21361">http://www.parks.ca.gov/?page_id=21361</a>
Regional Surface Transportation Program (RSTP)	Both	Transportation	Both	N/A	\$3-4 million	<a href="http://www.dot.ca.gov/hq/transprog/federal/rstp/Official_RSTP_Web_Page.htm">http://www.dot.ca.gov/hq/transprog/federal/rstp/Official_RSTP_Web_Page.htm</a>
Office of Traffic Safety (OTS) Grants	Both	Transportation	Both	N/A	Around \$67 million for FFY 2008	<a href="http://www.ots.ca.gov">www.ots.ca.gov</a>
Non-Motorized Trails Grant Program	Both	Both	Both	N/A	\$1.7 million	<a href="http://www.parks.ca.gov/?page_id=21355">http://www.parks.ca.gov/?page_id=21355</a>

<b>Table 4.2</b> <b>Bicycle and Pedestrian Facility Eligible Programs</b>						
<b>Funding Programs</b>	<b>Modes (Bicycle, pedestrian-walkways, trails)</b>	<b>Trip Types (Commute/Transportation, Recreational)</b>	<b>Project Types (Construction, Non-construction,)</b>	<b>Required Matching Funds</b>	<b>Available Annual Funding</b>	<b>Contact &amp; Website Information</b>
<b>INNOVATIVE FINANCING</b>						
Grant Anticipation Revenue Vehicle Bonds (GARVEE)	Both	Transportation	Both	11.5%	Total debt not to exceed 30% of federal funds received annually	<a href="http://www.dot.ca.gov/hq/innovfinance/garveebond.htm">http://www.dot.ca.gov/hq/innovfinance/garveebond.htm</a>
State Highway Account Loan Program (Short Term Loans)	Both	Transportation	Both	11.5%	Total outstanding loans can not exceed \$500 million statewide	<a href="http://www.dot.ca.gov/hq/innovfinance/sha.htm">http://www.dot.ca.gov/hq/innovfinance/sha.htm</a>
<b>PRIVATE FUNDING</b>						
Developer Impact Fees	Both	Both	Both	N/A	N/A	Local Jurisdiction
Bikes Belong Coalition	Bicycle	Both	Both	N/A	Each project not to exceed \$10,000	<a href="http://www.bikesbelong.org">www.bikesbelong.org</a>

<b>Table 4.3</b> <b>Short Term Bicycle Facility Project List</b>									
PROJECT INFORMATION					PURPOSE OR NEED				
Priority	Funding Source	Project # or Route & Post Mile	Description	Cost in Current Dollars (1,000)	Implementing Year	Congestion Relief	Safety	Multimodal	Rehabilitation
<b>DEL NORTE COUNTY BICYCLE PROJECTS</b>									
<b>Project Studies</b>									
High	TDA/TEA	Countywide	Bicycles Facilities User's Maps	8	Unknown	X		X	
Medium	TDA/RSTP/TE	Countywide	Bicycle Facilities Plan	5	2010		X	X	X
<b>Construction and Improvements</b>									
High	TE/TDA/RSTP		Hobbs Wall Tr. - Elk Cr. Wetland Rt. CL. I&II	445	Unknown	X	X	X	
High	TE/TDA/RSTP		H. Wall D.N.C. Railroad R.O.W. CL. I	460	Unknown	X	X	X	
High	TE/TDA/RSTP		H. Wall Howland Hill Phase I CL. II&III	425	Unknown	X	X	X	
Medium	TE/TDA/RSTP		H. Wall Howland Hill Phase II CL. I	442	Unknown	X	X	X	
Medium	TE/TDA/RSTP/BLA	553	Railroad Ave.- Parkway to Boulder CL. II	1,830	Unknown	X	X	X	
Medium	TE/TDA/RSTP	553	Railroad Ave. - Boulder to E. Valley X Rd. CL. I	454	Unknown	X	X	X	
Low	TE/TDA/RSTP	210	Riverside St.- Washington to Dead Lk. CL.II	190	2013-14	X	X	X	
Medium	TE/TDA/RSTP	103	Enderts Beach Rd. - 101 to NPS CL. I&II	197	2014-15	X	X	X	
High	TE/TDA/RSTP	201	Pebble Beach - City to Hemlock East CL.I&II	890	2010	X	X	X	
High	TE/TDA/RSTP/BLA	201	Pebble Beach - City to Hemlock West CL.I&II	1,952	2010	X	X	X	
High	TE/TDA/RSTP	201	Pebble Beach - Hemlock to Washington CL.III	2	2010-11	X	X	X	
Medium	TE/TDA/RSTP	126	Blackwell Ln.- Northcrest to Railroad CL. II	1,286	2010-12	X	X	X	
Low	TE/TDA/RSTP/BLA	421	Old Mill Rd.- Northcrest to Dilman CL.I&II	1,400	Unknown	X	X	X	
High	TE/TDA/RSTP/BLA	418	Moorehead Rd. - all CL. II	2,590	2010-12	X	X	X	
High	TDA/RSTP/BLA	116	Elk Valley Rd. - Howland Hill to Parkway CL.II	3,300	2012-13	X	X	X	
High	TDA/RSTP	427	South Fork Rd. Doug Pk. to Big Flat Rd. CL.III	44	2014-15	X	X	X	
High	TDA/RSTP	413	Kellogg Rd. - Lower Lake to Beach CL. III	5	2015-16	X	X	X	
High	TDA/RSTP	432	Lower Lake Rd. - Lake Earl Dr. to Kellogg CL.III	9	2014-15	X	X	X	
High	TDA/RSTP	308	Rowdy Cr. Rd. - 101 to SRNA CL.III	27	2015-16	X	X	X	

Table 4.3 Short Term Bicycle Facility Project List									
PROJECT INFORMATION					PURPOSE OR NEED				
Priority	Funding Source	Project # or Route & Post Mile	Description	Cost in Current Dollars (1,000)	Implementing Year	Congestion Relief	Safety	Multimodal	Rehabilitation
SUBTOTAL \$ 15,961									
CRESCENT CITY BICYCLE PROJECTS									
Medium	TDA 2%	8 locations	Bicycle Racks	8	Unknown			X	
Medium	TDA 2%	Regional	Trail Map	2	Unknown			X	
Low	TDA 2%	Hobbs Wall Trail	M St to DFG – Class II	2	Unknown				
Low	TDA 2%	9 <sup>th</sup> , Front, K & 2 <sup>nd</sup>	Class II	7	Unknown				
SUBTOTAL \$ 19									
GRAND TOTAL \$ 15,980									

## **Future Financial Needs for Bicycle Funding**

This Bike Plan Update plans for City and County bikeway improvement projects with target construction dates to the year 2020. The total future financial funding needs for the proposed short term (Table 4.3) and long term (Table 4.4) projects is more than \$40 million, in 2010 dollars. Actual financial needs will be higher due to the fact that some project costs are currently unknown.

## **Bicycle Parking & Rest Facilities**

The City and County are planning to install additional bike parking facilities. See Table 2.10 (in Chapter 2 of this document) for a listing of existing and proposed bike racks.

## **4C. INTERAGENCY COORDINATION**

### **Consistency with Regional Transportation Plan**

The 2007 Regional Transportation Plan references the Bike Plan. The 2007 RTP proposed bicycle facility improvements described are consistent with improvements in this Bike Plan. Updated bicycle information has been added to this Bike Plan.

### **Pacific Coast Bicycle Route Study**

Caltrans is overseeing the now ongoing *Pacific Coast Bike Route Shoulder Study*. The study will include recommendations for route improvements and alignment changes. The draft document has been released and its findings are incorporated into this document.

## **Maintenance**

Bicycle route maintenance includes regularly sweeping bikeways, maintaining pavement, signage, and striping. The DNLTC recommends that designated bicycle routes receive higher priority for sweeping than other routes.

## **Enforcement**

Enforcement of safe bicycling rules is a responsibility of the City police, the County Sheriff Department, and the California Highway Patrol.

Table 4.4 Bicycle Projects List --2017-2027									
PROJECT INFORMATION					PURPOSE OR NEED				
Priority	Funding Source	Project # or Route & Post Mile	Description	Cost in Current Dollars (1,000)	Construction Year	Congestion Relief	Safety	Multimodal	Rehabilitation
STATE HIGHWAY BICYCLE PROJECTS									
High	unknown	Cntywide	Coastal Trail - Segments of 101	unknown		X	X	X	
High	unknown	197&199	Hiouchi Trail	unknown		X	X	X	
Low	unknown	101 N.	Morrison Creek Access Improvement	unknown		X	X	X	
DEL NORTE COUNTY BICYCLE PROJECTS									
Medium	TDA/RSTP/TEA		Bicycle Facilities Plan	unknown	Biannual			X	
Medium	TE/TDA/RSTP	432	Lower Lake Rd.- L. Earl Dr. to Kellogg CL. II	4,535	2019-20	X	X	X	
Medium	TE/TDA/RSTP	432	Lower Lake Rd. - Kellogg to Pala Rd. CL.II	5,335	2019-20	X	X	X	
High	TE/TDA/RSTP	310	Fred Haight Dr. - 101 S. to Wilson Ave. CL. II	61	2019-20	X	X	X	
Medium	TE/TDA/RSTP	No. #	Timbers Blvd. - 101 to Fred Haight Dr. CL. II	765	2022-23	X	X	X	
High	TE/TDA/RSTP	307D	Ocean View Dr. - 101S. to Indian Rd. CL.II	4,930	2016-18	X	X	X	
High	TE/TDA/RSTP	307D	Ocean View Dr. - 101N. to Indian Rd. CL.II	2,530	2016-18	X	X	X	
High	TE/TDA/RSTP	309	Sarina Rd. - 101 to First St. CL. II	775	2016-17	X	X	X	
High	TE/TDA/RSTP	307C	First St. - Sarina Rd. to Beckstead CL. II	1,300	2019-20	X	X	X	
Medium	TE/TDA/RSTP	408	Elk Valley X Rd -101 to Wonderstump CL.II	1,030	2018-19	X	X	X	
Medium	TE/TDA/RSTP	412	Gasquet Flat Rd. - 199 to Middle Fork CL.II	3,578	2021-22	X	X	X	
Medium	TE/TDA/RSTP	318	Mid. Fork Gasquet Rd. - 199 to Gasq. Fl. CL.II	156	2021-22	X	X	X	
Medium	TDA	Various	Bicycle Racks	unknown	Various	X	X	X	
High	TE/TDA/RSTP		Harbor Trail - City to Anchor Way CL. I&II	140	2016-17	X	X	X	
SUBTOTAL \$25,135									
CRESCENT CITY BICYCLE PROJECTS									
M		Regional	Update City/County Bicycle Facilities Plan	25	Biannual				X
M	TDA 2%	Various locations	Bicycle Racks – per updated plan	20					X
M	TDA 2%	Regional	Trail Map Update	15	2015				X
SUBTOTAL \$60									
GRAND TOTAL \$ 25,195									

## **4D. CITIZEN & COMMUNITY INVOLVEMENT**

The DNLTC is using its website as a means for distributing information about the Bicycle Facilities Plan and periodic updates. The latest Bicycle Facilities Plan Update is available for reading or downloading at the DNLTC website [www.dnltc.org](http://www.dnltc.org).

## **4E. EVALUATION**

Implementation of this bike plan's recommended improvements will provide bicyclists with safer, more convenient, and more enjoyable recreational, commuter, and tour cycling opportunities. The following section discusses the anticipated effects of implementation, in regard to the number of bicycle commuters and the potential effects on accidents involving bicyclists.

### **Effects on Estimated Number of Bicycle Commuters**

Implementation of the Bike Plan is intended to bring about several benefits to the community, including:

- Improve safety conditions for bike travel through design standards, guidelines, education, and enforcement, and thereby reduce the accident rate for bicyclists.
- Provide needed facilities and services to meet the demand and increased use of bicycles as a means of travel;
- Improve the quality of life in Crescent City and Del Norte by providing more travel and recreational opportunities that are available to everyone;
- Improve the quality of life by helping to reduce air and noise pollution, and energy consumption.
- Maximize the City's and County's competitiveness for state and federal funds by having an updated, adopted Bike Plan that meets current funding requirements.

Through implementation of the policies and improvement projects in this Bike Plan, the DNLTC expects that cycling will be a more attractive transportation mode in the Crescent City and Del Norte County areas. With safer, more convenient and more available bicycle facilities, the number of commuter cyclists, as well as recreational and touring cyclists is expected to increase. Additionally, many of the bicycle facility improvements will also improve conditions for pedestrians, and in some cases, horseback riders and/or skaters.

### **Effects on Accidents Involving Bicyclists**

The goal of bicycle planning at the local level is to provide for bicycle travel within the community. Well-planned and maintained bicycle facilities can provide a convenient and safe bicycle network, reduce bicycle conflicts with motorized vehicles, and reduce the number of serious bicycling crashes and injuries.

According to the Institute of Transportation Engineers, the majority of bicycling injuries, particularly those incurred by children, take place in neighborhoods.<sup>5</sup> These injuries could be prevented by providing bicycle facilities such as:

- Building independent bicycle trails through neighborhoods.
- Having sidewalk and bike lanes on larger roadways;
- Encouraging the use of exclusive bike lanes.
- Enhancing roadway shoulders. This is critical, particularly for roadways with travel speeds of 35 mph or more.
- Incorporating "Share the Road" signs onto the roadway landscape.<sup>6</sup>
- Providing grouped diagonal parking to improve sight distances and reduce the likelihood of backing crashes in driveways.

The 1998 Federal Highway Administration (FHWA) report, *Implementing Bicycle Improvements at the Local Level*<sup>7</sup> also recommends facility improvements designed to increase bicycle safety. Many of these improvements would improve pedestrian safety conditions as well. Their "checklist" of improvements is shown in Table 4.5.

**Table 4.5 FHWA Checklist of Bicycle Safety Improvement Projects**

Category	Typical Concerns	Possible Projects
<b>1. Major urban streets</b>	High traffic volumes and speeds, lack of space for bicyclists.	Widen outside through lanes or add bike lanes by either redistributing roadway space by re-striping or adding paved width.
<b>2. Minor urban street traffic</b>	Higher than appropriate traffic volumes and speeds on residential streets.	Create a traffic calming program that responds to neighborhood requests by installing a variety of measures.
<b>3. Minor street/major street crossings</b>	Bicyclists have difficulty crossing busy arterial thoroughfares from quiet residential streets.	Provide median refuges at key minor street crossings, bike-friendly signals, and other features on collectors.
<b>4. Breaking bicycling barriers</b>	Physical features (rivers, creeks, railroads, freeways) often keep bicyclists from getting where they want to go.	Provide independent bicycle/pedestrian structures where necessary or combine bicycle/pedestrian structures with other existing or planned transportation facilities.
<b>5. Trail networks</b>	Trails are popular facilities among the bicycling public but they may be rare or discontinuous. In addition, some are poorly designed, constructed, or maintained.	Provide new trails where possible throughout the community, connect existing trail segments, and encourage developers to include trails in their developments. Make sure designers and operations staff use current literature.
<b>6. Transit connections</b>	The success of a multimodal transportation system suffers when bicyclists cannot get to transit stations, when there is not adequate safe bicycle	Improve connections between residential areas and transit stops, provide secure bicycle parking at stops, and provide for carrying bicycles on the system.

<sup>5</sup> Source: *Online Roadway Safety Guide* by the Roadway Safety Foundation, Washington, D.C. [http://www.roadwaysafety.org/chap2\\_10.html](http://www.roadwaysafety.org/chap2_10.html). Accessed October 3, 2002.

<sup>6</sup> *ibid.*

<sup>7</sup> Online version at [http://www.bikefed.org/bike\\_guide\\_online.htm](http://www.bikefed.org/bike_guide_online.htm). Accessed October 9, 2002.

Category	Typical Concerns	Possible Projects
	storage, and when bicyclists are not accommodated on the system itself.	
<b>7. Roadway bridge modifications</b>	Some bridges contain narrow outside lanes, hazardous deck surfaces, hazardous expansion joints, high traffic volumes, high traffic speeds, or high speed on- and off-ramps.	Reallocate bridge deck width by shifting lane lines, modify surface for better bicycle stability, modify ramps to discourage high speed turning movements, and, as a last resort, develop bicycle connections independent of the bridge in question.
<b>8. Railroad crossings</b>	Diagonal railroad crossings and rough crossings—regardless of crossing angle—can cause bicycle crashes.	Replace dangerous crossings with rubberized installations (especially in the outside through lane), use flangeway fillers on low speed diagonal crossings, flair paved surface at crossing approaches to allow right-angle crossings, and use warning signs or markings.
<b>9. Traffic signals</b>	Most traffic-actuated signals have difficulty detecting bicycles. In addition, signal timing may not allow sufficient clearance time for bicyclists to get through an intersection, and programmed visibility heads may not be as visible from a typical bicyclist's location as from a typical motorist's location.	Provide bicycle-sensitive loop detectors in new installations and retrofit where needed; in some cases, use pavement markings to identify most sensitive locations; adjust timing requirements on signals and test heads for visibility at necessary angles.
<b>10. Drainage grates and utility covers</b>	Some drainage grate designs can trap a bicycle wheel; in addition, grates and utility covers should be kept level with the grade of the street surface and, wherever practical, such installations should be kept out of the typical path of a bicyclist.	Replace bad drain grate standards with bicycle-safe models; replace or modify existing installations; as a routine practice, consider bicyclists when locating new utilities.
<b>11. Rural road shoulders</b>	Many rural roads serve high-speed traffic and, in some cases, high volumes of motor traffic containing a significant proportion of large trucks. For bicyclists, sharing narrow roads with such traffic can be unpleasant and dangerous.	Provide smooth paved shoulders on all new construction and reconstruction; add shoulders to popular bicycling routes; adopt standards calling for adequate paved shoulders; restrict the use of rumble strips <sup>8</sup> when bicycle traffic is expected, and on new construction and reconstruction; or provide space for future shoulders if they cannot be installed at the time.
<b>12. Bicycle parking</b>	Scarce bike parking at popular destinations, undesirable bike parking devices, no bike parking zoning requirements.	Each year, provide new bike parking as a routine practice; use only parking devices that accept high security locks; or add bike parking to local zoning regulations.
<b>13. Maintenance</b>	Poorly maintained trails and roadway edges.	Alter current practices; create a user-requested bicycle spot improvement program.

Source: *Implementing Bicycle Improvements at the Local Level*, Federal Highway Administration, 1998.

<sup>8</sup> This statement is not consistent with Caltrans policy on rumble strips, which stipulates that rumble strips will be installed in the shoulder of the travelway, dependent upon the width of the shoulder beyond the fog line.

In a more recent report, *Bicycle Lanes Versus Wide Curb Lanes: Operational and Safety Findings and Countermeasure Recommendations* (Publication No. FHWA-RD-99-035, October 1999)<sup>9</sup> the FHWA cites research done in Canada, Denmark, and Sweden that found that marking bicycle lanes with paint and/or raised pavement reduced bicycle-motorist conflicts and crashes at intersections by 10% to 36%.

The Bike Plan Implementation Program and/or proposed bike trails include projects applicable to several of the FHWA's categories for bicycle safety improvements, such as:

- Widen outside through lanes or add bike lanes;
- Provide new trails where possible throughout the community;
- Connect existing trail segments;
- Provide secure bicycle parking at transit stops;
- Provide for carrying bicycles on the bus system;
- Improvement bike facilities at railroad crossings;
- Add shoulders to popular bicycling routes; and
- Provide new bike parking.

Implementation of these improvements, along with bicycle safety education, is expected to decrease conflicts, increase bicycle safety, and reduce the potential for accidents involving bicyclists. As discussed previously (see "Bicycle Safety and Education Programs" in Section 2B of this document), the Del Norte Unified School District conducts bicycle safety programs in conjunction with the California Highway Patrol. By teaching children how to ride bicycles safely, the potential for bicycle accidents is reduced; however, no conclusive data is available at this time.

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<sup>9</sup> Online version at <http://www.tfhrc.gov/safety/pedbike/pubs/99035.pdf>. Accessed October 9, 2002