

Completing the Network

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DRAFT

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2007 SBCAG Regional Bike Plan, Santa Barbara County

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SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

CHAPTER 1: INTRODUCTION

Bicycling is a cost effective, energy efficient, clean and healthy way to travel. Santa Barbara County's mild climate and relatively flat terrain within the majority of our major urbanized areas provide an excellent environment for bicycling. Bicycles also provide mobility to residents who don't drive or can't afford cars and can help transit riders more quickly connect to destinations where walking is too far.

Growing traffic congestion and the need for a diversified transportation system have lead local jurisdictions to adopt policies that encourage alternative transportation options. This Regional Bicycle Transportation Plan (Regional Bicycle Plan) helps plan a seamless bicycle network that continues between jurisdictions and provides a planning resource for designing safe and efficient bicycle facilities and effective bicycle programs. It also meets the specific bicycle planning requirements of the State of California for participating local jurisdictions using the Regional Bike Plan as an adopted Bicycle Transportation Plan.



Photo 1: Santa Barbara County boasts a Mediterranean climate and many miles of bicycle facilities, like this Class I bike path connecting the University of California to Goleta and the South Coast.

Purpose of Plan

Four major goals are addressed in the Regional Bike Plan:

- ◆ **Update the Bikeway Network:** The Plan identifies the transportation infrastructure needed to enhance conditions for bicycling throughout Santa Barbara County. This was accomplished by updating and revising the regional bicycle network with digital GIS-based maps [see appendix A] and by updating, adding and prioritizing programmed and planned bicycle projects that will complete gaps in the bikeway network.
- ◆ **Meet BTA State Guidelines:** This comprehensive plan meets state guidelines and allows participating jurisdictions to be eligible for State of California's (Caltrans) Bicycle Transportation Account (BTA) funding. The BTA account has \$5 million annually, available via a competitive state-wide grant process. Projects identified in the Regional Bike Plan will also be given priority among all bike projects competing for SBCAG flexible funds.
- ◆ **Create uniformity in policies, design:** The Plan creates broad recommendations for uniformity in policies, design and construction techniques between jurisdictions in Santa Barbara County, and plans for and prioritizes future projects and programs. Uniform policies and standards ensure the development of standard bicycle facilities and increase the safety of these facilities across all jurisdictions.
- ◆ **Identify funding, evaluate programs:** The recent Plan also makes suggestions for improvements to existing bicycle programs and recommends potential funding sources for both building planned facilities and developing programs.

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

The Regional Bike Plan emphasizes the need for ‘inter-modal’ connections between bicycles, trains and buses by highlighting major transit routes and ensuring bike routes are close to bus stops and train stations. The Plan also recommends locations for secure bicycle parking (such as bike lockers, bike cages and bike stations) at transit stations and popular commuter destinations such as business’ parks and shopping centers.

Background

The Santa Barbara County Association of Governments (SBCAG) is a regional planning agency comprised of the County of Santa Barbara and all eight incorporated cities within the county. SBCAG distributes local, state, and federal transportation funds and acts as a forum for addressing regional and multi-jurisdictional issues. SBCAG also acts as a clearinghouse for projects requiring state or federal funding and can help member agencies secure funding for bicycle related projects such as bicycle paths, bike racks on buses and other bicycle related facilities and activities.

The Regional Bicycle Plan has been developed through the efforts of SBCAG staff, staff from member agencies, and interested citizens from bike advocacy groups, non-profits and other organizations interested in improving bicycling conditions within Santa Barbara County.

This Plan updates many elements of the Regional Bikeway Study that was adopted by SBCAG in 1994. The Study was undertaken to evaluate the existing transportation system's effectiveness in providing for the bicycle community. The report examined the (then) current bicycle programs and defined a regional bikeway network, some already built, some still proposed. The Study also documented various funding sources available to construct and maintain bikeways and made recommendations for improvements to these bikeways and programs.

This plan also serves to update the bicycle network and policies in SBCAG’s Regional Transportation Plan (RTP). The RTP is required by state and federal law and is a comprehensive examination of transportation in Santa Barbara County. The Regional Bike Plan is an important component of the RTP.

Setting

Santa Barbara County is located on the south-central coast of California approximately 100 miles north of Los Angeles. The region’s Mediterranean climate and relatively flat terrain in its urbanized areas make it ideal for bicycle commuting and recreational riding. It also offers a wide variety of cycling environments that include everything from coastal bike paths and bicycle boulevard’s to quiet vineyard roadways and challenging mountain terrain.

The Regional Bike Plan’s study area covers all of Santa Barbara County including the incorporated cities of Buellton, Carpinteria, Goleta, Guadalupe, Lompoc, Santa Barbara, Solvang and Santa Maria and the unincorporated areas that make up the County of Santa Barbara. These areas were evaluated and individual plans were developed for the participating jurisdictions who did not have an updated Bicycle Master Plan.

The County has a number of distinct regions spread across two general geographic areas

Figure 1: Santa Barbara County Regional County Map



SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

known as the North County and the South Coast. The North County includes the Santa Maria Valley, Cuyama Valley, Lompoc Valley and Santa Ynez Valley regions. The South Coast includes the Gaviota Coastline and the cities of Goleta, Santa Barbara and Carpinteria. Much of the central portion of the County is located within the boundaries of Los Padres National Forest and is mostly uninhabited.

The 2000 census lists a total County population of approximately 400,000 with most residents (262,000) living in the County's eight incorporated cities, five of which are in the North County and three in the South Coast. This leaves a significant percentage of the County population (approximately 35%) living in County unincorporated areas, and most of these residents are located in urban areas near the eight cities.

Bicycle Trends in SB County

Two recently available sources of data that can be used to assess bicycle commuting in Santa Barbara County include the 2000 Census Journey-to-Work data and the 2007 Commuter Profile, conducted by SBCAG. The 2000 Census data provide commuter information for both full- and part-time workers countywide while the 2007 Commuter Profile was a phone-based survey and focused on Santa Barbara County residents 18 years of age and older who work 35 hours or more per week. Unfortunately, neither of these data sources can be used to assess journey-to-school commuting, shopping or recreational trips made by bicycle.

The following table presents countywide census results for commuting to work by bicycle.

As seen from Table 2, the number of bicycle commuters increased slightly between 1980 and 1990 and then decreased by 1,180 riders from 1990 to 2000. This data also show that bicycle use as a percentage of total commute trips has declined from 1980 to 2000.

Table 2: Countywide Bicycle Commute Trends from U.S. Census Data

1980		1990		2000	
#	%	#	%	#	%
5823	4.36	6002	3.35	4822	2.69

Table 2 summarizes bicycle commute data for incorporated Cities and the Isla Vista Census Designated Place (CDP) for 1990 and 2000. The City of Carpinteria saw an increase in the number of riders from 1990 to 2000, but the percent that bicycles represented of total commute trips declined. The City of Santa Barbara shows an increase in both the number of bicycle commuters and the percentage of total commuters from 1990 to 2000. The Cities of Santa Maria, Lompoc, Solvang, and Buellton show significant decreases in bicycle commuting from 1990 to 2000. In addition bicycle commuting from 1990 to 2000 in the Isla Vista CDP declined dramatically and accounts for over 50 percent of the decline in countywide bicyclists from 1990 to 2000.

Table 1: Santa Barbara County's Population Forecast through 2030

Region	2000	2030	Total Change	Percent Change
Cuyama	1,400	1,600	200	14%
Lompoc	58,300	75,100	16,800	29%
Santa Maria	116,800	176,200	59,400	51%
Santa Ynez	21,800	27,400	5,600	26%
South Coast	201,000	240,500	39,500	20%
County Total	399,000	521,000	122,000	31%

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

Generally, on a countywide basis, bicycle use for commuting purposes ranges from 2% to 4% of total commute trips. However, bike use varies significantly around the county according to the census estimates, ranging from less than 1% in Buellton to 20% in Isla Vista, adjacent to UCSB. It should be noted that these survey data reflect only bicycle use for work trips and do not include bike use for school, recreation or other trip types.

Despite the overall decline in bike commuters, nationally, Santa Barbara County still ranks 14th for numbers of bicycle commuters and out of 58 California counties, ranked 2nd behind Yolo County, where bicycle commuting was the highest in the entire nation.

Table 3 summarizes primary and secondary mode choice data collected for the 2002 Commuter Profile. As with Census data, the Commuter Profile found driving alone to be the primary mode of commuting to work. The survey also shows that bicycling represents 2.8 percent of primary mode commute trips which is similar to that that identified in the 2000 census data (2.69%). What this table reveals that is not seen in the census data, is the secondary mode choice for bicycling (expected to occur on 2 days out of a typical work week) jumps to 25.3 percent of commuter trips.

This number is important because it indicates that Santa Barbara County's bike facilities are providing commuters with an alternative to their primary transportation mode, driving alone.

Relationship to Other Plans

The coordination of plans and policies at all levels of government (Federal, State, Regional, County and City) is crucial for bicycling to serve as a viable form of transportation countywide. This section explains the adopted plans that supplement and support the recommendations of the Regional Bicycle Plan.

STATE PLANS

California Department of Transportation (Caltrans) has guidelines for designing and implementing bicycle projects, such as Chapter 1000 in the Highway Design Manual (Appendix F) and the "1995 District 5 Bicycle Position Statement" (Appendix F). The design resources and recommendations in the Regional Bike Plan have been coordinated to be consistent with Caltrans bicycle planning guidelines.

**Table 3:
1990 and 2000 City and CDP Bicycle Commuter Trends**

City/CDP	1990		2000	
	#	%	#	%
Carpinteria	152	2.06	163	1.68
City of Santa Barbara	1465	3.20	1612	3.40
Isla Vista CDP	2283	26.66	1642	19.24
City of Santa Maria	339	1.29	279	0.71
City of Lompoc	335	2.12	124	0.80
City of Buellton	16	0.87	3	0.20
City of Solvang	37	1.58	12	0.78

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

REGIONAL PLANS

SBCAG Regional Transportation Plan (RTP)

This Regional Bicycle Plan has been coordinated with the development of the 2008 Regional Transportation Plan (RTP), called Vision2030. A primary policy of Vision2030 is the development of a coordinated multi-modal transportation system designed to serve the varying travel requirements of the region. The regional bikeways documented in this plan have been used in Vision2030, which also meets Federal requirements as the Metropolitan Transportation Plan. Some bicycle projects have also originated from the SBCAG Congestion Management Program.

APCD Clean Air Plan

Commitments to promote bicycling as a transportation control measure are also included in the Clean Air Plans of the Air Pollution Control District (APCD). The 2007 Clean Air Plan recommends that the county and cities ensure that bicycle needs are integrated into local planning efforts, including local plans and ordinances, and encourages that federal, state and local funding be expen-

ditiously pursued for purposes of completing missing commuter oriented bikeway segments identified as part the regional bikeway network.

LOCAL PLANS

Local General Plans, Circulation Element

Local jurisdictions can develop bicycle planning goals and priorities through their General Plan's Circulation Element as well as through a more focused supplemental Bicycle Master Plan. The next chapter provides a more comprehensive overview of the bicycle planning efforts at local jurisdictions. Every effort has been made to coordinate the goals and priorities established in the policy documents of local jurisdictions with those established in this edition of the Regional Bicycle Plan.

Status of Local Bicycle Elements and Plans

The Cities of Santa Barbara and Goleta and the County of Santa Barbara have adopted and current bikeway plans. The Cities of Buellton and Santa Maria have stand alone

Table 4: 2002 Primary and Secondary Commute Mode Choice

Mode Choice	Primary Choice %	Secondary Choice %
Drive Alone	79.7	25.3
Bicycle	2.8	25.3
Bus	1.9	14.1
Vanpool	0.5	--
Motorcycle	0.3	1.4
Carpool	10.3	25.3
Walk/Jog	2.5	8.5
Telecommute	2.0	--

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

Bicycle Master Plans, but both are outdated and do not meet Caltrans' BTA requirements for funding. Carpinteria, Lompoc, Solvang and Guadalupe have adopted bicycle elements in their general plans, however, some of the bicycle plans consist solely of a map adopted as part of the Circulation Element and most require updating. An evaluation of local jurisdictions' adopted bicycle elements/plans is presented below in Table 5.

This Regional Bicycle Plan was developed to enable local jurisdictions to apply for state Bicycle Transportation Account funding for the maintenance and development of bicycle infrastructure.

Initially, the City of Solvang is included as a Specific Appendix to the Draft Plan. Other agencies will be added as time and staff permit.

State Requirements for the Plan

To be eligible for Caltrans' funding from the Bicycle Transportation Account, local jurisdictions must prepare a Bicycle Transporta-

tion Plan that is no more than four years old and meets the 11 planning requirements of the California Bicycle Act, Section 891.2 of the State's Streets and Highways Code (Table 6)

These requirements can also be addressed in the bicycle section of a jurisdiction's circulation element. This section of the code also requires the bicycle master plan to include flexibility and coordination with long range transportation planning (activities most often coordinated by SBCAG for Santa Barbara County).

Major Recommendations of Plan

The Regional Bicycle Plan recommends the completion of a comprehensive bikeway network. Bikeway projects are prioritized into short and long-term categories. Short-term is defined as within three to five years and long-term is within the twenty-year planning horizon. Implementation of these phases would build out the primary system linking the major urbanized areas in Santa Barbara County as well as provide connec-

Table 5: Status of Local Bicycle Elements and Bike Plans

	Adopted Bike Plan	Bicycle Policies in Circ. Element	Bike Plan Mandated in Circ. Element	Map in Circ. Element	Date Adopted	Complies with BTA Requirement
City of Buellton	X	X			1993 (Plan)	
City of Carpinteria		X		X	2003 (Circ.)	
City of Goleta	X	X	X	X	2005 (Plan)	X
City of Guadalupe		X			1989 (Circ.)	
City of Lompoc		X	X	X	2005 (Circ.)	
City of Santa Barbara	X	X	X	X	2003 (Circ.)	X
City of Santa Maria	X	X			1992 (Plan)	
City of Solvang					1994 (Circ.)	
County of SB	X	X			2005 (Plan)	X

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

tivity between the smaller unincorporated County areas and numerous destinations countywide. The proposed bikeway system also considers some inter-county connections to Ventura and San Luis Obispo counties.

In addition to the planned bikeways and bicycle facilities, this plan outlines the educational and promotional programs targeting bicyclists and motorists. These programs include bicycle parking improvements, multi-modal (transit and passenger rail) support facilities, bicycle safety and education programs for cyclists and motorists, safe routes to school programs, community and employer outreach programs, continued maintenance of bikeway network maps, and bicycle commuting promotions, among others. Please see Chapter 5 for the complete list of recommended programs.

Community Input

As in every case, it is the responsibility of the SBCAG agency to inform the public of the newly updated transportation plans within the county.

The 2008 update of the Regional Bikeway Network called for the public input. Therefore, a total of four workshops were held around the county in both the northern region and the south coast. The Public opinion was collected on issues pertaining to the bikeway paths and design within Santa Barbara County. In large part many of the attending county residents were eager to express their thoughts on the current bicycle safety issue, as well as a list of project priorities within their respected areas. Also the question about electric bicycles on the path was posed to all attending residents,

Table 6a: Caltrans BTP Requirements

A Bicycle Transportation Plan (BTP) must contain the following elements to be eligible for Bicycle Transportation Account funding.

1. Estimated number of existing bicycle commuters and future bicycle commuters
2. Map of existing & proposed land uses
3. Map and description of existing and proposed bikeways
4. Map and description of existing and proposed end-of-trip parking facilities
5. Maps and description of existing and proposed bicycle and transport facilities for connections with other transportation modes
6. Map and description of existing and proposed facilities for changing and storing clothes, including locker, restroom and shower facilities near bicycle parking facilities
7. A description of bicycle safety and education programs conducted in the area
8. A description of the extent of citizen and community involvement in plan development, including letters of support
9. A description of how the bicycle plan has been coordinated with and is consistent with other local or regional transportation, air quality or energy plans
10. A description of the projects proposed in the plan, and a listing of their priorities for implementation
11. A description of past expenditures for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuting

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

in the north county no one had encountered problem with electric bikes on local or regional paths. However, in the south coast the electric bikes are more prevalent, and one request was posed by community members. The request was made to increase safety on bikeway paths by implementing a speed limit of 20 mph on all paths for those who use electric or gas powered bikes.

Overview of the Plan

The Regional Bike Plan addresses the actions needed, priorities, costs, and time lines for making Santa Barbara County more bicycle friendly.

Chapter 2 summarizes bikeway design standards and Chapter 3 discusses the necessary elements for developing and completing a regional bikeway network. Chapter 4 discusses the end-of-trip or destination needs of bicycle commuters, as well as the infrastructure needed to connect bicycle routes to other transportation systems such as rail or buses. Chapter 5 discusses existing and recommended educational and promotional programs to increase bicycle use. Finally, Chapter 6 lists the goals, policies, and objectives guiding the implementation of the Plan.

Appendix H is a glossary of terms. Appendix D includes Chapter 8, the Non-Motorized Transportation Sections of the California Streets and Highways Code.

This Plan serves as a 20-year vision for enhancing bicycle use in Santa Barbara County. Its success will only be assured by the continued support of Santa Barbara County's cycling community, government agencies, and other residents recognizing the benefits bicycling brings to the community.

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

Table 6b: Recommendations from Public Workshops

<u>Workshop</u>	<u>Request</u>	<u>Result</u>
Lompoc Valley	<ul style="list-style-type: none"> ◆ Add a Class I path connecting the City of Lompoc with Hancock College and Vandenberg Village ◆ Widen Purisima Road between SR 1 and SR246. ◆ Add a Class III on San Antonio Rd. between Central and Route 1 ◆ Add a bike lane on Harris Grade Rd. up to Burton Mesa. 	<ul style="list-style-type: none"> ◆ A Class I path connecting Lompoc with Hancock College is under development by the City of Lompoc. The connection to Vandenberg Village was added to the Plan as a Class I; however, topographic constraints may be too imposing and the existing Class III along Highway 1 may be the best alternate. ◆ A Class III is added on Harris Grade Rd. between Highway 1 and Burton Mesa Blvd. and on San Antonio between Central and Route 1. ◆ An existing Class III is on Purisima Rd; however widening the road may not be feasible due to the narrow elevated roadway but the request will be provided to the County of Santa Barbara.
Santa Maria Valley	<ul style="list-style-type: none"> ◆ Improve access between the existing bike path on Skyway Dr with two parks; County Waller Park, and City of Santa Maria Hagerman Park. 	<ul style="list-style-type: none"> ◆ The connections were added to the plan.
Santa Ynez Valley	<ul style="list-style-type: none"> ◆ Improve driver's awareness of cyclists ◆ SBCAG should expand bicycle education and safety programs under auspices of Traffic Solutions. 	<ul style="list-style-type: none"> ◆ Driver Safety improvement programs are a part of the plan, as well as other education programs for both adults and children. ◆ The Plan proposes significant education but its implementation is dependent on the Traffic Solutions Funding that is tied to the reauthorization of Measure D
South Coast	<ul style="list-style-type: none"> ◆ Add a Class II along Sycamore Canon Rd to Cold Springs School ◆ Add Class 2 path on Barker Pass connecting rural and urban areas. ◆ SBCAG should expand bicycle education and safety programs under auspices of Traffic Solutions. ◆ Provide Class I along Union Pacific Railroad ◆ Add Class II to Cabrillo Blvd. in Santa Barbara due to congestion along Class I Beachside Bikeway ◆ Add bike lanes on SR192 ◆ Connect the Rincon at the County line with Carpinteria 	<ul style="list-style-type: none"> ◆ Sycamore Canyon Rd. is very narrow and improvements are problematic. The proposed class II path on Barker Pass is more of a local route which will be discussed with local jurisdictions. ◆ The Plan proposes significant education but its implementation is dependent on the Traffic Solutions Funding that is tied to the reauthorization of Measure D. ◆ The Class I along UPRR is in the existing plan; however, since this is private property it is a very long term illustrative project. ◆ A Class II route was added to Cabrillo Blvd. ◆ Generally SR192 is narrow and improvements are problematic so the regional focus is on a route that is further south, along North Jamison and via Real ◆ A Class I/II route was added, in the area of the Carpinteria Bluffs Open Space.

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

CHAPTER 2: BIKEWAY DESIGN STANDARDS

Introduction¹

In the State of California, every person riding a bicycle on a highway has all the rights and is subject to all the provisions applicable to the driver of a vehicle (1997 California Vehicle Code, §21200). That is, bicycles are entitled to share the city streets, local roads and many state highways with motor vehicles. However, local authorities may establish bicycle lanes separated from vehicular lanes, primarily for bicycle travel. The State of California (Streets and Highway Code, § 885) declared that "traffic congestion, air pollution, noise pollution, public health, energy shortages, consumer costs, and land-use considerations resulting from a primary reliance on the automobile for transportation are each sufficient reasons to provide for multi-modal transportation systems," including non-motorized transportation facilities such as bikeways.

Further, the Legislature (Streets and Highway Code, § 890), intended "to establish a bicycle transportation system designed and developed to achieve the functional commuting needs of the employee, student, business person, and shopper as the foremost consideration in route selection, to have the physical safety of the bicyclist and the bicyclist's property as a major planning component, and to have the capacity to accommodate bicyclists of all ages and skills."

Bikeway Classification Descriptions

The Streets and Highways Code describes three categories of bikeways that indicate to motorists and bicyclists that a street segment or path is designated primarily for travel by bicycle. A Class I bikeway has a separate right-of-way for non-motorists. A Class II bikeway is

a 4 to 7 foot lane striped on the side of a street for exclusive travel by bicycle, and a Class III bikeway is a route signed for shared use by motorists and bicyclists.

In addition to the three traditional bikeway classifications, this chapter reviews some of the many innovative designs that can make roadways safer for bicycling such as Class IV facilities, which in this document refers to designated and maintained off-road, unpaved facilities, and the Multi-Purpose Trail II facilities as presented in the City of Santa Maria's 1993 Bikeway Plan. This chapter also discusses other bikeway improvements such as bicycle compatible drainage grates, railroad crossings and signal detectors.

Specific guidance on the treatment of bikeways can be found in the Caltrans Highway Design Manual, Chapter 1000 (Appendix F).



Photo 2: Railroad Crossing Warning

Off Street Paths (Class I bikeways)

Off-street bike paths provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with cross-flows by motorists minimized. This type of bikeway can be situated within rights-of-way of existing roads (if space permits) as well as along creeks, flood control channels, through parks and recreation areas and along railroad tracks.

Bike paths, when properly designed and con-

1. Sections of Introduction and Bikeway Classification Descriptions taken directly from the City of Barbara's Bicycle Master Plan, October, 1998, pg. 19-21 and City of Portland Bicycle Master Plan, 1996 pg. 21-31 (with permission).
2. Complete the Streets, <http://www.completstreets.org>, 9/28/2006

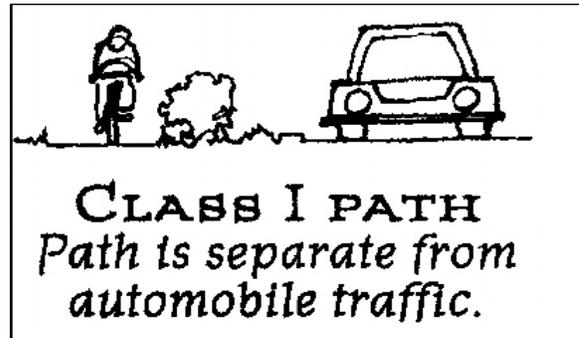
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structed, can provide good routes for bicycles that are separated from vehicles. Many of the existing paths in Santa Barbara County are along greenbelts and away from busy streets, meaning they provide a route for commuting and recreational cyclists alike that is quiet and within a natural setting with cleaner air. Class I bikeways are especially effective when they provide a more direct connection than the street network because this may provide another reason for people to choose bicycling over driving.

Separate bike paths are not always a good choice to replace on-street lanes when they are along high volume, relatively high-speed arterials. In these circumstances, retrofitting within the existing right-of-way to add paths can prove difficult or impossible. In addition, the presence of numerous driveways, which for the cyclist function as uncontrolled intersections, can be problematic. In these scenarios, a well-designed Class II bike facility can provide the same mobility with more effective multi-modal flow at intersections, at a fraction of the cost.

Also, Class I bike facilities are heavily used by recreational bicyclists, slower moving pe-

Figure 2a: Bikeway Classification



destrians and other users (such as joggers, parents with strollers, and in-line skaters) are often not suitable for bicycle commuters because of the congestion and unpredictable movements these other users create. These potential conflicts could be reduced by posting signage and conducting public outreach about how to share trails. When a multi-purpose trail is constructed, it should be built with a larger width which would help accommodate the variety of trail users.

When bike paths must intersect roadways or driveways, it is important that any intersections have traffic control devices such as yield and stop signs or traffic lights.

Table 7: Advantages and Disadvantages of Class I Bike Paths

Class I Bike Paths are separated from roadway facilities. Paths must be at least 5 feet wide for a one way direction, but since paths are designed for multipurpose use in California, they should be at least 10 to 12 feet wide for two way traffic.

Advantages

- Reduction in conflicts with high speed, high volume vehicle traffic
- May provide a more direct path to a final destination with minimal interruption from vehicle traffic
- A greater perception of safety for novice riders
- Attracts people to cycling

Disadvantages

- Building new bike paths can often be expensive and require lengthy environmental impact reports and right of way acquisitions.
- Multipath trails can increase bicycle crashes because of the unpredictable movements of other trail users.
- Isolated paths may increase problems with theft, security and assault because of a potential lack of access by police patrols (unless on bike).
- Ongoing funding for maintenance is often hard to obtain, leading to poorly maintained facilities

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On-Street Bike Lanes (Class II bikeways)

Bike lanes provide a restricted right-of-way designated for the exclusive or semi-exclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and cross-flows by pedestrians and motorists permitted. Separation is achieved by signage and a line painted on the street surface.

Bike lanes establish direct and convenient access to employment centers, commercial districts, transit stations, recreational desti-



Photo 3: *This Class I facility in the City of Lompoc connects the residential western half of the City to the commercial centers along Highway 1. Note the need for brush clearing (maintenance issues covered in Chapter 3).*

nations, and schools. Installing Class II bike-ways is often much less expensive than building off-street bikeways and bikeways built on an existing street system often serve a cyclists' destination more directly than Class I bike paths. Pavement maintenance can happen during regularly scheduled roadway rehab cycles. The City of Santa Barbara has found that bicycle volumes have increased where Class II lanes have been installed.³

Some streets where bicycle lanes are the preferred treatment have circumstances that make bicycle lane installation very difficult; a Class II bike lane often requires more than a line on the street made with a can of paint. These circumstances include: 1) harm to the natural environment or character of the natural environment due to additional pavement; 2) severe topographical constraints; 3) economic or aesthetic necessity of retaining parking on one or both sides of the street; and 4) significant levels of traffic congestion that would result from eliminating travel lanes or reducing lane widths. These circumstances should be evaluated very carefully before a decision is made to implement an alternative treatment.

Table 8: Bike Path Recommendations

City of Santa Barbara Bicycle Master Plan, October 1998, pg 20

Generally, off street paths should follow the following guidelines:

1. Off-street paths should be designed as separated facilities which can be shared with pedestrians and other non-motorized users.
2. Off-street paths should be protected or grade-separated at intersections with major roadways.
3. Off-street paths should be identified through signing.

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Table 9: Bike Lane Recommendations

Bike lanes may be implemented by:

1. narrowing existing travel lanes;
2. removing a travel lane;
3. removing parking, except where it is essential to serve adjacent land uses;
4. shoulder widening; and
5. including bike lanes in new streets

Shared Use Class III Bikeways

Class III bikeways, such as on-street "bike routes," provide a right-of-way designated by signs or permanent markings and are shared with motorists because they do not have a separately striped lane designated for bicyclists. Design treatments for local service bikeways include shared roadways and extra width curb lanes. On-street motor vehicle parking will not normally be removed on these streets. Class III bike routes are signed, intending to alert motorists to the presence of bicyclists and to guide bicyclists to use streets that have been determined to be preferred for bicycle usage. However, this type of bicycle facility is appropriate only for streets with low automobile traffic volumes.

Figure 2b: Bikeway Classification

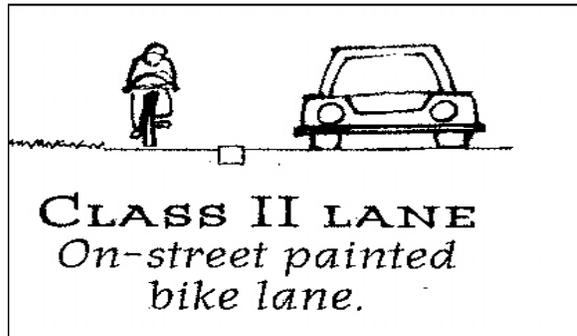


Photo 4: Class II bike lanes on Bath St, in the City of Santa Barbara. The dotted lines on the left of the bike lane indicate to motorists where they can enter the bike lane to turn right (after yielding to a bicyclist in the lane).

Table 10: Advantages and Disadvantages of Class II Bike Lanes

Class II Bike Lanes are semi-exclusive lanes for bicycles. Lanes are a minimum of 5 feet wide when located next to parallel parking and 4 feet wide when adjacent to a curb or shoulder. Bike lanes should include striping, pavement stencils, directional arrows and signs. Signs should be located at the beginning of the lane and at every half mile interval.

Advantages

- Construction cost is usually lower than Class I facilities
- Pavement maintenance (repaving) can occur during regular street maintenance schedules, reducing maintenance costs.
- Maximizes use of the existing transportation system and provides and the street system often serves the cyclists' destinations more directly than Class I bike paths

Disadvantages

- Without bicyclist and motorist education, may contribute to problems and conflicts at intersections and mid-block driveways
- Marked lanes on the roadway may provide a false sense of security for cyclists
- May require removal of parking or vehicle lanes to provide bike lanes. On-street parking may be difficult to remove where parking demand is high, especially in high density residential areas. Widening streets may require expensive right-of-way acquisition

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Figure 2c: Bikeway Classification



adopted into the City of Santa Maria’s 1992 Bikeway Plan and have been incorporated into many of the residential subdivisions recently built in the City of Santa Maria. Multi-Purpose Trail II bikeways are separated joint-use facilities designed in conjunction with a Class II bike lanes on the adjacent roadway. Multi-Purpose Trail II bikeways provide facilities for a wide range of cycling abilities. The trails provide Class II on-street bike lanes for advanced riders, while the novice rider is provided with an innovative safe route at the sidewalk level. This is done by replacing the traditional six foot sidewalk with one that is

Other Bikeway Types

Unmarked Mixed Flow Streets

Many local surface streets have low traffic volumes and low speeds, providing both motorists and bicyclists with excellent routes for travel. Furthermore, mixed flow lanes provide flexibility for experienced and skilled cyclists. Where it is appropriate for bicyclists to use the existing street system, there is no need to design special facilities. Most of our urban streets are satisfactory for bicyclists without significant improvement, although traffic calming may be recommended, for a variety of reasons, if traffic speeds or volumes show a need .



Photo 5: *This quiet neighborhood street in Santa Maria is an unmarked, mixed flow street that can easily be shared with bicyclists and motorists without striping.*

Multi-Purpose Trail II bikeways

Multi-Purpose Trail II bikeways have been

Table 11: Advantages and Disadvantages of Class III Bike Routes

Class III Bike Routes are designated by signage only. These are on roadways where cyclists are integrated with motorists. Signs should be at the beginning of the route, and at least every half mile interval, as well as at every directional change and at the end of the route.

Advantages

- Can designate a route that can later be developed with Class II bike lanes that accommodate growing number of cyclists in area
- Inexpensive to implement and maintain, can be as pleasant as Class I bike paths when on quiet neighborhood streets.
- Good way to connect to other bike facilities and routes if on streets with low traffic volume and speed

Disadvantages

- Decreased sense of security for novice riders and children because there are no buffers between vehicles and cyclists
- Bike route signs, while present, may not be readily identified, causing motorists to be unaware that the route is a designated bike route

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eight to ten feet. These facilities could be improved with signage and stripes that separate the pedestrians from the bicyclists (Photo 8).

Bicycle Boulevards

A bicycle boulevard takes an enhanced Class III one step further; it is a shared roadway (bicycles and motor vehicles share the space without marked bicycle lanes) where the through movement of bicycles is given priority over motor vehicle travel on a local street. Traffic calming devices are used to control traffic speeds and discourage through trips by motor vehicles. Routes are signed and large “sharrows” (see Image 13) are painted on the streets. Traffic control devices are designed to limit conflicts between automobiles and bicycles and favor bicycle movement on the boulevard street. No bicycle boulevards exist in Santa Barbara County, but a regional boulevard is planned in Santa Barbara.



Photo 6: Bicycle Blvd.



Photo 7: Bicycle Boulevards are enhanced Class III bikeways where the through movement of bicycles is given priority over motor vehicle travel on a local streets. Bicycle Boulevards use traffic calming devices like mini traffic circles (right) to control traffic speeds and discourage through trips by motor vehicles. Photo courtesy of City of Berkeley.

Bicycle boulevards are intended to provide an advantage for bicycles over motor vehicles, and as such, also significantly improve the pedestrian environment. Bicycle boulevards should be implemented on local streets, generally with fewer than 3,000 vehicles per day, through a combination of traffic calming, intersection treatments, and signing. Bicycle lanes are normally not used on a bicycle boulevard, thus little or no parking removal is necessary. The implementation of bicycle boulevards should not result in significant traffic diversion onto other local streets.

Unpaved Trails

In addition to these officially designated bikeways, there are also many unofficial trails throughout the county that are usually unpaved. Some of these trails are used by children as convenient routes to get to school while others are used both for commuting and for recreation (for instance along creeks and flood control channels). Other trails are maintained for hiking and off-road vehicles in the Los Padres National Forest. The Los Padres

Photo 8 (below): A Multi-purpose Trail II bikeway on Railroad Ave. in Santa Maria. Bicyclists can choose to ride in a Class II bike lane or on a wider sidewalk.



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National Forest has over 1,175 miles of trails, providing day-use and extended touring opportunities for both non-motorized and motorized vehicles. (Use by off-road vehicles is permitted on designated trails or maintained service roads.) The trail system is used for a variety of activities, including hiking, horseback riding, jogging, and mountain biking.

Mountain biking is permitted on all trails outside of the designated Wilderness Areas except for Rattlesnake Canyon, where bikes are prohibited. Front Country trails are those in the foothill trails along the stream-cut canyons on the Santa Barbara side of the Santa Ynez Mountains (including the San Ysidro, McMenemy, Cold Springs, Tunnel, Jesusita and Rattlesnake Canyon Trails, and East and West Forks). When riding on all trails, especially busy Front Country trails, mountain bikers are encouraged to ride in control and at moderate speeds and to yield to hikers and equestrians at all times. Several non-profit advocacy groups including the Front Country Trails Alliance and the Santa Barbara Mountain Bike Trail Volunteers, are working to facilitate safe and environmentally-friendly use of the trails through education and trail work, and are also working to develop new trail access to help alleviate congestion on Front Country trails. Improved bike parking facilities at trailheads may encourage more trail users to arrive to local trails via bike.



Photo 9 (above): The Santa Maria River Levee Trail is an unpaved multipurpose trail in the City of Santa Maria.

Innovative Bikeway Treatments

Colored Bike Lanes

Colored bike lanes have been used in other countries, especially in Europe, but are not widespread in the U.S.; they have only been used experimentally in a few locations, most notably in Portland, Oregon.

Colored bike lanes have been used for two purposes. The first is to emphasize the distinction between the bike lane and the traffic lane. It is believed the coloring may keep motorists from straying into the bike lane. The other use of colored lanes is to highlight conflict areas, usually at or near intersections. The City of Portland is still researching the use of different paint options in order to address concerns about slipperiness of the surface, its ability to bond to existing asphalt, and long-term durability.



Keep Our Trails Open!

The Santa Barbara Mountain Bike Trail Volunteers are supplying these cards, posting trail use flyers, organizing trail maintenance events, and working with the Forest Service and other trail user groups to improve our trail system and trail community. For information on these projects or on our organization, visit SBMTV at www.sbmtv.org



Photo 10: Trail education reminds mountain bikers to ride in control and at moderate speeds and to yield to hikers and equestrians at all times.

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Contra-flow Bike Lanes

Contra-flow bike lanes can be developed when heavy bike traffic creates a demand for bicyclists to travel against the normal flow of traffic, such as on one-way streets.⁴ While every effort should be made to design bike lanes that travel in the same direction as other road users, there are scenarios when allowing bicycles to travel against the flow of traffic significantly improves bicycle circulation. This technique is especially effective for short segments of a street network that improves flow for bicyclists. For example, the City of Santa Cruz, CA constructed a contra-flow bike lane near its busy boardwalk area, because a one way street (Beach St) provides a crucial bicycle link between the eastern and western parts of the City and bicyclists had to previously take a significant detour as well as climb extra hills in order to legally follow the flow of traffic.

“Sharrows”

“Shared Lane Markings” (aka “sharrows”) are used in lanes shared by bicyclists and motorists when there is not sufficient width or a need for a bike lane. In contrast, bike lanes set aside a pavement area for bicyclists and are marked by a solid white line and a different symbol. Sharrows show where cyclists should ride to avoid being hit by a suddenly-opened car door. Although motorists are responsible to check before opening their car door, riding too close to parked cars (in the “door zone”) can lead to serious injury. Cities such as San Francisco and Oakland conducted pilot programs with sharrows, but until recently there was no “official” marking. The City of San Francisco studied different types of markings and made recommendations to Caltrans based on the study results. In September 2005, Caltrans approved the shared lane marking for use statewide, making California the first state to adopt a marking for shared lanes.

4. Pedestrian and Bicycling Information Center: <http://www.bicyclinginfo.org/de/onstreet.htm#innovative>, 9/27/06



Photo 11: colored bike lanes in Copenhagen, Denmark are used to alert right turning motorists of their responsibility to yield to bicyclists at upcoming intersections.



Photo 12: Contra-flow bike lanes in the City Cruz. Bicyclists can travel east or west on the section to the right. Photo courtesy of City of Santa Cruz.

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Other Bikeway Improvements

Besides bike lanes and routes, there are additional components to a successful bicycle network. Miscellaneous facility improvements which increase safety and/or convenience are important enhancements to the bicycle riding community. Additional bikeway enhancements that improve cycling conditions include lighting, rubberized railroad track crossings, safe drainage grates, bicycle-sensitive loop detectors at traffic signals, and end-of-trip facilities such as bike racks, bike lockers, personal lockers, showers, and rest stops (destination facilities are discussed in Chapter 4).

The concern about personal safety from criminal assaults has led Seattle to install video cameras and lighting in bicycle/pedestrian tunnels. Concern for safety on the Obern Trail Bikeway on the South Coast of Santa Barbara resulted in the installation of solar lights on



Photo 13: Sharrows are stenciled on the street outside of the “door zone” and the position is intended to show bicyclists where they should ride to avoid being hit by car doors opening.

*San Francisco Dept. of Traffic and Parking



Photo 14: The City of Goleta has recently striped Hollister Avenue in Old Town Goleta with “Sharrows” because this short segment of City’s major East/West corridor does not have the space for a Class II bike lane. Photo courtesy of Ralph Fertig.

sections of the well-used commuter route between UCSB and Santa Barbara (photo 15 on previous page).



Photo 15: Solar lights were installed on the Obern Trail in Santa Barbara to increase bikeway visibility and safety for commuters in the evening hours. Photo courtesy of Ralph Fertig

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Drainage Grates

Drainage inlet grates should provide an adequate surface for bicyclists. Parallel-bar drainage grates can trip a cyclist's wheel, which can cause a serious crash. Bicycle-safe models, such as those which resemble honeycombs or cast iron grates with short angled slots are offered by most grate manufacturers. The best design is the curb-face inlet, as long as the slope to the inlet is not excessive. The grates should be installed level with the pavement, and maintained flush with the surface with resurfacing. Welding flat steel bars across the grate perpendicular to the flow of traffic can be an effective retrofit, but can collect debris that restricts water flow through the grate if not frequently maintained.

Railroad Crossings

Railroad crossings, particularly if the tracks and roadway don't meet smoothly, can be dangerous for bicyclists because the tracks can trap a bicyclist's front wheel and cause a crash. Where bikeway facilities cross railroad tracks, smooth rubberized railroad crossings, or paved tapered approaches on either side of the crossing should be installed. Rubberized

* <http://www.tfrc.gov/pubrds/fall95/p95a41.htm> (footnote for crash reduction info)

crossings, while expensive to install, reportedly have the advantage of significantly reducing long-term maintenance costs.

Roundabouts & Traffic Circles

Many planners and engineers in the US have become advocates for modern roundabouts and the smaller neighborhood traffic circles, and they are designing and developing them to reduce accidents and increase capacity. Although there is some debate about perceived safety for bicyclists in roundabouts and traffic circles, most studies have shown all crash rates, including those involving bicyclists and pedestrians, to be reduced at intersections that have been converted to roundabouts*. Nonetheless, it is important to consider the needs of bicyclists when designing roundabouts and traffic circles. This can be accomplished by providing two ways for bicyclists to navigate the roundabout, including the option of walking a bike as a pedestrian, or taking the lane like a motor vehicle.

To assure safety when traveling through a modern roundabout all commuters must adhere to two common rules; first, one must

Photo 16a: *this photo portrays the rubberized warning approaching the Railroad crossing.*



Photo 16b: *The City of Lompoc has filled in the gaps between these rail road tracks on Laurel Ave. with paved tapered approaches. Another retrofit for railroad crossings is rubberized strips that decrease the gap and keep the crossing smooth for bicycles and cars alike (Photo 16a)..*

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maintain a low constant speed through the designed roadway. Second, is the yield at entry rule, which entails deferring the right of way to traffic already traveling through circulatory roadway. These two rules have become the reason for accident reductions near busy intersections, while also promoting a bicycle/pedestrian friendly community.

Improved Signal Detection

Loop Detectors ✦

Some traffic signals on Santa Barbara County roads are actuated. Actuation means that, in some directions, a signal will stay red until a sensor in the pavement detects that a vehicle has arrived and is waiting for the signal to turn green. The sensor detects the metal in the vehicle and changes the light. In some cases, the metal content of a bicycle is insufficient to be picked up by these sensors. Bicycle detection is a significant challenge because bicycles are small in comparison to the street surface area that must be covered by a detector. Also, because detectors are located near the centerline of most roads, bicyclists traveling near the right side of the lane might not be detected. At some intersections, the signal will not change until a motor vehicle arrives at the

approach. Most jurisdictions do not maintain an inventory of the bicycle detection ability of the actuated signals but attempt to adjust signals when it is determined that they do not detect bicycles.

Special loop detectors have been developed that are more effective at detecting bicycles, but few roadways are equipped with them in the Santa Barbara County region. The small number of bicycle actuated signals in our region is a significant deficiency in the network, as there are several locations that are signed or striped to encourage bicycle use, with signals that do not recognize the arrival of bicycles.

When bicycle lanes are created jurisdictions should incorporate bicycle sensitive loop detectors at intersections.

Video cameras

Video detection via cameras are another way to detect bicyclists at intersections. One camera takes the place of four loop detectors (one at each leg) and detects vehicles and bicycles as they arrive and wait.

✦ *City of Santa Barbara Bicycle Master Plan, 1998, pg. 21*

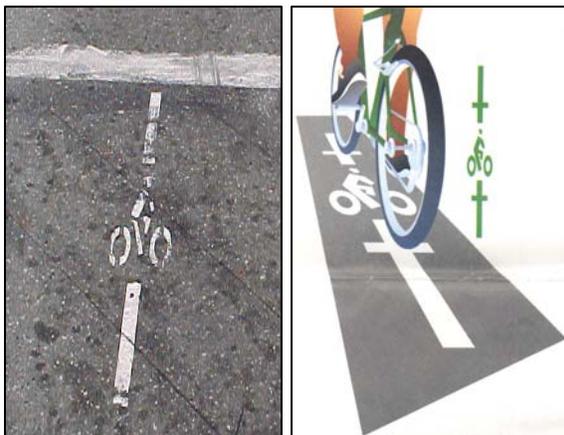


Photo 17a & 17b: show bike-specific sensors that detect bicyclists at intersections. Photos courtesy of John Ciccarelli, Bicycle Solutions (www.bicyclesolutions.com)



Photo 18: Typical urban double-lane Roundabout from "Roundabouts: located in Santa Barbara Milpas and 101 exit"

Link: <http://sbbusinessreports.com/isk178/milpas.html>

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Intersections & Freeway Crossings

Crossing busy arterial streets at signalized intersections poses safety concerns for many cyclists. Indeed, most bicycle-auto crashes occur at intersections. Conflicting vehicle movements at freeway onramps can be daunting to even an experienced cyclist. Many cases provide an examples of the difficulties encountered where there are two opportunities within 100 yards for motorists to make right turns onto the freeway exit across the bike lane, and two opportunities within the same 100 yards for motorists to make left turns across the bike lane. An experienced cyclist knows to enter the vehicle lane before a car can turn in front of her, but many cyclists don't know to do this.

Installing demarcated bicycle-sensitive loop detectors at traffic signals that can be activated by cyclists, and bicycle-oriented signal call buttons will facilitate crossing. (Caltrans has a new bike logo that may be used on the road surface to indicate where the bicyclist can activate the signal, see Photo 17 on previous page.) Implementation of traffic calming techniques on appropriate alternate streets, in conjunction with signing to encourage cyclists to use the quieter streets would be another way to enhance cyclists' safety.*

* John Ciccarelli, Bicycle Solutions (www.bicyclesolutions.com)

The needs of pedestrians and bicycles should also be considered during the design phase of freeway interchanges/crossings and intersection projects. At a minimum, Class II bikeways should be provided on over/under crossings that link up with or are a part of the regional bikeway system. A more comprehensive solution for busy freeway interchanges are pedestrian/bicycle specific bridges or tunnels. Local examples of separated under crossings include the Maria Ygnacia Creek Bikeway which goes under both Hollister Avenue and Hwy 101 and the bicycle/pedestrian tunnels under Los Carneros Road, near El Colegio Road and on the UCSB campus. These tunnels are all well lit for evening use. Any new bicycle under crossing under State highways would have to be maintained by local agencies. In addition, the local agency may need to accept Caltrans' relinquishment of the under crossing.

Intersections and freeway interchanges with safety problems due to high bicycle and automobile traffic levels coupled with inadequate bicycle facilities should be inventoried so that projects can be created that would alleviate these identified deficiencies.

Photo 19: *State of the Art Modern Video Detector/Sensor, most common in busy intersections*



Iteris Vantage Systems <http://www.iteris.com/rs/products/vvd.html>

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Conclusion

In recent decades there have been modern advances in design and architecture, which have proven to be beneficial in a community's transportation infrastructure. The usage of modern changes in transportation technology, such as signage and roadway design can help promote environmental quality and commuter safety. By providing the citizens of Santa Barbara county with a network of bike paths and trails, we have created an alternative source of commuter transportation. When using this source of commuter transportation one can promote a healthier lifestyle, while reducing the GHG emissions in the area. Appropriately, some of the before mentioned modern changes in transportation design have set the standard for the future of sustainable transportation.

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CHAPTER 3: Regional Bikeway Network

Introduction

Bikeways provide critical links for both the cycling and non-cycling public. Bikeways attract more cyclists which results in air, noise, and water quality benefits. They increase the carrying capacity of the transportation system by removing vehicle trips from roadways. Bikeways improve safety for all users; bicyclists feel they have a safe space on the road and tend to be more law-abiding while riding and motorists generally know where to expect bicyclists. Bikeways also help motorists to be aware of bicyclists' presence and right to be on the road¹.



Photo 20: *This bikeway in Amsterdam, Netherlands has separated bikes and pedestrians through colored brick and completely separates cars from bikes/peds.*

The planning and implementation of bikeways can be relatively simple and inexpensive, as when a City re-stripes a roadway with bicycle lanes during a routine resurfacing. Bikeways can also be very complicated and costly, as with streets that need to be widened or the construction of new off-road bike paths in environmentally sensitive areas. The installation of some bikeways may be subject to controversy, if, for example, parking needs to be removed to install bicycle lanes or traffic needs to be diverted to create a bicycle boulevard. These factors have all been analyzed for this Plan. Bikeways were selected because of their

1. *City of Portland Bicycle Master Plan, 1996, pg 21*

connection to land uses, ease of implementation, need for safety improvements, lack of parallel facilities, and need for continuity. In some cases, two bikeways both serving the same origins and destinations have been included on the regional system. In such cases, because of the considerable development problems and approval time for the long term vision, both routes were included in order to provide a short and long term bicycle route. For example, as a long term vision, jurisdictions on the South Coast have expressed an interest in the completion of a continuous Class I bikeway along the railroad right-of-way from the west side of Goleta to east of Carpinteria. While this is included in the Regional System as a proposed route, there are numerous obstacles to the bikeway's development including the fact that the right of way is privately owned by Union Pacific. Therefore the Regional System also includes bikeways which either already exist or have the potential for completion in the near future that will serve in the interim as the regional east-west corridor through the South Coast.

The regional bikeway system defined through this process is presented in the maps included in Appendix A. Both existing and planned facilities are shown. The planned facilities serve to augment the existing system, correct specific deficiencies, and extend the regional network through newly developed areas.

The purpose of a regional bikeway system is to link major population centers and major trip origins and destinations that bridge two or more jurisdictions. Therefore, the regional system does not include all the local bikeways within each jurisdiction, but those that connect these major centers and origins/destinations, between jurisdictions. Designating a regional network does not discredit the necessity of local bike networks, which are equally important for many bicycle trips. However, this notion of regional connectivity can be promoted by incorporating local bike paths, which act as a function that closes the loop and promotes development of a regional bikeway system.

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SBCAG, as the regional transportation planning agency, is responsible for reviewing and prioritizing project applications for funding under various regional grant programs. A goal of this plan is to identify the bicycle segments that, if built, would complete a network of regionally significant bike routes that could be used by both commuters and recreational riders. An additional goal is to determine, from a regional perspective, which bicycle segments should have priority in terms of funding and construction.

Many of the projects to construct these segments have been incorporated into the 2007 Regional Transportation Plan (RTP) and new segments will be incorporated into future drafts. The local jurisdictions are strongly encouraged to select projects from the 2008 RTP project list when applying for regional funding. The list should also be used by the jurisdictions in selecting projects for their annual or biennial capital improvement budgets. This will ensure a greater likelihood of completion of the regional system.

Current State of Regional Network

The region has 299.7 miles of existing bikeways (see Table 12). The majority of designated bikeways in the region are Class II and Class III. The region also has multipurpose recreational trails, which are used by bicy-

clists, hikers, joggers, in-line skaters, skateboarders, equestrians, etc. Maps of the existing bikeway facilities are included in Appendix A.

Bikeway Network Development

The regional bikeway network has been developed using a variety of techniques, which are described below.

Design Guidelines

National studies have found that an effective bicycle system accommodates the preferences and tendencies of a variety of bicyclists². For instance, experienced riders who commute to work may prefer Class II bike lanes on major arterials with high volume because they are often looking for the fastest and most direct route to their destination. Meanwhile, other types of commuters may prefer a less direct but quieter neighborhood street (Class III). A Class II facility on busier arterials will accommodate more skilled riders while signage directing others to an alternate route nearby will accommodate riders with different needs.

The Cabrillo Boulevard Bikeway in the City of Santa Barbara is an example where a Class I route is used heavily by pedestrians, recreational bicyclists, novice riders, joggers, and other users. Commuter bicyclists through this stretch often ride on the street with the vehicles to avoid the congestion on the bikeway.

2. Federal Highway Administration National Bicycling and Walking Study, Case Study No. 4, Measures to Overcome Impediments to Bicycling and Walking

Table 12: Bike Route Mileage by Jurisdiction— SBCAG Travel Model

AREA	COUNTY	CITY	STATE	TOTAL
South Coast	53.6	92.9	16.6	163.1
Santa Maria	14.3	55.0	10.0	79.3
Lompoc	6.8	8.4	10.6	25.8
Santa Ynez	8.9	13.1	6.0	28.0
Guadalupe	—	—	3.5	3.5
Total	83.6	169.4	46.7	299.7

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The regional network therefore recommends the construction of Class II bike lanes on Cabrillo, which would complete a network that accommodates a broad range of bicyclists.

Illustrative Projects

Some bikeways designated as part of the regional network will be more difficult to design and build than others. In some cases, proposed bike lanes can be striped easily and affordably on a road that is being repaved. Other bikeway projects require feasibility studies, complex planning and environmental reviews because they cross private property, span longer distances or are being proposed in environmentally sensitive habitats. Other projects must go under or over major roadways, freeways or rivers. These bikeways are considered “illustrative” because they provide long-range connections for missing links in the bikeway network, but funding is not readily available in the foreseeable future. Nonetheless, they are included in this plan to ensure they are considered should future funding become available.

Some examples of illustrative bikeways identified in the regional network are the Santa Maria to Guadalupe Levee Trail that would continue the Class IV bike path already built along the levee in the City of Santa Maria, to Guadalupe to the east. The Class I bikeway proposed along the entire stretch of the Union Pacific Railroad right of way from Winchester Canyon to Ventura County line is a more speculative horizon project.

Route Selection Criteria

Route selection factors commonly used by bicycle facility planners include:

- **Rider Safety** - Routes are chosen considering various safety factors, including traffic volume, motor vehicle speed, shoulder width, and the presence of parked cars.
- **Rider Convenience** - Convenience factors include routes those with the most destination points, the number of stop signs, and the amount of debris on the road.
- **Rider Volume** - Emphasis is placed on lim-

iting the number of bikeways designated in order to concentrate on corridors with the highest bicycle volumes.

Cyclist Population

Planners also consider the distinct types of riders when planning bikeway networks. The bicycling population in Santa Barbara is made up of riders with differing skills and abilities, as well as differing motivations for cycling. The type, location, and characteristics of bicycle facilities must take into account these various types of riders to create an effective bikeway network; a given set of bicycle facilities and routes will not be suitable for the entire cycling population. The following list is an attempt to classify this population into five identifiable categories: adults who are avid, regular or new commuters and young cyclists who are either regular or new riders.

ADULT CYCLISTS

1. Avid Riders

Avid cyclists use bicycles as their primary transportation mode for most trips. They value the availability of direct, high-speed routes that are relatively unfettered by traffic lights and stop signs. The avid cyclist will often choose to ride in the motor vehicle travel lane and along major routes without bicycle facilities. This group of experienced riders will typically avoid separated bike paths, particularly in neighborhood greenbelts. Avid cyclists are highly attuned to bicycle safety, so they are sensitized to potential hazards, and they continually anticipate and avoid compromising situations while riding. This group, although typically the most visible and strongest advocates in the bicycling community, is actually a relatively small segment of the cycling population.

2. Regular Riders

Regular riders will typically use bicycles as the preferred transportation mode, provided that the destination is reasonably close and a good bicycle route exists. The individuals in this group are usually working adults, college students, or mature high school students. This

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group also includes parents with child seats and trailers. They appreciate the relative speed and convenience of the bicycle as compared to the car. These cyclists desire safe and efficient bicycle facilities and routes. They are willing to accept some out-of-direction travel to avoid routes perceived as dangerous. Some cyclists in this group feel uncomfortable riding along high-speed arterial streets even when bike lanes are provided. They are usually attuned to potential hazards such as opening car doors, and cars exiting or entering driveways. The regular bicycle rider wants to maintain momentum, but usually obeys traffic controls. This type of cyclist comprises a large segment of the cycling population in Santa Barbara.

3. New Riders

New adult riders tend to have ridden bicycles as children or college students, but not ridden in many years. They are back on their bicycles to increase their fitness level, improve air quality or avoid parking hassles. However, most of these riders do not have the necessary skills to ride confidently and safely on the street network and feel uncomfortable on most streets with cars.

4. Young Regular Riders

These riders are usually of junior high or high school age who routinely rides to and from school. Other trip purposes include riding to visit friends, to the park, to shop, and to other after-school activities. This group of cyclists tends to have less experience negotiating traffic and are not always aware of potential hazards. They may choose routes unsuitable to their ability, and they often disobey traffic laws and traffic control devices and ride on sidewalks. Young riders tend to prefer the shortest route possible, because minimal pedaling effort seems more important than speed, and they tend to prefer bike lanes and bike paths.

5. Beginning Bicycle Riders

These are typically school-age children. They ride bikes to and from school only if a route

exists with bike paths and bike lanes on streets with relatively low traffic volumes. Beginning young bike riders will typically only pedal to destinations in their neighborhood, and they seldom ride bikes across town. Cycling skills are not fully developed in this age group, and most of them have relatively limited experience riding a bike in traffic. Developmentally, this age group has physical limitations as well. Up to about age nine or ten, most children do not have well-developed peripheral vision, and they have difficulty with concepts such as closure speed (that is, gauging the speed of approaching motor vehicles). Younger bicycle riders typically have difficulty following a straight track, and they frequently weave from side to side when riding. Beginning riders are a relatively small segment of the overall cycling population. In fact, the number of young riders over all has fallen steadily over the past thirty years.

There are other ways that cyclists can be categorized, such as by trip purpose. The descriptions detailed above only serve to represent the major categories of cyclists in Santa Barbara County, but they do not imply that the categories are exclusive, or the descriptions absolute.

Completing the Network

Once an overall network was identified, bikeways were developed that connect missing links and address areas of concern. A completed regional network will provide a safe and seamless cycling experience for riders of all levels.

Connecting Missing Links

Missing links, or gaps in the bikeway network, reduce the likelihood commuters will bike to work. Bikeways with missing links often force cyclists to choose between using streets without bike lanes with high traffic volumes, taking a longer alternative route that has less traffic, or not taking the trip by bike. Most of the bikeways identified in the regional network are Class II facilities (on road), with most gaps oc-

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curing where there is a barrier such as a river or freeway. Elimination of these gaps in the bikeway network is crucial to facilitate bicycling as a travel mode.

Freeway Crossings

All urbanized areas in Santa Barbara County are intersected by state highways and therefore all areas rely on over and under crossings for transportation links between land uses. For example, in Carpinteria, residential housing is located primarily on the north side of the freeway while most of the commercial and retail development is located on the south side of the freeway. However, many of these freeway crossings do not have designated space for bicyclists because they were designed primarily for use by motor vehicles. Even freeway crossings that do have bike lanes can be hazardous for bicyclists because of the existence of free right hand turn areas that lead to freeway on-ramps. Several communities in Santa Barbara County, including the Cities of Buellton and Goleta have sited the need for additional freeway crossings to improve the mobility of residents. The City of Goleta sites the need for more north-south crossings of US-101 in its recently adopted General Plan. Any additional freeway crossings should be designed to accommodate bicyclists.



Photo 22: least optimal bike plan

The original striping (left) of this freeway overpass on Donovan Rd. in the City of Santa Maria shows the potential for conflict areas on freeway overpasses, and how proper striping can help reduce conflict areas (right). Photos courtesy of Ralph Fertig.



Photo 21: This bike/pedestrian bridge in the City of Lompoc successfully spans the missing link created by a flood plain. The bridge connects V St. to a Class I facility that runs to the east and is part of the regional bikeway network.

Creeks / Rivers / Large Hills

Natural features such as waterways and steep hills can also present barriers to completing a bikeway network. When possible, bicyclists should be provided safe passage over waterways by using existing roadways or new bike/pedestrian bridges. Hills can provide additional barriers and therefore topography should also be taken into consideration when planning the route of a bikeway.

An example of a missing link in the Lompoc Valley is the Allan Hancock Bikeway, which is planned to connect the urban areas of



Photo 23: Most optimal bike plan

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Lompoc to the Allan Hancock College and ultimately to the new Providence Landing development (located within the County of Santa Barbara). Currently, a Class I bike path exists along Hwy 1 only from Central Ave. past the bridge and then bicyclists are directed to cross busy Highway 1 and ride up a large hill in order to arrive to Allan Hancock College. A Class I bikeway is planned that would climb more gradually up a canyon behind the college and would provide a safer, quieter and easier bike route than riding up Highway 1 to the college.

A missing link in the regional system on the South Coast is from Modoc Road to downtown Santa Barbara. The Obern Trail is the primary Class I bikeway arterial from Goleta Beach (with access to UCSB) to Modoc Road near the Hollister Avenue/Modoc Road intersection. From this point, cyclists going south must travel along Modoc Road (a Class II facility) to Mission Street to access downtown Santa Barbara. Mission Street and its under-crossing with Route 101 experiences high traffic volumes (especially during peak hours) and conflicting turning movements. These conditions, coupled with the lack of bike lanes and narrow shoulders, make this link difficult to navigate, especially for less experienced riders. This missing link was identified as part of the City of Santa Barbara's 1998 Bicycle Master Plan

and in the 1994 Regional Bikeway Study. The City of Santa Barbara, in conjunction with Caltrans and SBCAG, has obtained funding and the project is programmed for construction in 2008/2009.

Signage and Connections

Once a network of bikeways has been planned and built, signage provides cyclists with the final resource needed to comfortably travel by bicycle. Established bike routes lacking signage can be a barrier both to the novice rider and the visiting or touring cyclist. Santa Barbara County bike maps, with designated bike routes are available at local bike shops, visitors' centers, hotels and the offices of SBCAG Traffic Solutions. Without appropriate signage, however, a rider may not be sure whether he or she is actually on the route indicated on the map, especially if the rider is new to bicycling or to the area.

Route signage should occur frequently, especially at points of potential route confusion, like at intersections. A consistent symbol for bicycles should be used. For example, in 1998, a project called the Southern Santa Barbara County Regional Bikeway Signage Program was completed that installed 500 signs from Goleta to Carpinteria. The signs use a



Photos 24 & 25 show a missing link on the Allan Hancock Bikeway in the Lompoc Valley. Photo 24 shows where the Class I bike path ends and directs bicyclists onto Highway 1. Photo Y is taken from behind Allan Hancock College. A class I bike path is planned in this canyon and would connect a missing link in a regional bikeway network.

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consistent nomenclature and design that is easy to see and follow. The signs note the route name, distance from popular destinations, and indicate direction changes (Photo 25).

Similar signs can be produced affordably by the County of Santa Barbara's Public Works department for other jurisdictions. The regional network should be signed throughout the region. Implementation of such a signage program for the regional bikeways throughout Santa Barbara County should not add significantly to the existing signage maintenance programs.

Bikeway Network Maintenance

It is important for bikeways to be regularly maintained in order to prevent the deterioration of roadway surface and the accumulation of broken glass, sand and other debris on the roadway. Crumbling asphalt, cracking (distressed) surfaces, and potholes also significantly reduce the bicyclists' ride quality, and can result in severe crashes if cyclists swerve into the traffic lane to avoid the prob-

lem area. Poor surface quality reduces the desirability of bicycling as a transportation alternative. Other maintenance issues include re-stripping bike lanes (See Photo 22 & 23), repair and update of signage, repair or replacement of any lighting provided for bike facilities (tunnels, bikeway lighting at night), repair and replacement of storm drain inlet grates, repair or replacement of bicycle loop detectors or signal activation buttons, repair or replacement of parking storage facilities, and repair or replacement of any barricades associated with the bicycle facilities.

Street maintenance activities, however, can also result in reduced ride quality for bicyclists. Using chip seal rather than slurry seal to resurface streets or roads, for instance, can result in rough and slippery bike lane surfaces. After application on the street, the excess chip material is continuously swept into the bicycle lanes by vehicular traffic. Bicyclists turning onto bike lanes on streets which have been chip sealed can skid sideways on the chip material and lose control of their bicycles. For this reason, chip seal is not recommended for streets which have Class II or Class III facilities. If chip seal is used on such streets, care

Photo 26: Signage indicating direction change. This type of signage program should be implemented county-wide, using regional funding.



Photo 27: Neglected bike path in Lompoc Valley

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should be taken to remove the excess material from the streets, and the streets and bike lanes should be swept more. The road maintenance technique of “slurry-sealing” provides a smooth surface without this problem.

Maintenance of on-road bikeways such as repaving and re-striping occurs with scheduled maintenance activities of each jurisdiction, and is usually based on the condition of the roadway and age of the pavement, and the condition of the striping and legends. Sweeping also occurs with scheduled maintenance activities. Bicyclists should be taken into account when maintenance activities are planned on roads that have bicycle facilities. Appropriate signs warning both motorists and cyclists of appropriate rerouting or merging of lanes should be used.

Class I bike path maintenance has also been based on the age or condition of the pavement and in response to feedback from bicyclists using the paths. The principal aim of the maintenance activities is to increase the life cycle of the pavement. Even though Measure D funds have been used by each jurisdiction to resurface roadways, schedules for street

sweeping to remove debris and trim trees and brush have not significantly changed. As a result, many of the bikeways have less than optimum conditions for biking. Therefore, street sweeping and trimming of vegetation should be included as part of road way rehabilitation.

Conclusion

The development of a regional bike path network in the Santa Barbara County will provide local residents with an alternative form of commuter transportation. The completion of this project will allow cyclists of all ages in Santa Barbara County to utilize the bicycle transportation network for business transit, school transit and recreational activity.

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CHAPTER 4 Parking and End-of-Trip Facilities

Introduction*

Every bicycle trip has two basic components: the route selected by the cyclist, and the “end-of-trip” facilities available at the destination. These destination facilities include parking for the bicycle and a changing space, lockers and even showers for commuters. If the end-of-trip facilities do not meet the users’ needs, other means of transportation will be more convenient and more often chosen.

Good, secure bicycle parking offers these benefits:

- It inexpensively and efficiently increases a building’s parking capacity;
- It serves those who use bicycles as a mode of transportation; and
- It encourages bicycle use.

Cyclists’ needs for bicycle parking range from simply a convenient piece of street furniture to storage in a bicycle locker or facility that protects bicycles from weather, theft and vandalism and offers gear storage space and 24-hour personal access.

Several factors determine where a cyclist’s need falls on this spectrum:

- **Storage time:** whether or not the bicycle will be left unattended all day or just for a few minutes
- **Weather conditions:** covered bicycle parking is apt to be of greater importance during the months with percentages of precipitation.
- **Value of the bicycle:** the more a cyclist has invested in a bicycle, the more concern she or he will show for theft protection. Most new bicycles cost \$400-\$500 and often considerably more.

- **Security of area:** determined by the cyclist’s perception of how prone a given area is to bicycle theft. This is fairly subjective, and probably predicated to a degree on an individual’s experiences with bicycle theft.

Bicycle storage facilities should be provided by the responsible agency at principal bicycling destinations such as schools and recreation facilities, as well as at local government and community centers, state, regional and local parks, post offices, public libraries, health care facilities, visitor information centers and museums. Bicycle parking should also be provided at bus and train stations. Local jurisdictions should require adequate bicycle storage or short-term parking facilities (bike racks) to be provided by local developers of any grocery store or bank, and at large residential, commercial and industrial facilities.

Maps of public parking and end-of-trip facilities are shown on the regional bike maps.

Proper selection and placement of end-of-trip facilities such as bike racks and lockers is important. Racks should be located in front of a business in a well lit and highly visible location



Photo 28: Bicycle racks that are conveniently located at the entrance of the Santa Maria Town Center Mall provide short-term bike parking for shoppers.

*Source: Portland Office of Transportation (1996) End-of-Trip Facilities. *Portland Bicycle Plan*. Portland, OR

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(Photo 27). Bike lockers should be placed in well lit areas for the convenience of those using them in the evening and early morning.

It is also important to publicize bicycle parking when it is provided. Bike racks and lockers can be painted in creative and colorful ways and bike parking signage should be placed in the vicinity of the parking so bicyclists know where to park.

Bicycle Parking Definitions

Note: Common terms describing the types of end-of-trip facilities discussed below, such as short-term, long-term, secure, etc. are defined at the end of this chapter on page 4-8.

Bicycle Racks

Bike racks best serve bicyclists who are making a short-term trip lasting a few minutes to a few hours. Racks should be placed in convenient, well-lit locations close to building entrances but also should not obstruct pedestrian traffic. Bike racks should also be plentiful enough so bicyclists don't have to lock bicycles to sign posts or trees (Photo 28).

There are many different designs for bike

racks. Unfortunately, many racks use space inefficiently and can have the unintended result of damaging bikes because they do not support them properly or because their design leaves them more prone to wheels or frames being stolen.

Hitching Post (staple) racks are highly recommended. Ribbon racks are not recommended, as bicyclists commonly use these racks as if they were hitching post racks, therefore limiting the capacity to two bicycles, regardless of the potential or stated capacity. All three designs are shown in Figure 3.

Bicycle Lockers

Bike lockers are the preferred choice for secure long-term parking at many locations because they protect bicycles from weather and theft. Bicycle lockers also make it more difficult to steal bicycle accessories such as panniers, computers and lights.

As with bike racks, there are several designs available for bike lockers. Some have latches that can be secured with a pad lock supplied by the bicyclist and some are keyed and rented on a monthly basis to the bicycle user. Bike lockers that are rented to one assigned



Photo 29: This bicyclists chose to lock their bike to a light post, which often happens because bike parking is not conveniently located. Ironically, in this instance, there are two "hitching post" bike racks just behind the trash cans.



Photo 30: The County of Santa Barbara in Santa Maria has four bike lockers available to their employees and to the public at their Betteravia office building.

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user on a monthly basis require administrative staff time and are unable to be used by other bicyclists when vacant. Bike lockers administration can be handled by staff from the responsible agency or through a contract with an operator. For example, the City of Santa Barbara administers keys for their bike locker program and the Metropolitan Transit Authority in Los Angeles contracts with the Los Angeles Bicycle Coalition to administer bike lockers at transit stops and centers.

In the San Francisco Bay area new technology exists that allows multiple users to have access to a network of bike lockers through an electronically activated card. A nominal fee is usually charged per hour of use. (Visit www.Bikelink.org for more information.) This type of system allows more users to use fewer lockers while eliminating the need for administrative staff support by a responsible jurisdiction.

Other Secure Bike Parking Facilities

In addition to bike lockers, there are various spaces in commercial and residential areas that can be affordably converted into secure bicycle parking. Secure bike parking spaces can simply be a bike rack added to an empty corner of an office building (Photo 30) or a locked room with standard racks and access limited to employees or tenants with a key. Secure bike parking can also be created in a parking lot with chain link fencing or an open

rack near a parking attendant or guard (Photo 31).

Secure bike parking facilities can also offer more comprehensive amenities including attended parking, bike repairs, restrooms/changing rooms/showers, a small retail shop for essential bike accessories such as tubes and patch kits, a café and/or bike rentals.

Most often these facilities are located at transit centers, where bicyclists can drop off their bicycle and connect to light rail, subway, or bus lines. Although they have long been popular in Europe and Japan, these types of facilities are now being operated in the US. Six such facilities are being operated by the Bike-station Coalition on the west coast of the US (Seattle, Palo Alto, San Francisco, Berkeley, Santa Barbara and Long Beach) while other cities like Chicago are operating their own facility.

Indoor bicycle parking should be on a floor that has an outdoor entrance open for use and a floor location that does not require stairs to access the space; exceptions may be made for parking on upper stories with elevator access within multi-story buildings.

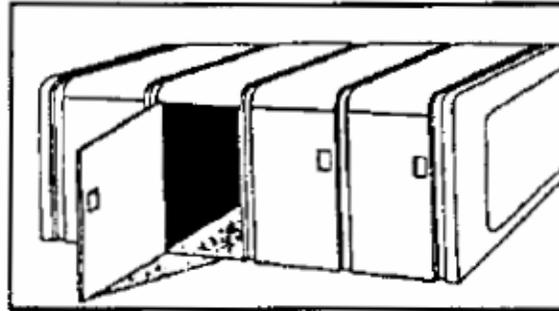
Directional signs should be used to locate bicycle parking areas when it is not visible from the street.



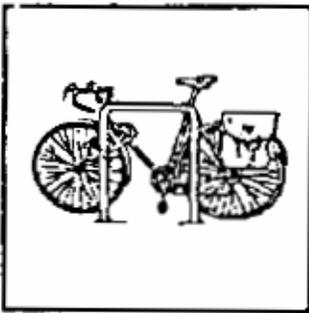
Photo 31 & 32: Secure bicycle parking is provided for Raytheon employees at their Goleta worksite (right) and in a vacant corner of the office in the case of Yardi Systems (also in Goleta, CA).

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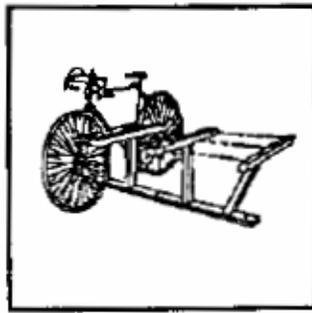
Figure 3: Common Bicycle Parking Racks*



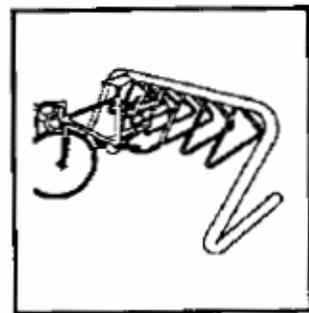
Bicycle Locker



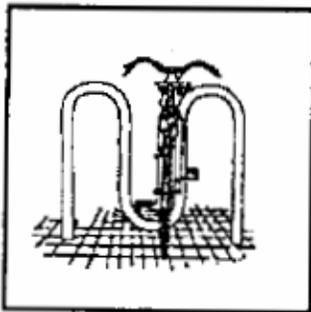
Bike Rail



3-pt. Locking



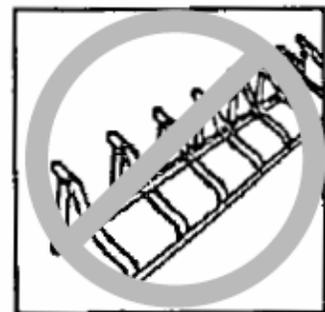
Freestanding



Ribbon Rack



Traditional
(SUBSTANDARD)



Wheelholder
(SUBSTANDARD)

*Source: Portland Office of Transportation (1996) End-of-Trip Facilities, Figure 4.1. *Portland Bicycle Plan*. Portland, OR

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Showers and Changing Facilities

A final need for some commuting cyclists is a shower, locker, and changing rooms at trip destinations. For those cyclists needing to dress more formally, travel longer distances, or cycle during wet or hot weather, the ability to shower and change clothing can be as critical as bicycle storage. Some commuting cyclists have access to showers and lockers at their workplaces and new commercial developments are increasingly including the provision of showers and lockers for bike commuters. Other employers offer discounts at gyms as a health benefit, but commuting cyclists can take advantage of the shower and locker facilities if the gym is close to their workplace. There are few publicly-accessible shower/locker facilities at this time in Santa Barbara County. Jurisdictions could consider partnering with local YMCAs or aquatic centers to offer commuting cyclists access to showers. The Bike-station in Santa Barbara has a shower and lockers available to paying members.

Multi-modal Facilities

Bicycle use would be more reasonable to many people if a short bike trip could connect to other services such as transit, trains or carpools. In order for this to be possible, end-of-trip facilities need to be available to

bicyclists once they are ready to transfer to another service. This section discusses the necessary facilities to allow for a seamless transition between bicycles and these other transportation networks.

Bicycles and Transit

Improving the bicycle-transit link is an important part of making bicycling a part of daily life in Santa Barbara County. Linking bicycles to mass transit (both bus and rail) overcomes such barriers as lengthy trips, personal security concerns, and riding at night, in poor weather, or up hills. This link also enables bicyclists to reach more distant areas and can increase transit rider-ship on weekends and mid-day. The bicycle-transit link can also make transit less expensive. In suburban communities, population densities are often too low to offer transit service within walking distance of many commuters (which is about one-quarter of a mile) so residents drive their car to catch a regional bus service such as the Clean Air Express, VISTA Coastal Express or the Valley Express. As these lines become more popular, jurisdictions are going to be faced with the expensive reality of building more parking lots unless commuters can arrive to the transit connection without their cars. Many of the auto trips to park-and-ride lots are under five miles – an easy bicycling distance for most adults.

Photo 33: Casa Nueva's showering facility



Photo 34: Breeze bus with bike racks full, the bus-bike option has been very popular for VAFB employees who have to travel 2-3 miles to get around the base during the work day.

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Once bicyclists arrive to the transit connection, they need to be able to park their bicycles securely in a bike locker or take their bicycles with them on the bus.

Virtually all of the transit providers in San Luis Obispo, Santa Barbara and Ventura Counties accommodate 2-3 bicycles on their buses. All modes of public transportation in the county are limited to a bike carrying capacity on transit and rails services in the Tri-Counties region.

Park-And-Ride Lots.

Both the Congestion Management Program and the Clean Air Plan encourage the use of park-and-ride lots throughout the region to reduce single occupant vehicle trips. Park-and-ride lots offer cyclists an option for inter-modal connections and secure bike parking should be provided for bicyclists. Bike lockers offer the greatest protection both in terms of security and weather. There are currently 6 park-and-ride lots in Santa Barbara County (two in Santa Maria, one in Lompoc, one in Santa Ynez and once recently completed in Buellton).



Photo 35 & 36: The City of Buellton and Caltrans recently completed a new Park & Ride lot (above), complete with bike lockers for inter-modal connection. Note the placement of a light near the lockers for added security. Amtrak's Pacific Surfliner has several cars that accommodate bikes.

Passenger Rail and Airports

Secure bicycle parking should be provided at other points of inter-modal connection. To this end, the Action Element of the RTP as well as policies in this Plan (Chapter 7, Goal 2.3) recommends the installation of secure bicycle parking at the Santa Barbara Rail Station and the rail platforms at Carpinteria, Goleta, Guadalupe and Surf (near Lompoc), and at the airports.

Bicyclists also have the option of bringing along their bicycles on AMTRAK's Pacific Surfliner and Starlight Express and many airlines allow a foldable bike to be brought as luggage for no extra fee.

Conclusion

In bicycle communities it is important to provide sufficient parking and end of trip facilities for the use of bicycle commuters. While working with the local government agencies to promote a healthy lifestyle and a cleaner alternative form of transportation, cyclists utilize these facilities for both safety and hygienic reasons. Bicycle friendly communities



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can increase bicycle commuting by the development and continued maintenance of the before mentioned facilities.

End-of-Trip Facilities Definitions

Common terms describing end-of-trip facilities are defined below.

SHORT-TERM PARKING: Short-term parking should accommodate visitors, customers, messengers and others expected to depart within two hours. Effective short-term parking requires approved standard racks, appropriate location and placement (close to building entrances) and can also provide weather protection.

LONG-TERM PARKING: Long-term bicycle parking should accommodate employees, students, residents, commuters, and others expected to park longer than two hours. Effective long-term parking should be provided in a secure, weather protected manner and location. Long-term parking facilities include bicycle lockers, a locked room with standard racks and access limited to member bicyclists or standard racks in a monitored location.

STANDARD RACK: A non-enclosed rack that is designed to reasonably protect the wheels from accidental damage and allows use of a high security U-shaped lock to lock the frame and one wheel (see Table 4.1, “Bicycle Parking Typology”).

Photo 37: of Santa Barbara Airport’s Bike Racks



SECURE AND COVERED: As invulnerable as possible to theft and the elements, depending on an appropriate combination of parking type, location, and access.

PLENTIFUL: Enough short- and long-term bicycle parking spaces to exceed peak season demand. Requests for additional bicycle parking, beyond existing code requirements, are to be met by the property owner.

EASILY-ACCESSIBLE: Per local jurisdictions’ zoning code, bicycle parking should not be impeded by nearby stationary objects, parked bicycles or parked cars.

ADJACENT TO DESTINATIONS: Short-term bicycle parking should be located no farther from the main entrance than the closest auto parking, and within 50 feet of a main entrance to the building. Close proximity to a main entrance is desirable for long-term parking but is not required.

SHOWER AND LOCKER FACILITIES: Any facility providing showers, changing space, and permanent clothes storage lockers sufficient to the needs of bicycle commuting employees.

Photo 38: Santa Barbara Bike station, 24 hr shower and changing facility located at 1219 Anacapa St.



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CHAPTER 5 Education, Encouragement and Enforcement

Introduction

Awareness of bicycling has entered the mainstream because of events like the Tour de France and the growing interest in bicycling as a low-impact fitness activity. The national limelight has also focused on bicycling over the past few years because of celebrities and leaders like Lance Armstrong and President George Bush who are outspoken bicycle enthusiasts. More and more recreational riders are hitting the road for fitness and recreation each year.

Bicycling for transportation, however, still has not entered the mainstream for a number of reasons. Most American cities span large geographical areas that are more easily traveled by car and many roadways have been designed for high speed car traffic. Many potential bicycle commuters feel that roads are unsafe and that they live too far from work to ride. Other prospective bike commuters do not have a reliable bike or have a bicycle tucked far away in a garage with two flat tires and a rusty chain. Others may feel that they are not physically able to ride a bicycle for transportation or have children with transportation needs that can't be served with a bicycle. Finally, and perhaps most importantly, bicycling has not yet become a socially and culturally accepted form of every day transportation, so few think of it as a viable option.

Previous chapters of this plan have focused on planning a network of bicycle facilities and amenities that improve riding conditions for bicyclists. Providing bicycle facilities will likely create a safer cycling environment but "engineering solutions" cannot increase bicycle use if the culture of bicycling doesn't enter the mainstream or if there is a perceived danger that is greater than the real danger. In other words, if bicycling is not seen as a *socially* acceptable form of transportation, very

few people will chose to ride a bike to get around town, regardless of how many bike-ways and bicycle amenities are built.

Education, encouragement and enforcement programs are vital elements for encouraging bicycle use and can bring help bicycle use into the mainstream when they are coupled with the development of physical bicycle accommodations such as bikeways and end-of-trip facilities.

- **Education:** Many bicycle drivers do not know that they are required by law to follow the "rules of the road," nor do they understand that following these rules decreases their risk of collisions by making their movements more clear and predictable to other road users.
- **Encouragement:** Education goes hand-in-hand with encouragement to increase cycling. Encouragement programs make bicycling fun and help create a culture of bicycling for transportation at workplaces and at the community level. Together with education, encouragement improves skills and raises awareness about the benefits of bicycling for transportation.
- **Enforcement** Adequate enforcement from police, sheriff and highway patrol officers is another important element for creating a safe and predictable driving environment for both bicyclists and motorists. Enforcement strategies need to target both motorists *and* bicyclists who are breaking the law.

This chapter discusses the current programs in Santa Barbara County to educate, encourage and enforce bicyclists and motorists and suggests ways to enhance or supplement programs.

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Education

A number of groups are actively offering education opportunities for bicyclists of all ages in Santa Barbara County. These education programs vary depending on the target audience. Clearly, education messages will be different when targeting school children or adults or when a target audience speaks a different language. Below is a brief overview of the programs currently being offered in Santa Barbara County.

League Certified Instructors (LCIs)

The League of American Bicyclists, a national non-profit group, certifies instructors in local communities to teach a set bicycle education curriculum and to offer a number of different classes to both adults and children. In 2001 the City of Santa Barbara partnered with the Santa Barbara Bicycle Coalition and was awarded a grant from the California Department of Health Services to certify fifteen local residents to become nationally certified as League of American Bicyclist Cycling Instructors (LCIs) to teach concepts of vehicular cycling to people of all ages, known as BikeEd.

CycleSmart Bicycle Education Program

The Santa Barbara Bicycle Coalition recently formed a program called CycleSmart to offer the range of classes supported by the League of American Bicyclists' BikeEd program. Since 2004 the Bicycle Coalition has offered classes to adults and children on the South Coast and is working to expand the program, especially to North County communities and to offer classes in Spanish, as funding and staff time grows.

Youth Education Programs

Today, fewer than 15% of trips made to schools are done by walking or bicycling. This decline has had an adverse effect on traffic congestion and air quality around schools, and has left many children without a basic knowledge of pedestrian and bicycle safety. In addition, a growing body of evidence has shown that children who lead sedentary lifestyles are at risk for a variety of health problems such as

obesity, diabetes, and cardiovascular disease. Many parents feel that current traffic conditions are too dangerous for their children to walk or bike for transportation and often children in Santa Barbara County attend schools many miles from their homes.

Safe Routes to School

Safe Routes to School programs encourage and enable children to walk and bicycle to school by making routes to school safer and more appealing for children to arrive on foot or by bike. A new federal program under the federal transportation bill, SAFETEA-LU, has made available significant levels of funding to help communities create and sustain a Safe Routes to School program. This funding facilitates the planning, development and implementation of projects that aim to improve safety, and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

Bicycle education programs in the schools are an essential foundation for increasing bicycle safety. Since 2000, a local non-profit group, the Coalition for Sustainable Transportation (COAST) has partnered with a broad range of community groups to offer pedestrian and bicycle safety assemblies and playground bicycle rodeos to schools on the South Coast of Santa Barbara County. Law officers and LCIs sponsored by the Santa Barbara Bicycle Coalition team up to teach kids important points about how to stay safe on foot and bike. Bicycle safety programs are also sponsored by other agencies such as the California Highway Patrol and AAA (American Automobile Association). Schools should be encouraged to maintain or expand existing student bicycle education programs. On-going bicycle safety instruction should be made available to all age levels in order to ensure safe bicycling, especially among youth without driver's licenses who may not be aware of basic rules of the road.

Some Tips for Riding Safely in Traffic

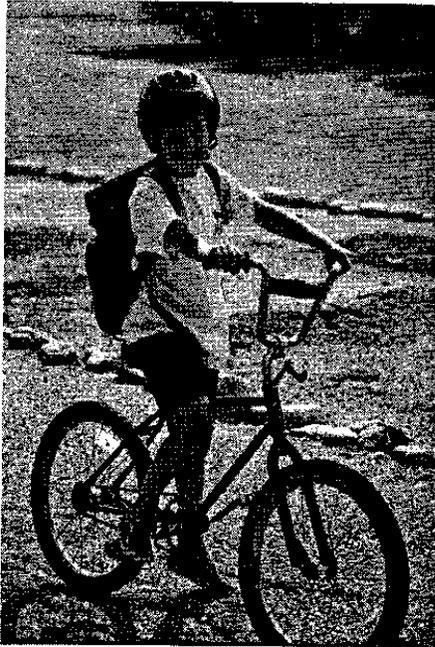


Photo courtesy of Carol Slater

- Be predictable
- Obey traffic laws
- Signal your intentions
- Remain alert for hazards in your path
- Watch for inattentive motorists
- Listen to traffic noise
- Ride on the right

- Wear a helmet



Making a left turn? Look behind you. If it's safe to merge left, first signal. Then merge left, then turn. If traffic is too thick or too fast for you to merge left, *walk your bike* across the intersection.

Figure 4 Example of Promotional Material On Safe Bicycling Practices

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Adult Education Programs

The Santa Barbara Bicycle Coalition, SBCAG Traffic Solutions and the City of Santa Barbara have regularly been offering “Street Skills for Cyclists” classes to adults, primarily on the South Coast of Santa Barbara County. These classes teach a broad range of concepts about how to ride legally and confidently and many include information about bicycle commuting and basic bike maintenance. Most classes also take students out on the road to practice bike handling and lane positioning with instructors. These types of classes should be available to adults in communities throughout Santa Barbara County as funding and staff time permits.

Motorist Education Programs

Motorists also can be better educated about how to more effectively share the road with cyclists. SBCAG Traffic Solutions has partnered with Steve Morris School of Defensive Driving in Santa Barbara to teach new drivers how to share the road with bicyclists and this type of program should be expanded to other communities and driver’s education programs. A more comprehensive bicycle education curriculum could also be incorporated into defensive driving classes for motorists with traffic violations who want to prevent points from being added to their permanent driving record.

Encouragement

Encouragement programs make bicycling fun and help create a culture of bicycling for transportation at workplaces and at the community level. Together with education, encouragement improves skills and raises awareness about the benefits of bicycling for transportation and also helps bring the culture of bicycle use into the mainstream.

Bike Week/Bike to Work Day

Over the past 10+ years, Bike To Work events like Bike to Work Day and Bike Week have served to highlight the benefits of bicycle commuting, educate the public about alternatives to private automobiles, and generally promote bicycles for every-day transportation. SBCAG

Traffic Solutions launched Santa Barbara County's first Bike to Work Day in May of 1994, and over the years the event expanded to communities across Santa Barbara County. The half-day event consists of a series of breakfast sites throughout Santa Barbara County where cyclists are treated to free food, prizes and t-shirts. The events are publicized in local print, radio and direct marketing pieces such as posters and brochures, as well as via the web.

In 2005 SBCAG Traffic Solutions decided to expand the scope of its countywide Bike to Work events and replaced Bike to Work Day with the Team Bike Challenge (see below). Bike Week and Bike to Work Day continue on the South Coast and are currently coordinated by the Santa Barbara Bicycle Coalition and the City of Santa Barbara.

Team Bike Challenge

The Traffic Solutions Team Bike Challenge is a month-long bicycle competition each June, where teams of five individuals track the number of days they take a trip by bicycle instead of by car. Each day team members ride a bike they earn points for their team. As teams earn more points, members become eligible for fun prizes such as movie tickets and gift certificates to iTunes and local bike shops. The Team Bike Challenge is designed to encourage more utilitarian bicycling in Santa Barbara County and is not only fun but also motivates both novice and experienced bicyclists to establish new transportation routines.

Community Bicycle Programs

Community bicycle programs can take many forms and indeed there are many programs in communities across the country and the world. Most community bicycle programs exist to refurbish old, discarded or donated bicycles and to empower youth. These programs can include elements such as:

- Youth and adult bicycle repair training
- Earn-a-bike programs (volunteers earn their own bike through accumulated hours)

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- Community furniture and art made from recycled bike parts
- Other recycling programs
- Bicycle safety education
- Career and business management training

Currently, no such program exists in Santa Barbara County but a number of activists and groups are working to determine the feasibility of creating such a program.

Enforcement

Bicycle safety and encouragement programs alone will not be sufficient without an effective law enforcement program. Law enforcement officers can enforce the vehicle code regulations pertaining to bicycling (such as citing bicyclists who don't follow the rules of the road) and site motorists who endanger bicyclists by speeding, passing at an unsafe distance or making unsafe turns in front of bicyclists. Information on the fines for violating the vehicle code should be included in educational materials and on the bike map.

Other Bicycle Resources

Bicycle Shops

Bicycle shops can play an active role in bicycle safety programs and in creating an active bicycling culture. Many bike shops across Santa Barbara County support the Traffic Solutions Team Bike Challenge and a myriad of other community groups through donations of goods and services. Many also distribute bicycle safety materials and publications, maps, and other free bicycle information brochures.

Bike Maps

A bicycle map is useful in helping cyclists select routes and can include information on bicycle laws, tips on safety and security, and can convey information on bicycle resources such as bicycle clubs, telephone numbers to call to report bike theft, or to report potholes and other bikeway maintenance needs.

SBCAG Traffic Solutions provides a free Santa Barbara County Bike Map through the mail and via their website.

Low-Cost/Free Helmets & Bike Lights

The County of Santa Barbara's Emergency Medical Services has a low-cost helmet program that sells helmets on a sliding scale. The Kiwanis Club also has a program that sends volunteers out to community events to distribute low-cost or free helmets and also to fit them properly.

Bike Clubs

Santa Barbara County contains several bicycle advocacy groups/clubs that help promote the use of bicycles as an alternative mode of transportation. The Groups are as followed: Santa Barbara Bicycle Coalition, Tailwinds, Goleta Valley Cycling Club, The Cutters, and The Coalition for Sustainable Transportation. The before mentioned groups/clubs are also responsible for the majority of bicycle community education and safety programs.

In addition, the Santa Barbara Bicycle Coalition and the Goleta Valley Cycling Club have teamed up a number of times to purchase rear flashing RED lights and front lights and have given them away to low-income workers, mainly through agricultural growers/farmers in the Santa Barbara County.

Conclusion

Education, encouragement and enforcement programs are vital elements for creating a culture of bicycle use and can help bring bicycle use into the mainstream when they are coupled with the development of physical bicycle accommodations such as bikeways and end-of-trip facilities. Programs that target smaller communities and Spanish speakers need to be enhanced as time and funding permits.

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CHAPTER 6 FUNDING

Introduction

Bikeway funding is available through a combination of federal, state, and local sources. Most funding for bicycle related improvements is tied to commuter bicycle routes. The definition of a commuter bicycle facility includes preferred routes to work as well as to schools. However, there are specific programs that provide funding for recreational bicycle facilities which can often serve some limited needs of bike commuters as well. Local jurisdictions have funded bicycle facility improvements principally from gas tax monies, Local Transportation Funds (Measure D) bikeway allocations, developer fees and Bicycle Transportation Account (BTA) grants.

Federal Sources

- ◆ Surface Transportation Program (STP)
- ◆ Transportation Enhancement Activities (TEA)
- ◆ Bridge Repair and Replacement Program
- ◆ National Highway Safety Act Funds (Section 402)
- ◆ Federal Transit Act
- ◆ National Recreational Trails Fund
- ◆ SAFETEA-LU

State Sources

- ◆ California Bikeways Act (BTA)
- ◆ Regional Improvement Program (RTIP, STIP)
- ◆ Habitat Conservation Fund Grant
- ◆ Environmental Enhancement and Mitigation Program
- ◆ Land and Water Conservation Fund Program
- ◆ Mello-Roos Community Facilities District Act of 1982
- ◆ Office of Traffic Safety

Local Sources

- ◆ Local Transportation Funds (Measure D)
- ◆ Development Fees
- ◆ Development Agreements
- ◆ General Fund
- ◆ Other Local Programs

Federal Sources

Surface Transportation Program (STP)

STP funds originate with the federal government and are distributed to States. This program contains a provision that requires states to spend ten percent of the STP on environmental enhancements such as pedestrian/bicycle facilities. To meet this provision, the State of California puts 10% of STP funds into a "Transportation Enhancement" program and assigns SBCAG a share of the 10% that SBCAG can use for TE projects in the county. These state-exchange STP funds are distributed by SBCAG by statute through two sub-programs. Santa Barbara County annually receives \$1.872 million in "Local STP" (LSTP) which is apportioned by SBCAG to local agencies on a formula basis for projects of their choosing. The local agencies most frequently choose to do road rehabilitation and maintenance with the funds but can do bike projects or landscaping. Regional STP (RSTP) is awarded through a competitive process by the SBCAG Board and these funds can also be used for bicycle related projects. Unlike LSTP, the amount of RSTP changes every year, and normally goes up. In FY 05/06 SBCAG received \$2.583 million, in 06/07 the estimate is \$2.893 million and in 07/08 the estimate is \$3.378 million.

Transportation Enhancement Activities (TEA)

This program may provide funds for bicycle and pedestrian facilities, scenic easements, historic sites, scenic highways, landscaping, rehabilitation, operation of historic transportation facilities and preservation of abandoned railway corridors for conversion to bikeway/pedestrian trails. The State of California has created a statewide TE program, which allocates funds every other year. SBCAG can pro-

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gram projects up to their share of the program which is approx. \$1.8 million every other year. The \$1.8 million includes about \$1.584 million in federal funds (88%), and the State puts in \$216,000 (12%), to meet the 12% match requirement at the local level.

Bridge Repair and Replacement Program

This program provides funds for repair or replacement of bridges, which can include improving or building bikeway facilities. This program is administered through Caltrans and two bridges per year in each county are selected from a priority list.

National Highway Safety Act Funds (Section 402)

This program was developed to reduce motor vehicle fatalities and injuries through a national highway safety program. Bicycle/pedestrian safety is eligible for funding, but it is not considered a priority program.

Federal Transit Act (FTA)

This act provides funds to non-urbanized areas under Section 5311 for various transit operating and capital assistance projects. Eligible projects include those that provide access for bicycles to mass transit facilities, or to install racks or other equipment for transporting bicycles on a mass scale. Local agencies are required to provide 10% of the total project cost.

National Recreational Trails Fund

This program appropriates about \$290,000 to California for development of recreational trails and trail related projects. The California Department of Parks and Recreation administers this program.

SAFETEA-LU

Also known as the Safe, Accountable, Flexible, Efficient Transportation Equity Act – a legacy for Users. SAFETEA-LU is a \$286.4 billion law that reauthorizes federal surface transportation programs through 2009. SAFETEA-LU has three important components for funding bicycle projects: bikeways, safe routes to school and a safety element.

- **Bikeways** – The sections on SAFETEA-LU that could help to fund the construction of and improvement upon bikeways includes; the Surface Transportation Program, Transportation Enhancements and the Highway Safety Improvement Program. The surface transportation program can be used to improve and create bicycle transportation projects. Transportation enhancements can be used to construct facilities for pedestrians and bicycles and create safety and educational activities for pedestrians and bicyclists.

- **Safe Routes to School** – This program should increase pedestrian and bicycle safety to, from and near schools. Eligible projects include wider shoulders and sidewalks near schools, crosswalk signals, school zone signage, traffic calming and pedestrian and bicycle safety education for students

- **Safety** – SAFETEA-LU includes an element that will improve the safety on highways. These improvements can include the installation and maintenance of signs at pedestrian/bike crossings and school zones. In general grants will be given to non-profit organizations engaged in promoting bicycle and pedestrian safety in order to operate a national bicycle and pedestrian clearinghouse; develop information and educational programs; and disseminate techniques and strategies for improving bicycle and pedestrian safety.

State Sources

California Bikeways Act

The Bicycle Transportation Account (BTA) has historically provided funds annually for California to improve the safety and convenience of bicycling. In 1997, AB 1020 was signed into law, effective January 1, 1998. In the 2006/2007 fiscal year and beyond, \$5 million will be available annually. To obtain funding through this source, jurisdictions must have a bicycle plan that is no more than five years old and has been certified by Caltrans.

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Regional Improvement Program

Each County may program a portion of Regional Improvement Program funds available to them for capital projects, including bicycle facilities. Projects must be consistent with the Regional Transportation Plan (RTP) and be included in the Regional Transportation Improvement Program (RTIP) to be programmed in the State Transportation Improvement Program (STIP)

Habitat Conservation Fund Grant

This program provides 50% matching funds for acquisition of wildlife habitats, which may include trails and programs that attract people to park and wildlife areas and educate citizens about the state's wildlife resources.

Environmental Enhancement and Mitigation Program

This program currently provides \$10 million annually to fund projects that offset environmental impacts of existing or new public transportation facilities. The funding is allocated according to population with 40% to northern California and 60% to southern California. Projects compete statewide for available funding. The maximum amount of EEMP funds toward any single project is \$500,000.

Land and Water Conservation Fund Program

This program provides grants to plan, acquire and develop recreation parks and facilities including bikeway and pedestrian trails. The California Department of Parks and Recreation distributes the funds which require 50% match in cash or in kind, with 40% going to northern California and 60% to southern California.

Mello-Roos Community Facilities District Act of 1982

This program allows a sponsoring agency to issue a special tax bond for a community facilities district to finance public facilities and services such as parks, recreation areas, parkways and open spaces.

Office of Traffic Safety

Eligible governmental agencies may submit proposals for traffic safety projects as part of

Caltrans' Highway Safety Plan. Comprehensive bicycle safety programs that involve enforcement, education, public health, driver education, transportation engineering and public communication are eligible project types.

Local Sources

Local Transportation Fund (Measure D)

Measure D is the Santa Barbara County Transportation Improvement Program. Approved by county voters in 1989, Measure D increased the local sales tax by 1/2 percent and dedicated the funding to transportation improvements. The measure will end in 2010 unless renewed by a county-wide vote. Seventy percent of the revenue from Measure D is allocated to the incorporated cities and County of Santa Barbara to fund street, transit, bikeway, pedestrian and other local transportation projects. The remaining 29.5% of funds were dedicated to regional highway improvements and .5% for paratransit services. Of the 70% of Measure D revenues that are allocated to local government agencies; 6.3% has been spent on bicycle and pedestrian facilities.

In 2006 a proposal to renew the existing sales tax and increase it by 1/4% failed to receive the necessary two-thirds voter support. A new proposal will be on the ballot in November of 2008 that will renew the existing 1/2 percent sales tax for another thirty years. Measure A, as this effort will be called, will generate approximately \$1.05 billion during its term and includes funding for maintaining, improving or constructing bicycle and pedestrian facilities, safe routes to school improvements and programs that reduce transportation demand. Improvements that could be funded from the regional plan include; safe routes to school, expanded regional bicycle network and expanded use of carpools, vanpools and alternative modes.

Development Fees

These fees are levied and administered by local jurisdictions and are used to provide improvements to accommodate new develop-

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ment.

Development Agreements

This program does not provide funding to the local agency; however, development agreements can stipulate that developers provide portions of bikeway facilities. The construction of these bicycle facilities becomes a function of the development.

General Fund

This is the general operating fund for a local jurisdiction which may be allocated by the governing board to provide increased funding for bicycle facilities.

Other Local Programs

Local agencies may implement programs to provide bikeways and bicycle facilities including "adopt-a-trail," symbolic shares in trail right-of-way and memorials. These programs require that private individuals or groups donate money, property, or time for the design, acquisition and construction of bikeway facilities. Volunteer programs may reduce the cost of implementing some off-street routes.

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Chapter 7 Policies & Recommendations

This section presents a list of actions that SBCAG, as the regional transportation planning agency, and local jurisdictions can take to complete the regional bikeway network and increase bicycle use.

There are physical, financial, institutional and social obstacles to increasing the number of people who ride bicycles for transportation. A comprehensive set of goals, policies and standards can guide the development of a bikeway system that is seamless and consistent between jurisdictions. The following policies and goals also address the institutional and social barriers that impede greater bicycle use. It is recommended that jurisdictions incorporate these policies and standards into their Bikeway Element or Bike Plan updates and use them during the land use development process by placing conditions on future land uses.

Regional Bike Plan Goals

Four main goals have been identified for the Regional Bike Plan. The goals are consistent with those identified in the 2007 Regional Transportation Plan. SBCAG staff will work with local jurisdictions to achieve the following goals and related policies:

Goal 1: Create and maintain a regional network of bikeways that provides access between residential, commercial, education and employment centers across Santa Barbara County, for residents of all ages.

Goal 2: Provide seamless bicycling connections with transit, passenger rail, airports, carpooling and vanpools.

Goal 3: Implement a uniform set of policies and standards region-wide to en-

courage design consistency across jurisdictions when developing bicycle facilities.

Goal 4: Enhance education and public awareness of bicycling, including the development of Safe Routes to School program, so bicycling becomes a viable, affordable, safe, fun, healthy and environmentally friendly mode of transportation for all ages.

Goal 5: Provide safe and secure parking and other amenities such as showers and lockers to bicyclists once they reach their destination.

Goal 1: Completing the Bicycle Network

Create and maintain a regional network of bikeways that provides access between residential, commercial, education and employment centers across Santa Barbara County, for residents of all ages.

SBCAG Actions:

1.1 Incorporate relevant sections of the Regional Bicycle Plan into the Regional Transportation Plan

1.2 Ensure the Regional Bike Plan is updated every five years

1.3 Work with member jurisdictions to ensure that Bikeway Elements provide policy language that encourages regional connectivity.

1.4 Work with local jurisdictions to ensure coordination in developing bikeways that extend across jurisdictional boundaries within Santa Barbara county.

1.5. Work with San Luis Obispo and Ventura County and Caltrans to coordinate the

*These goals and many policies were inspired from the City of Santa Barbara's Bicycle Master Plan, 1998, pg. 35-70, with permission

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development and funding of bikeways that extend across county boundaries.

1.6 Review projects in the earliest possible design phase, such as during a project study report, to ensure all projects eligible for regional funding include some provision for improved bicycle access.

1.7 Review, comment on, and, approve bicycle elements and bike plans submitted by local jurisdictions. Provide technical assistance as appropriate in creating or updating a Bicycle Transportation Plan for any local jurisdiction that lacks the resources to create a Plan in-house.

1.8 Identify new and existing funding sources for the completion of the Regional Bikeway Network and make that information available to local jurisdictions.

1.9. Prioritize funding for projects that complete a missing gap in the regional bike network.

1.10. SBCAG's Bicycle Funding Policies (approved 8/20/98) shall guide SBCAG programming decisions, and continue to program at least 10% of SAFETEA-LU funds for bicycle projects, despite loss of CMA2 Funds.

1.11. Review and comment on bicycle grant application submittals. SBCAG staff may write letters of support for local applications. SBCAG staff may assist in drafting grant applications in cases where local jurisdictions lack staff resources to apply for funding for projects that are part of the regional bikeway network.

1.12. In reviewing applications for grant monies ensure that project design is consistent with adopted policies and standards.

1.13 Recommend that each local agency adopt a capital improvement program for bikeways such as is now adopted for roadways and transit.

1.14 Assist in implementing county-wide, a regional bike signage program similar to that completed on the South Coast in 1999. Signs should use a consistent nomenclature and design that is easy to see and follow.

Local Jurisdiction Actions:

1.15 Develop as a first priority bikeways which form a comprehensive network within each jurisdiction and which also allow continuity with the regional routes provided by and planned for in adjoining jurisdictions.

1.16 Work with adjacent jurisdictions to establish joint user agreements to combine bikeways with railroad, utility easements, and drainage facilities, when feasible.

1.17 Adopt a capital improvement program for bicycle facilities similar to that adopted for streets and roads.

1.18 Include bikeway maintenance in ongoing roadway maintenance programs.

1.19 Ensure that as roadway improvement projects are undertaken, provisions for bicycles are included as appropriate, consistent with the adopted Regional Transportation Plan (RTP), Congestion Management Program (CMP), and Clean Air Plan requirements.

1.20. Prepare and submit grant applications to the various funding agencies for bicycle projects to implement the jurisdiction's Bikeway Element and bikeway capital improvement program.

1.21. Require developers to contribute funding or right of way easements for the completion of bicycle facilities contiguous to or near the development.

1.22 Work with SBCAG and adjacent jurisdictions to implement a regional bike signage program. Signs should use a consistent nomenclature and design that is easy to see and follow.

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Goal 2: Inter-modal Connections

Provide seamless bicycling connections with transit, passenger rail, airports, car-pooling and vanpools.

SBCAG Actions:

2.1 Work with member jurisdictions to ensure that Bikeway Elements provide policy language that encourages inter-modal connections.

2.2 Work with transit agencies in the region to encourage the implementation and enhancement of a bike-and-ride system on routes that serve more than one jurisdiction.

2.3 Work with the cities, the county, and transit agencies to ensure the provision of secure bicycle parking and storage facilities at or near transit/rail stations and airport terminals.

2.4 Work with Caltrans and the local jurisdictions to ensure the provision of secure bicycle storage facilities at identified park-and-ride lot locations.

2.5 Work with Caltrans and the local jurisdictions to encourage the provision of secure bicycle storage facilities at the passenger rail stations for Carpinteria, Goleta, Guadalupe, Lompoc (Surf), and Santa Barbara.

Local Jurisdiction Actions:

2.6 Work with SBCAG and transit agencies in the region to develop secure bicycle parking and storage facilities at or near transit, railroad and airport terminals or points of high rider-ship origin.

2.7 Work with Caltrans and SBCAG to ensure the provision of secure bicycle storage facilities at identified park-and-ride lot locations.

2.8 Work with Caltrans and the local jurisdictions to encourage the provision of secure

bicycle storage facilities at the passenger rail stations for Carpinteria, Goleta, Guadalupe, Lompoc Surf and Santa Barbara.

Goal 3: Standardized Policies & Guidelines

Implement a uniform set of policies and standards region-wide to encourage design consistency across jurisdictions when developing bicycle facilities.

SBCAG Actions:

3.1. Develop a process to be used by all jurisdictions and SBCAG staff for completing and updating Bikeway Elements every five years.

3.2. Determine compliance of the Bicycle Elements with the recommended policies and standards in this Plan during the review and approval of Bikeway Elements (required under state legislation).

Local Jurisdictions Actions:

3.3 Incorporate the recommended policies and standards in this Plan when updating Bikeway Elements, to ensure regional consistency.

3.4 (a.) (Participating local jurisdictions) Councils or Boards shall adopt relevant chapter of the Regional Bike Plan so it can serve as jurisdiction' current Bicycle Master Plan.

3.4 (b.) (non-participating jurisdictions) Prepare Bicycle Element or Plan updates and submit to SBCAG for review, comment and approval.

3.5. In reviewing land use development proposals, ensure that any planned bikeway projects comply with the jurisdiction's adopted policies and standards.

Note: Appendix E includes design standards for maintaining and improving the regional bikeway system. It is recommended that each

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jurisdiction's Bikeway Element or Plan contain policies consistent with those included in this Appendix.

Goal 4: Education & Public Awareness

Enhance education and public awareness of bicycling, including the development of Safe Routes to School programs, so bicycling becomes a viable, affordable, safe, fun, healthy and environmentally friendly mode of transportation for all ages.

SBCAG Actions

4.1. Continue to partner with the Safe Routes to School Coalition to integrate bicycle education into the curriculum of public and private schools, county-wide.

4.2. Continue to partner with the Santa Barbara Bicycle Coalition's CycleSmart program, which offers cycling classes to a broad range of ages and riding abilities.

4.3. Continue to coordinate the Team Bike Challenge to encourage the increased use of bicycling for every day transportation.

4.4. Continue to partner with groups such as the Air Pollution Control District and the Community Environmental Council to educate the public about auto-related air pollution emissions and opportunities to decrease energy consumption and improve resource conservation with increased bicycle use.

4.5. Consider development of Spanish language print and broadcast campaign that teaches consistent messages to adult motorists and bicyclists as well as to children: be alert, obey traffic laws, be patient, and be predictable.

4.6 Support the allocation of funds to bicycle programs offered by other jurisdictions or community groups.

4.7 As time permits assist local jurisdictions to develop and maintain a comprehensive Safe Routes to School program that includes the 5Es: evaluation, education, encouragement, engineering and enforcement. Work with school districts, parents and students to achieve the goal of making it safe, easy and convenient for all children to walk and bicycle to and from schools.

Local Jurisdictions Actions

4.7. Partner with the Safe Routes to School Coalition to integrate bicycle education into the curriculum of public and private schools, county-wide.

4.8 Support the Santa Barbara Bicycle Coalition's CycleSmart program, which offers cycling classes to a broad range of ages and riding abilities.

4.9. Partner with groups such as the Air Pollution Control District and the Community Environmental Council to educate the public about auto-related air pollution emissions and opportunities to decrease energy consumption and improve resource conservation with increased bicycle use.

4.10. May help fund a multi-lingual print and broadcast campaign that teaches consistent messages to adult motorists and bicyclists as well as to children: be alert, obey traffic laws, be patient, and be predictable.

4.11 May support the allocation of funds to bicycle programs offered by other jurisdictions or community groups.

4.12 May support events that celebrate and encourage bicycle use such as Bike Week, Bike to Work Day and the Team Bike Challenge.

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Goal 5: End-of-Trip & Destination Facilities

Provide safe and secure parking and other amenities such as showers and lockers for bicyclists once they reach their destination.

SBCAG Actions

5.1 Encourage local jurisdictions to require the provision of bicycle parking for private development, construction or reconstruction projects.

5.2. Encourage local jurisdictions to work with employers and property management firms to install bicycle parking where it is not provided or replace old racks that are no longer functional.

5.3 Encourage local jurisdictions to support the installation of showers and personal lockers for new development projects that will house employees who might bike commute (when feasible).

5.4 Encourage local jurisdictions to create or expand a bicycle locker program at transit stops, public buildings, parks and other strategic locations as demand increases.

Local Jurisdictions Actions

5.5 Require the provision of bicycle parking for private development, construction or reconstruction projects.

5.6. Work with employers and property management firms to install bicycle parking where it is not provided or replace old racks that are no longer functional.

5.7 Recommend the installation of showers and personal lockers for new development projects that will house employees who might bike commute (when size and scope of project merits).

5.8 Create or expand a bicycle locker program at transit stops, public buildings, parks and other strategic locations as demand increases.

Monitoring Program

A monitoring program will develop strategies to gather better data on bicycling and to determine the success of efforts in the region to increase bicycling as a travel mode.

SBCAG actions:

1. Review and incorporate into the update of the RTP actions accomplished to implement the goals listed under items 1 through 5 above. Report shall include indication of progress in terms of:

a.) Completion and adoption of local bicycle elements. Status of SBCAG approval.

b.) Local jurisdiction's incorporation of a capital improvement program (CIP) for bicycle projects within the roadway CIP.

c.) Progress in implementing bikeway projects identified in the most current Regional Bikeway Plan.

d.) Identification of new grant programs/funding options for bicycle projects.

e.) Status of submittal and approval of grant applications for bicycle projects.

f.) Implementation of bike-and-ride provisions by the transit agencies.

g.) Provision of secure bicycle parking/storage at or near transit systems.

h.) Installation of secure bicycle storage at park-and-ride lots.

SBCAG Regional Bicycle Plan: SANTA BARBARA COUNTY

2. Work with local jurisdictions to update the lane-miles of bicycle facilities within each jurisdiction as part of the RTP and Bike Plan updates. This should be accomplished by working with local jurisdictions to update the digital bike route files managed by SBCAG as part of its regional bikeway program.
3. Encourage the local jurisdiction's Public Works departments to add bike counts to their annual traffic count programs.
4. As part of the next update of the Congestion Management Program, consider adding bicycle counts to the data submittal requirements for arterial intersections on the Congestion Management System with designated Class II or III bikeway facilities.
5. Incorporate any submitted bicycle count data into SBCAG's Annual Traffic Count Report.
6. Work with local jurisdictions to formalize agreement and system for keeping regional and local bike maps/inventory updated as new projects are built.

Local Jurisdictions Actions

7. Phase in a tally of bicycle usage as part of regular traffic counts conducted on those streets with Class II or designated Class III bicycle lanes. Submit bicycle count data to SBCAG for compilation into annual traffic count report.
8. Conduct special bicycle counts or use surveys to support bicycle grant applications.
9. Work with SBCAG to revise the lane-miles of bicycle facilities within local jurisdiction as part of the RTP and Bike Plan updates. This should be accomplished by working with SBCAG to update the digital bike route files managed by SBCAG as part of its regional bikeway program.

City of Solvang Bikeway Plan

1. Introduction

- Description of the City and its Citizens

The city of Solvang was founded in 1911 by a group of Danish settlers from the Midwest and its current population is 5,400. There is a variety of Shops, galleries, restaurants hotels, and wine tasting events in Solvang, that reflect the town's Danish roots. Solvang has a generally flat topography, a Mediterranean coastal climate and good air quality, making it an ideal town for the use of bicycles as a mode of transportation.

- History of Bicycling in Solvang

The city of Solvang is a relatively new bicycle community. Although the city has access to several bike paths, the residents do not generally utilize this mode of transportation. According to the US census data, less than 1% of local employees ride bikes to work. The elementary and high school students are also more inclined to use the more traditional mode of transportation (automobile). In terms of accident history, cyclists in the Solvang area have been relatively accident free, with no reported in town accidents and very few reported highway accidents. However, with the addition of BTA funding the city of Solvang plans to improve existing bike paths and implement new safer routes for everyday practical use.

- Existing Bicycle-Related Policies

- ❖ The City shall adopt a master plan of bike trails and shall develop trails as needed and feasible. (Solvang's General Plan: Circulation Element)
- ❖ The City shall only implement bikeways in locations that do not require the removal of on-street parking. (Solvang's General: Plan Circulation Element)
- ❖ The City shall implement its adopted Master Plan of Trails as established in the Recreation Element of the general plan. (Solvang's General Plan: Circulation Element)
- ❖ The City shall allocate a sufficient amount of resources to maintain a safe bike trail system (Solvang's General Plan: Circulation Element)

- Bicycle Commuter Statistics

According to the U.S. Census Bureau's Journey to Work survey in 2000, 0.5% of all employed persons in the city of Solvang over the age of 16 bike as a form of transportation to and from work.

- Public Involvement in the Bicycle Transportation Plan

There are several bicycle advocacy groups based out of the Santa Ynez valley, which include the *Cutters*, *Lompoc valley bicycle club*, and *SB Mountain Bike trail Volunteers*. In addition to the bicycle advocacy groups in the Santa Ynez Valley, there is also a number of regional Santa Barbara County bike clubs, which support the bike plan. The clubs in the Santa Barbara County use the regional bikeway network in long distance bike marathons and for general recreational use. A public workshop was held in Solvang and one person attended, see Appendix F for more information.

2. Policies and Objectives

In 2007, the City of Solvang first hosted Amgen Tour of California Bicycle Race. This Professional Cycling Tour was introduced to the cycling community in November 2006 and it is

currently the second largest cycling tour in the Country. It is a 650-700 mile bicycle marathon that spans the Golden State in 8 days.

3. Recommended Bicycle Network

It may prove to be beneficial to develop bike routes on Laurel or Maple Avenue. This will provide a safer route for children to Solvang Elementary School. The change would be used in lieu of the path on Old Mission Road.

Create connecting routes from the City of Solvang to near-by recreational parks and the unincorporated community of Ballard-Los Olivos. Another important destination is the Santa Ynez Band of Chumash Indians and the newly built casino/hotel. This is achieved along SR246.

4. End-of-Trip Facilities

The city of Solvang lacks the end-of-trip facilities and bike lock areas. One of Caltrans General Requirements for BTA funding, is that each region within the network facilitate the development of a locker/shower facility near employment centers, creating an end-of-trip-facility. This is done to provide bicycle commuters with a means of hygienic capabilities and storage facilities, both to and from destinations. The lack of these facilities could inhibit bicycle commuters in the Solvang area. The proposed addition of such a facility near the city business center may result in increased bicycle transit. (Such a facility could be located adjacent to Restroom #2 providing a link to the Santa Ynez Valley Transit system as well.

5. Bicycles and Transit

A small local bicycle shop recently opened in Solvang. Bicycle shops can play an active role in community bicycle safety programs, which include but are not limited to conducting safety campaigns, offering special discounts for helmets for children and free bicycle maintenance “check ups” during safety campaigns distributing bicycle safety material and publications, maps, and other free bicycle information brochures. It is also important for local agencies to connect the bike paths with alternative modes of transportation, this entails that trains and the Santa Ynez Valley Transit buses are to be equipped with temporary bicycle storage racks. The addition of bike racks on local transit buses will promote bicycle transit in lieu of short distance automobile use.

6. Education and Encouragement

Educating the community about bicycle safety and the advantages of using cleaner non-motorized forms of transportation can increase both the bicycle use and environmental quality. It is important that bicycle users follow the California Vehicle Code rules and regulations, when operating a bicycle on paths or roads. The bicycle safety laws are endorsed to promote safety of the biker and others who occupy the road. In some cases cities or local employment agencies can implement an incentive based program for the residents who choose to bike to and from work and/or school. Another important factor that pertains to this element of the plan is Enforcement. It is important for the residents to follow the rules of the road for the safety of themselves and others. It is important for the local law enforcement officers to apply the same rules for the bicycle community as they do for the driving community.

7. Implementation

The Importance of implementation is vital in mandating local policies. The City of Solvang should incorporate the updated Master Bikeway Plan into their General Plan, while introducing it to their local residents. It is important not only to educate the public on bicycle safety, but also to provide the residents with a link to projects that implement policies.

8. Connection with The Regional Bikeway Plan

The City of Solvang is promoting the use of alternative modes of transportation by working in coordination with the County of Santa Barbara to complete the missing bicycle commuter link between cities within the Santa Ynez Valley. In addition to linking the bicycle network, the Santa Barbara County can help air quality, conserve energy, and provide the citizens of Santa Barbara County with a diverse transportation network.

9. Priority Projects

Local merchant employees and school students require a safe and efficient route to their destinations from the residential areas of the city. Along with the implementation of safe and efficient routes to schools and employment centers, the local residents need the addition of secure bicycle parking structures and facilities. The addition of bike racks and lockers are an important factor in increasing bicycle transit within the city of Solvang.

The biggest problem within the bikeway network in the Solvang area is insufficient signage connecting routes, with minor deterioration in the actual roadway. The Bikeway paths need ongoing maintenance. Routine maintenance on the paths should promote use and increase cyclist population in the Solvang Area. Many of the proposed bikeway paths within city limits should be proposed Class II bikeways because of the parking conflicts and narrow streets. However, the proposed bike paths within the residential area can easily be converted into Class III bike paths with the addition of signs. These minor changes will save money and be the most efficient way of creating new paths to connect the existing ones.

Existing Paths in Solvang:

- State Highway 246 Alamo Pintado Rd
- Chalk Hill Rd
- Section of Alisal Rd

10. Past Expenditures

The Alamo Pintado path is a striped lane, which runs from the State Highway 246 to the unincorporated town of Ballard. The only other bike path within the city limits is a Class I bike path adjacent to SR246, however, this path is poorly marked and needs ongoing maintenance.

2008 Regional Bikeway Network Santa Ynez Valley

Map layers

- cities
- CA20LINK

Landmark Area Types

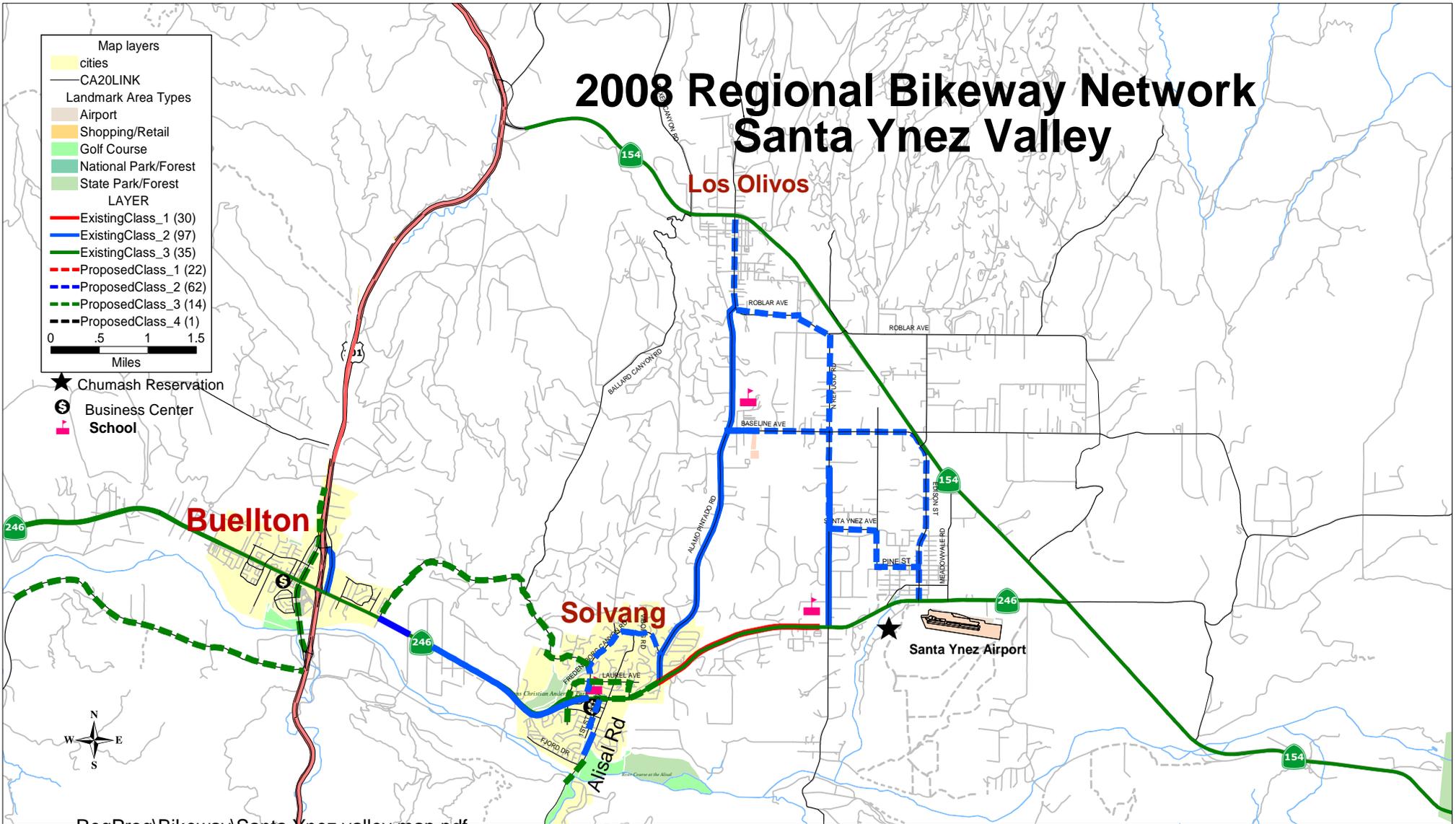
- Airport
- Shopping/Retail
- Golf Course
- National Park/Forest
- State Park/Forest

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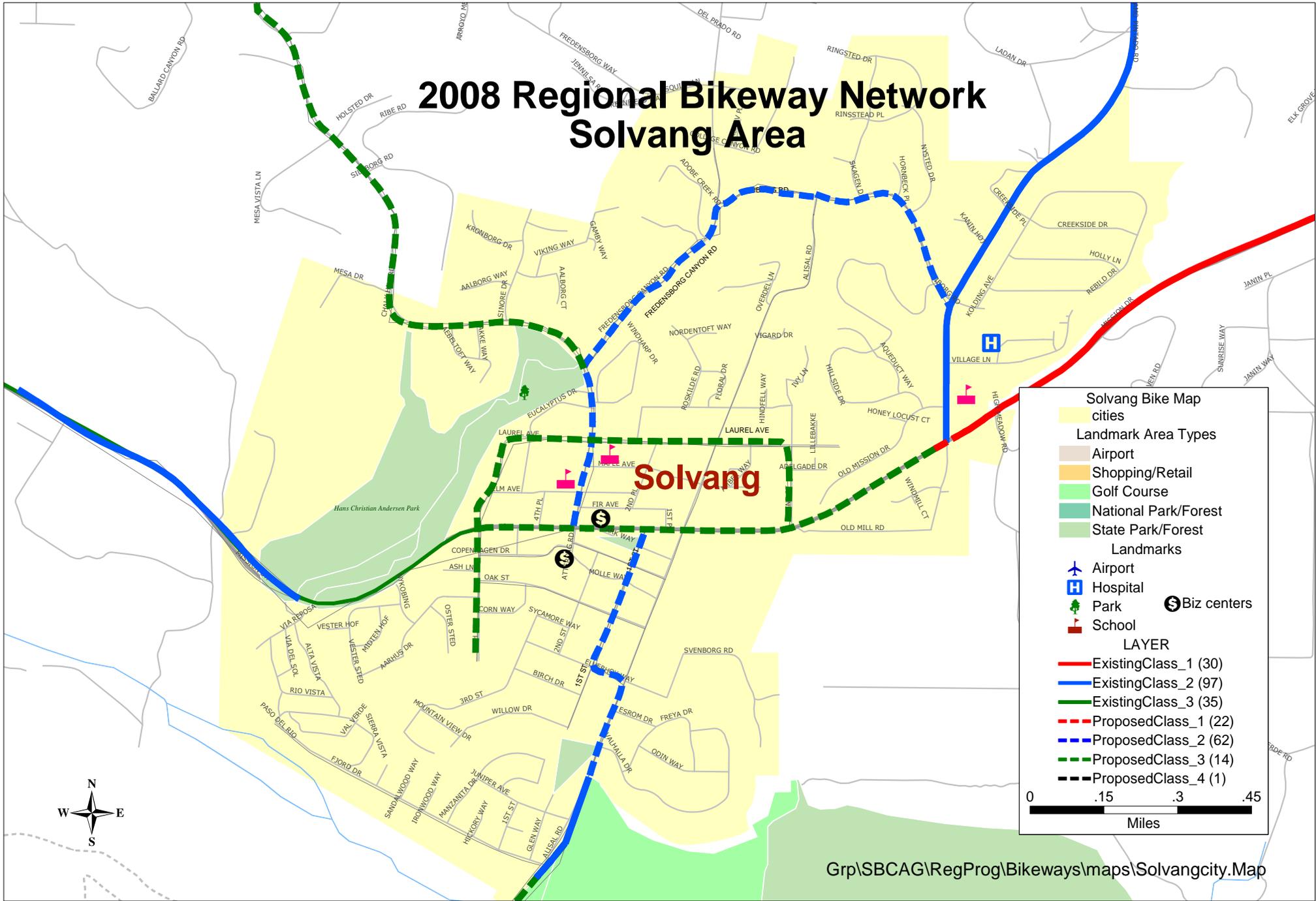
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- ExistingClass_3 (35)
- ProposedClass_1 (22)
- ProposedClass_2 (62)
- ProposedClass_3 (14)
- ProposedClass_4 (1)

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Miles

- ★ Chumash Reservation
- Ⓢ Business Center
- 🏫 School



2008 Regional Bikeway Network Solvang Area



Solvang Bike Map

cities

Landmark Area Types

- Airport
- Shopping/Retail
- Golf Course
- National Park/Forest
- State Park/Forest

Landmarks

- Airport
- Hospital
- Park
- School
- Biz centers

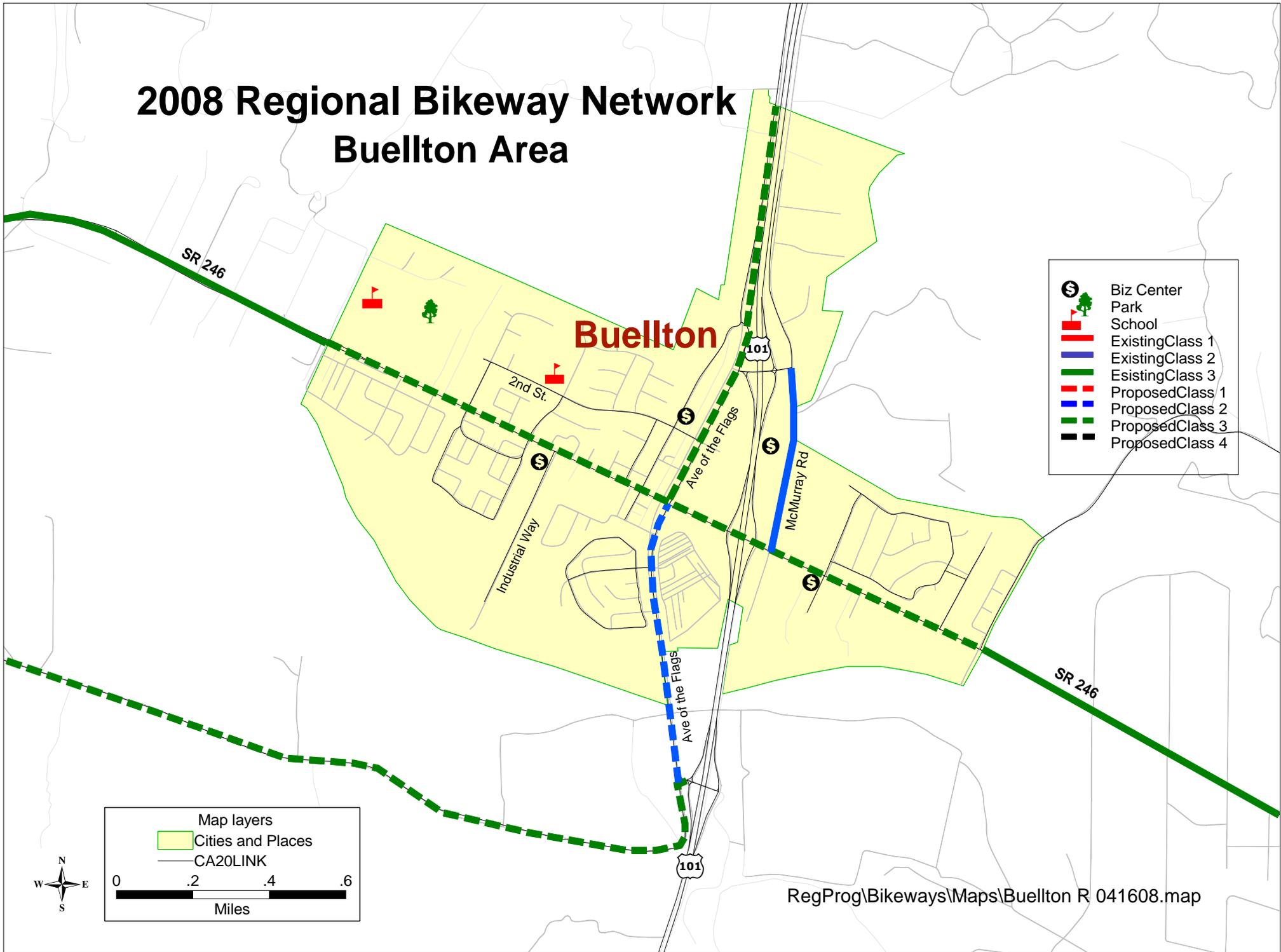
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- ProposedClass_2 (62)
- ProposedClass_3 (14)
- ProposedClass_4 (1)

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Miles



2008 Regional Bikeway Network Buellton Area



- Biz Center
- Park
- School
- ExistingClass 1
- ExistingClass 2
- ExistingClass 3
- ProposedClass 1
- ProposedClass 2
- ProposedClass 3
- ProposedClass 4

Map layers

- Cities and Places
- CA20LINK

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Miles



2008 Regional Bikeway Network Carpinteria Area

Los Padres National Forest

Summerland

Carpinteria

Carpinteria Bike Map Landmark Area Types

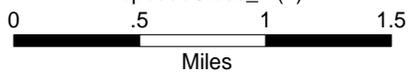
-  Educational
-  Airport
-  Shopping/Retail
-  Golf Course
-  National Park/Forest
-  State Park/Forest

Landmarks

-  Airport
-  Hospital
-  Park
-  School
-  Bike Station

LAYER

-  ExistingClass_1 (30)
-  ExistingClass_2 (97)
-  ExistingClass_3 (35)
-  ProposedClass_1 (22)
-  ProposedClass_2 (62)
-  ProposedClass_3 (14)
-  ProposedClass_4 (1)



SLO County

Kern Co.

Ventura Co.

2008 Regional Bikeway Network Santa Barbara County

**Santa Barbara Bike Map
LAYER**

- ExistingClass_1 (30)
- ExistingClass_2 (97)
- ExistingClass_3 (35)
- - - ProposedClass_1 (22)
- - - ProposedClass_2 (62)
- - - ProposedClass_3 (14)
- - - ProposedClass_4 (1)

Railroad

- + + + Commuter
- + + + Rapid Transit

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Miles

Guadalupe

Santa Maria

Lompoc

Buellton

Solvang

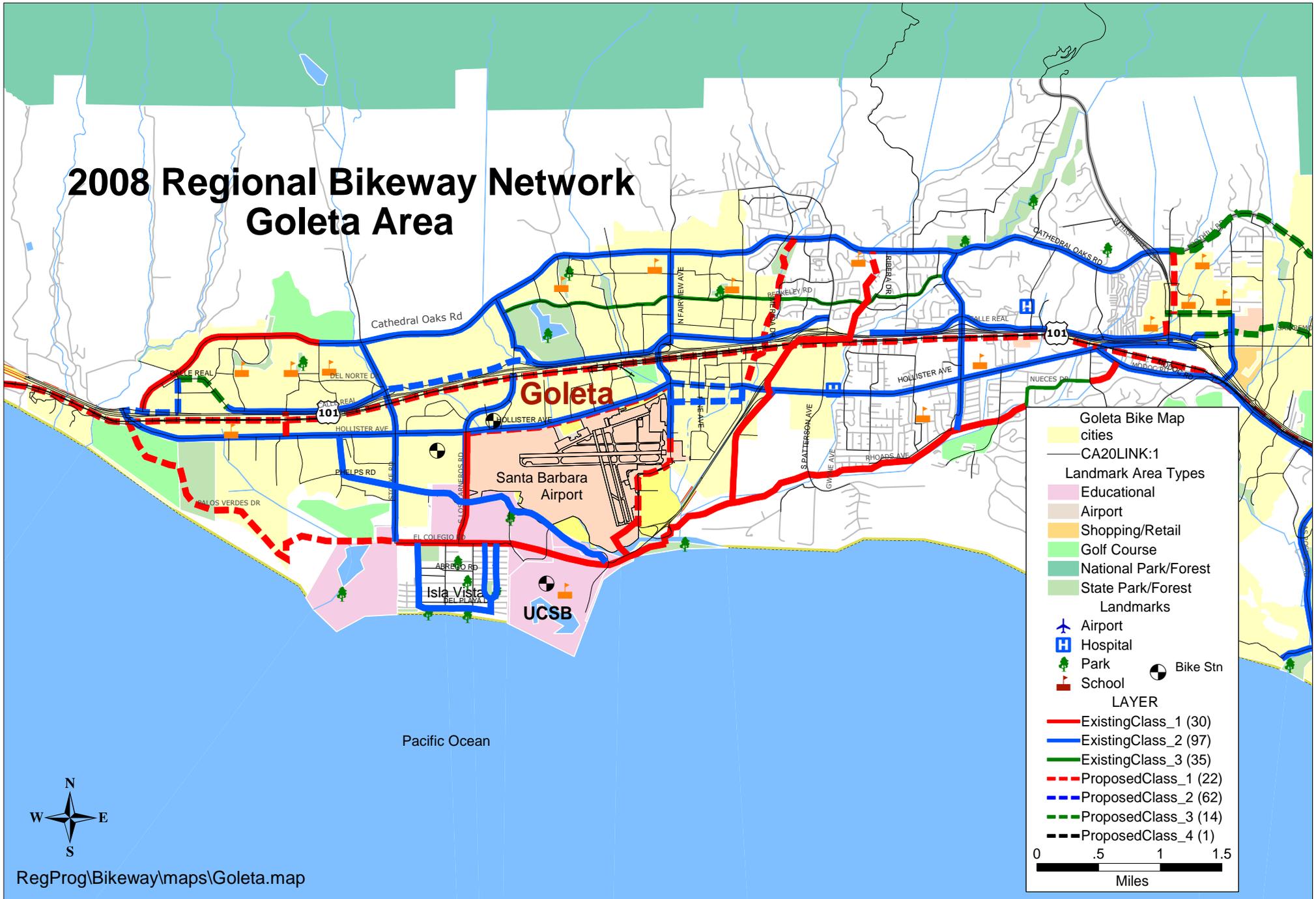
Goleta

Santa Barbara

Carpinteria



2008 Regional Bikeway Network Goleta Area



Goleta Bike Map

- cities
- CA20LINK:1

Landmark Area Types

- Educational
- Airport
- Shopping/Retail
- Golf Course
- National Park/Forest
- State Park/Forest

Landmarks

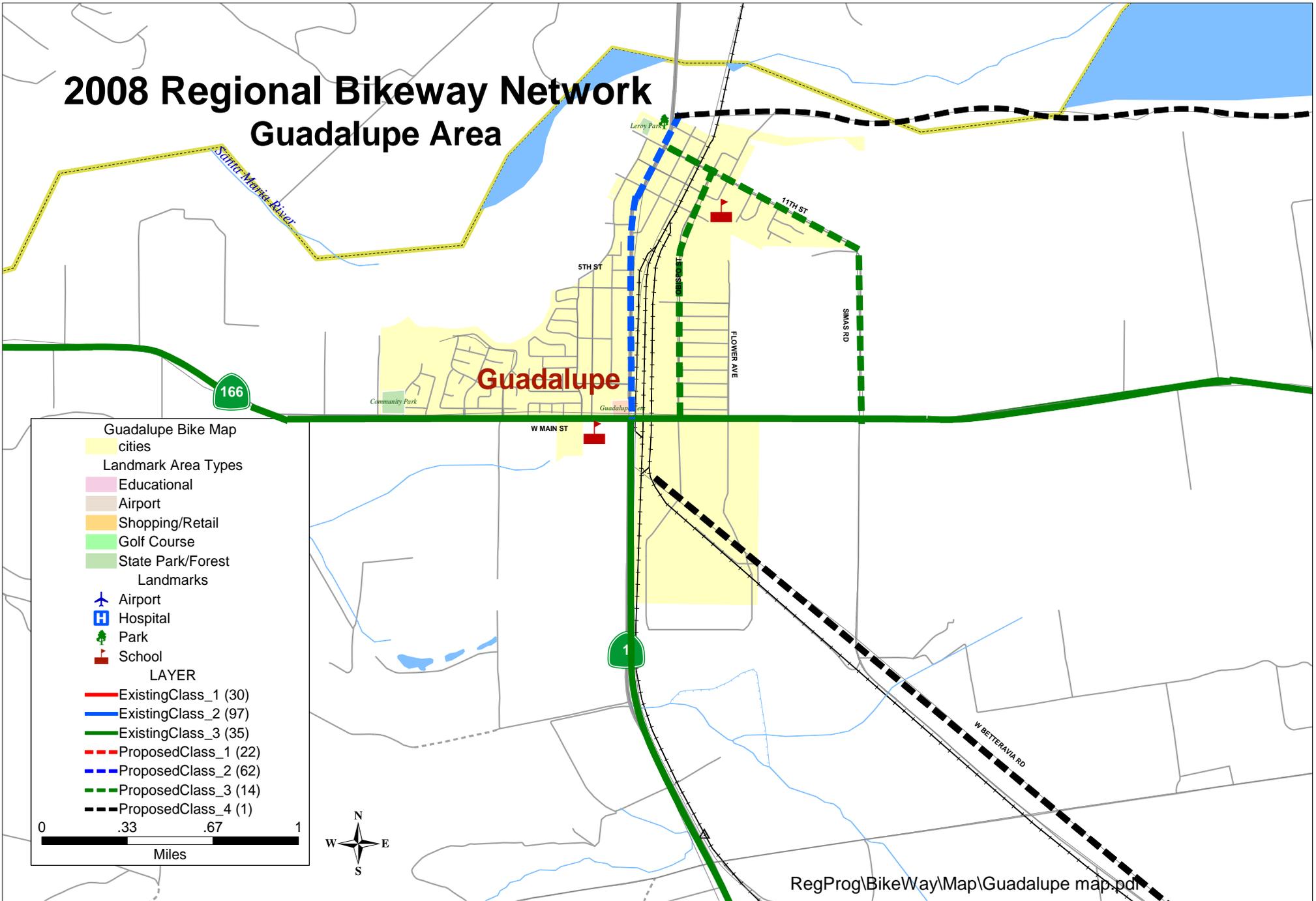
- Airport
- Hospital
- Park
- School
- Bike Stn

LAYER

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- ExistingClass_3 (35)
- ProposedClass_1 (22)
- ProposedClass_2 (62)
- ProposedClass_3 (14)
- ProposedClass_4 (1)

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Miles

2008 Regional Bikeway Network Guadalupe Area



2008 Regional Bikeway Network Lompoc Area

Lompoc Bike Map
Landmark Area Types

- Military
- Educational
- Airport
- Shopping/Retail
- Golf Course
- National Park/Forest
- State Park/Forest

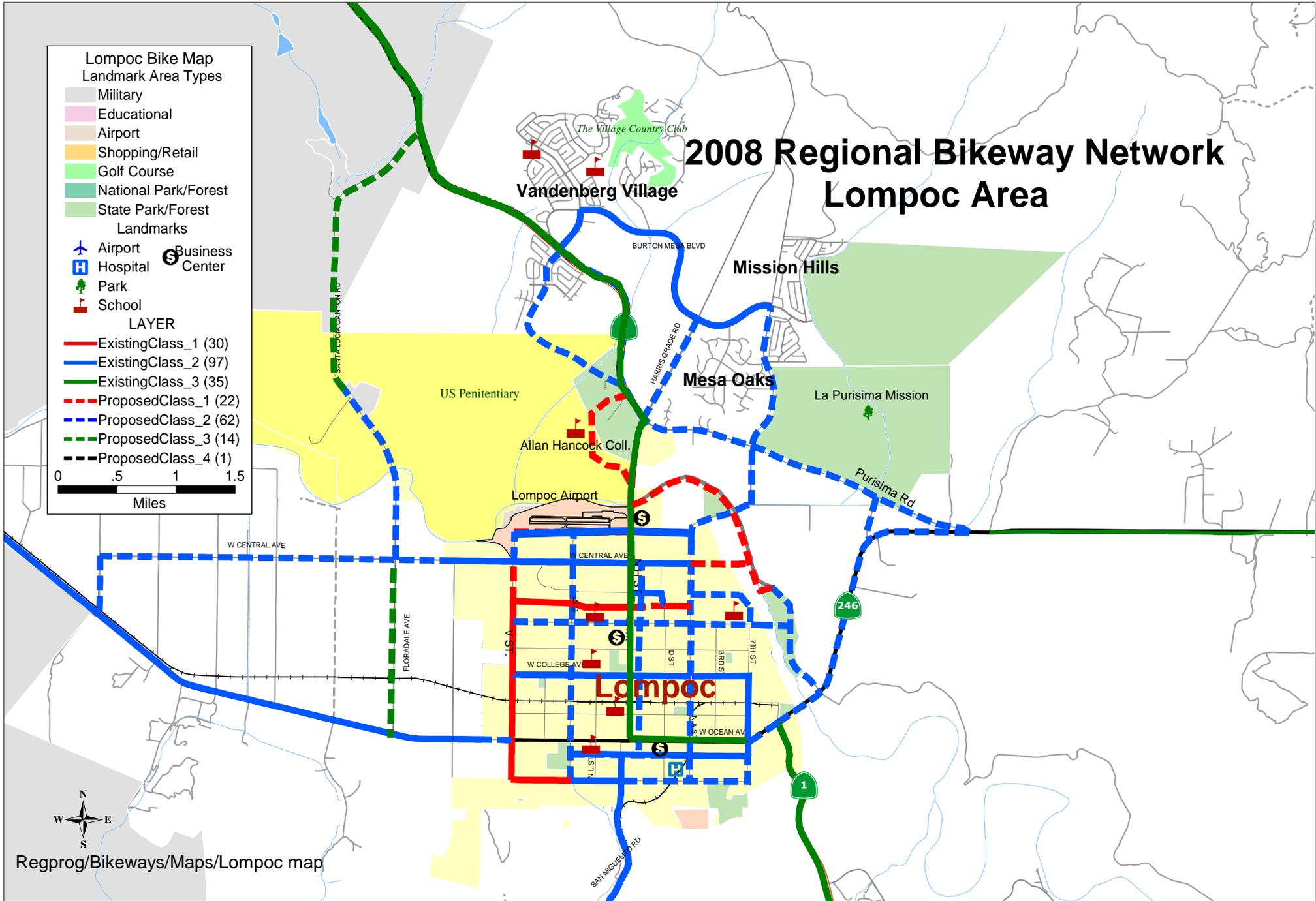
Landmarks

- ✈ Airport
- H Hospital
- S Business Center
- P Park
- S School

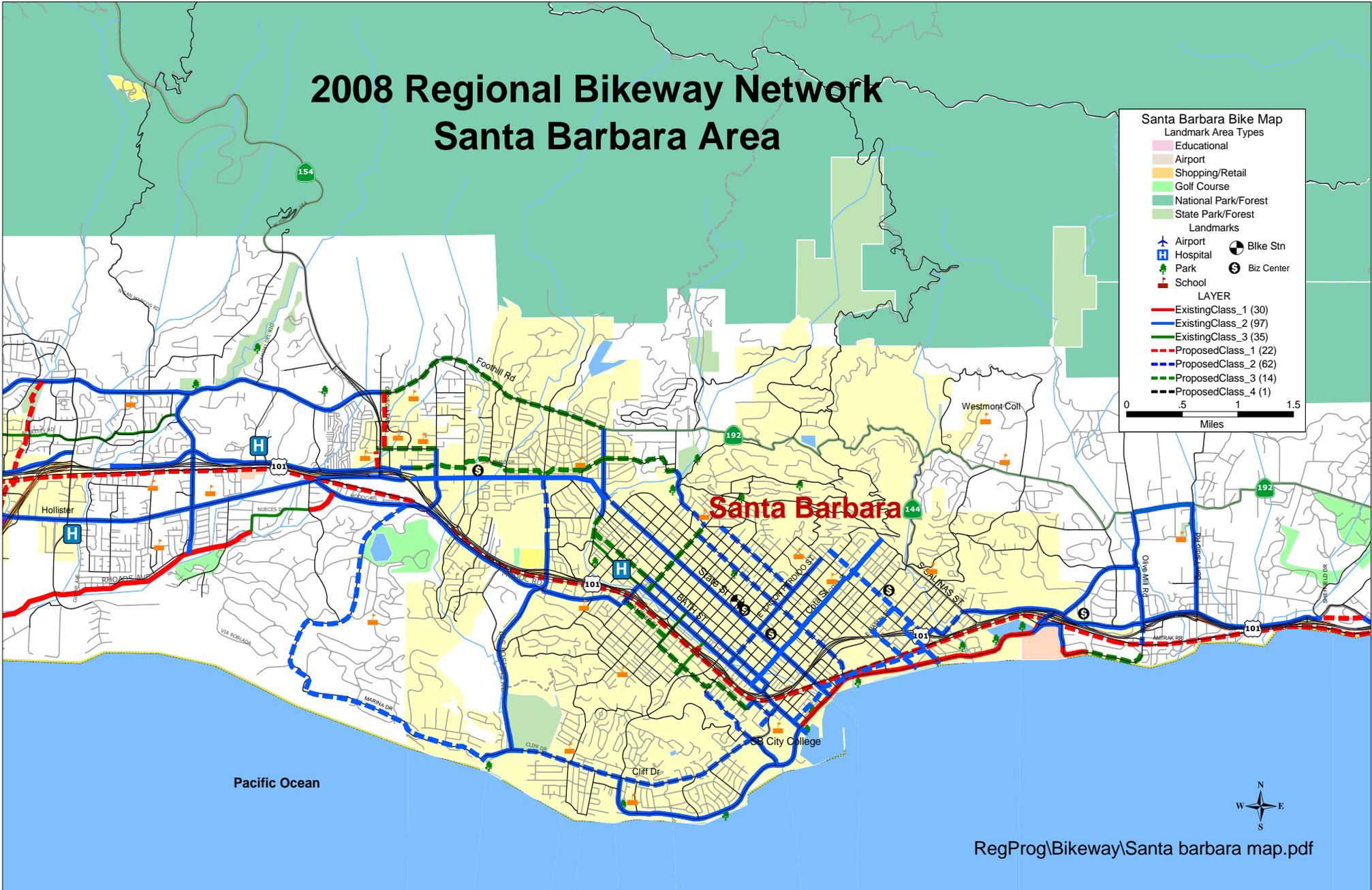
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- ProposedClass_1 (22)
- ProposedClass_2 (62)
- ProposedClass_3 (14)
- ProposedClass_4 (1)

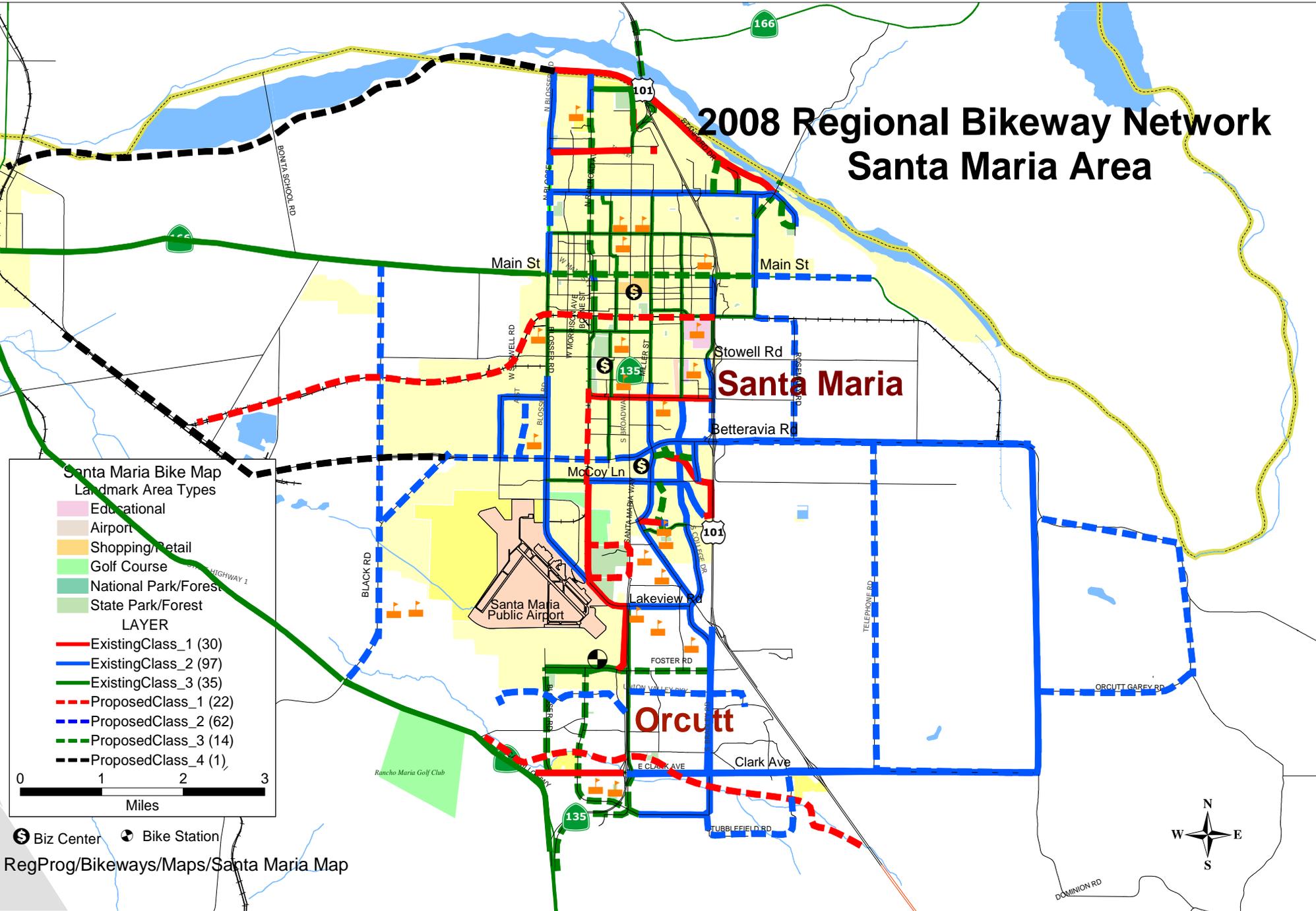
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Miles



2008 Regional Bikeway Network Santa Barbara Area



2008 Regional Bikeway Network Santa Maria Area



**Santa Maria Bike Map
Landmark Area Types**

- Educational
- Airport
- Shopping/Retail
- Golf Course
- National Park/Forest
- State Park/Forest

LAYER

- ExistingClass_1 (30)
- ExistingClass_2 (97)
- ExistingClass_3 (35)
- ProposedClass_1 (22)
- ProposedClass_2 (62)
- ProposedClass_3 (14)
- ProposedClass_4 (1)



Biz Center Bike Station

RegProg/Bikeways/Maps/Santa Maria Map



APPENDIX C EXISTING MAJOR RECREATIONAL FACILITIES

In completing the regional bikeway system, bikeway facilities that provide access to major recreational facilities must be included. The major recreational facilities in the region are inventoried below.

Santa Barbara County may be characterized as generally mountainous with small amounts of level land in the inland river valleys and along the coastal range, with elevations ranging from sea level to 6,828 feet (2,081 meters) at Big Pine Mountain. Existing recreational opportunities include the reservoir (Lake Cachuma); Santa Barbara Harbor; local and state parks; and the Los Padres National Forest trail system. A significant portion of the region is managed by the federal government. The U. S. Forest Service manages the Los Padres National Forest. The military controls a large amount of land at Vandenberg Air Force Base, but this area is closed to the public. The Bureau of Land Management has scattered land ownership throughout the region.

The California Department of Parks and Recreation is the major state land manager in the region, and operates the following state parks in the county:

Gaviota State Park - This 2,775-acre park with ocean frontage is located on the South Coast where southbound Route 101 reaches the coast. Park facilities include 24 picnic day-use tables, hike-in and bike-in campsites, one group site, and 59 family campsites. There are two restroom facilities and six chemical toilets at the park. Current bicycle access is along Route 101, where cyclists travel on the shoulders of the highway either north or south to access the varied recreational opportunities. The California Transportation Commission (CTC) has approved the construction of a 3.5 mile (5.6 km) segment of the multi-use Coastal Trail along the Gaviota coast on the south side of Route 101, from the Gaviota State Park entrance road along the coastal terrace between Route 101 and the Southern Pacific Railroad right-of-way to San Onofre Beach, and connecting to Route 101.

Refugio State Beach - Refugio State Beach is located 22 miles (35.4 km) west of Santa Barbara on Route 101. The 90-acre park provides day use and camp facilities, including 88 picnic tables, one group camp, a bike-in camp, 85 family campsites, five restroom facilities and six chemical toilets. Current bicycle access is along the shoulders of Route 101 and the Refugio Ranch Road undercrossing, or via an offroad bicycle facility that links Refugio State Beach and El Capitan State Beach.

El Capitan State Beach - El Capitan State Beach is located on the South Coast to the east of Refugio State Beach. The 133 acre park provides 70 picnic tables, three group camps, five hike-in camps, 145 family campsites, nine restroom facilities and 14 chemical toilets. Current bicycle access is along the shoulders of Route 101. The CTC has approved the construction of a bicycle segment of the Coastal Trail along the South Coast from El Capitan State Park to Calle Real (El Capitan Ranch Road).

Carpinteria State Beach - This 50 acre state park is located in the City of Carpinteria, 12 miles (19.3 km) east of Santa Barbara. Park facilities include 103 picnic tables, and 261 family campsites, with no hike-in or bike-in or group camps. There are nine convenience facilities with flush toilets and showers. Current bicycle access is along Linden Avenue (a Class II facility) and on Palm Avenue (Route 224) which does not have bicycle lanes. Federal Transportation Enhancement Activities (TEA) funding has been approved by the CTC for the construction of a one-mile (1.6 km) long segment of the Coastal Trail along the Carpinteria State Beach. The Class I facility will include a pedestrian/bicycle bridge over Carpinteria Creek, and provide access between downtown Carpinteria and the state park.

La Purisima Mission - La Purisima Mission is a historical park located on Purisima Road, approximately three miles (4.8 km) north of the city of Lompoc on the Eastern Burton Mesa. The park covers 980 acres and includes ten restored adobe mission buildings, a museum, and riding and hiking trails. Bicycle access is along Purisima Road. The state historic park's trail system provides access for historic tours, service and fire patrol, and is popular with the local residents for bicycling, jogging, walking and horseback riding. The riding and hiking trails include 3.7 miles (5.9 km) in the mission area and 8.8 miles (14.2 km) in the surrounding hills.

El Caurtel (El Presidio de Santa Barbara) - This historical park, located at 122 East Canon Perdido Street in downtown Santa Barbara, is part of the original royal fortress founded in 1782 by Imperial Spain. El Presidio is bounded by Carrillo, Garden, De la Guerra, and Anacapa Streets. Bicycle access is through the city bicycle system on city streets. The facility is open seven days a week.

Point Sal State Beach - Point Sal State Beach is located in the remote northwestern part of Santa Barbara County, about five miles (eight kilometers) southwest of the City of Guadalupe. Auto and bicycle access is from Route 1 to Brown Road, and then to Point Sal Road (which is mostly unpaved). The 49-acre park has no facilities or utilities. Beachcombing, fishing, hiking, nature study, photography, picnicking and sunbathing are principal recreation activities.

In addition to the state parks described above, and the trails and camping opportunities in the Los Padres National Forest, there are a number of parks operated by the local governments within the region. The most significant are described below.

Major Parks Operated by Santa Barbara County

Arroyo Burro (Hendry's) Beach Park - A 12.8 Acre Park, with 0.11 miles of ocean frontage, located five miles (eight kilometers) west of Santa Barbara on Cliff Drive. Auto, bicycle and transit access (SBMTD) is via Cliff Drive. Class II bicycle lanes on Las Positas link the Class II bicycle lanes on Modoc Road and Cliff Drive. The park is a short distance on Cliff Drive from Las Positas Road. The park provides small group picnic and family picnic facilities; volleyball, surfing, swimming, beach walking, and hiking opportunities; as well as equestrian trails, drinking fountains, public telephones, restrooms, showers, snack bar, and a full restaurant and bar.

Cachuma Lake Recreation Area - The Cachuma Lake Recreation Area includes 6,455 acres, off Route 154 in the Santa Ynez Valley. Bicycle access is along the shoulders of Route 154 to the park entrance. Facilities include family picnic and group picnic areas, camping, bicycle rentals, marina, boat launching, interpretive nature center, general store, gas station, snack bar and tackle shop, swimming pool, laundromat, drinking fountains, public telephones, restrooms, and showers. Softball fields, a playground area for children, equestrian trails, guided lake cruises and seasonal naturalist programs offer additional recreational opportunities.

Goleta Beach Park - Goleta Beach Park includes 28.8 acres, with 0.6 miles of ocean frontage bordered on the east by the mouth of the Goleta Slough, on the west by the UCSB campus. The park is adjacent to the Santa Barbara Municipal Airport. Several bike paths (including the Atascadero Creek Class I bikeway) lead to the park. Auto and transit access (SBMTD) is along Fairview Avenue or Ward Memorial Boulevard (Route 217) to Sandspit Road. The Goleta Pier, located in the park, is a popular fishing spot. Other recreational opportunities include swimming, beachcombing, bird watching, ocean sports (kayaking, skin diving) and surf fishing. Facilities at the park include family picnic and group picnic/barbecue areas, a playground, volleyball courts, horseshoe pits, boat launching, restaurant, bar, bait and tackle shop, snack bar, bike racks, drinking fountains, public telephones, restrooms, and showers. The park has a year-round resident ranger.

Jalama Beach Park - A 22.8-acre park, with 0.3 miles of ocean frontage just north of Point Conception. The park is 4.3 miles (6.9 km) south of Lompoc off Route 1 on Jalama Beach Road. Neither Route 1 nor Jalama Beach Road has bicycle lanes. Family picnic and barbecue, 105 campsites, playgrounds, horseshoes, general store (groceries, fishing bait and tackle), snack bar, drinking fountain, public telephone, restrooms and showers.

LeRoy Park - This four-acre park is the only park in Guadalupe. Bicycle access to the park is on 11th Street. Planned future bikeway facilities include a Class III route between Santa Maria and Guadalupe on Route 166 (a Measure D project), and a multipurpose trail between Santa Maria and Guadalupe along the Santa Maria River. From either of these future bikeways, cyclists would proceed along Route 1 to the park. Park facilities include family picnic, and large group barbecue/picnic areas, playground area, volleyball court, horseshoes, recreation building, community building, and restrooms. There are no public telephones or drinking fountains at the park.

Los Alamos Park - A 51.6-acre park, located at the mouth of the Drum Canyon, behind the town of Los Alamos. Vehicle access is from either Route 135 or Route 101 to Bell Street, where it intersects Centennial, which becomes Drum Canyon Road. There are no separated bicycle facilities to the park. Park facilities include family picnic, group picnic areas, a playground area, softball, baseball, volleyball, horseshoes, equestrian trail, bike path, drinking fountain, public telephone and restrooms. The park has a resident ranger.

Manning Park - A 12.1-acre park, near Montecito off San Ysidro Road. Both East Valley Road and San Ysidro Road, which border the park, have Class II bike lanes. SBMTD provides transit access to the park. The park facilities include family picnic and group picnic or barbecue areas, two playground areas, softball, volleyball, horseshoes, a tennis court, a community building, drinking fountain, public telephone and restrooms. Two rangers reside at the park.

Miguelito Park - A 4.2 acre park, 3.5 miles (5.6 km) south on "I" Street (which becomes Miguelito Road) out of Lompoc. A designated bikeway exists along the first two miles of Miguelito Road, south of Lompoc towards the park. Park facilities include family picnic and group picnic/barbecue areas, playground, horseshoes, drinking fountain, and restrooms. There is no public telephone at the park, but there is a resident ranger.

Nojoqui Falls - Nojoqui Falls is an 82.5-acre park on Alisal Road, 1.5 miles (2.4 km) east of Route 101, near Gaviota Pass. There are no bicycle facilities to the park. From Solvang, autos and bikes access the park along Alisal Road. The park facilities include family and group picnic and barbecue areas, playground area, softball, volleyball, horseshoes, hiking trail, drinking fountains, public telephone and restrooms. There is a resident ranger.

Ocean Beach Park - Ocean Beach Park is a 36-acre park with ocean frontage located 13 miles (20.9 km) west of Lompoc on Route 246. A lagoon and railroad trestle mark the mouth of Santa Ynez River. Bicycle access to the park is along the shoulders of Route 246. The park facilities include family picnic areas, barbecue pits, playground, fishing, interpretive nature paths, drinking fountain, public telephone and restrooms.

Rancho Guadalupe Dunes - A 592.9-acre recreational area with ocean frontage. Planned future bicycle access from Santa Maria/ Guadalupe Dunes Bikeway. Informal recreation, beach. No facilities.

Rocky Nook Park - Rocky Nook is a 19.6-acre park located in Mission Canyon (610 Mission Canyon Road) south of Foothill Road in Santa Barbara. Auto access if from Mission Canyon Road. There are no bicycle facilities on Mission Canyon Road, which experiences heavy auto traffic during peak periods. The park facilities include family picnic, group picnic and barbecue areas, a playground area, horseshoe pits, an equestrian trail (also used by mountain bikes and children on bikes) which meanders through the park and exits to Foothill Road behind the fire station, a hiking trail along the creek, drinking fountain, public telephone and restrooms. Santa Barbara Mission and Natural History Museum are across Mission Canyon Road from the park, on either side of Mission Creek.

San Antonio Canyon Park (Tucker's Grove)- A 118.2 acre park located on San Antonio Creek Road just north of Cathedral Oaks Road (at Turnpike Road). There is good bicycle access to the park with existing Class II bicycle lanes along both Cathedral Oaks Road and Turnpike Avenue. SBMTD provides transit service to the park. Family picnic, group picnic, playground area, volleyball, horseshoes, equestrian trail, drinking fountain, public telephones and restrooms.

Santa Rosa Park - A 21.4 acre park, located midway between Lompoc and Buellton, one mile (1.6 km) south of Buellton on Route 101, then eight miles (12.9 km) west on Santa Rosa Road). Bike access is along the road shoulders. Family picnic, group picnic, playground, volleyball, horseshoes and restrooms. No public telephone, but there is a year-round resident ranger.

Santa Ynez Park - A 4.6-acre park, just off Route 246, west of the Santa Ynez business district, between Cuesta and Numancia Streets off Edison Street. Family picnic, group picnic and barbecue areas, playground area, volleyball, horseshoes, drinking fountain and restrooms. No public telephone, but there is a year-round resident park ranger near entrance at Edison and Numancia Street.

Stow Grove Park - Stow Grove is an 11-acre park, bordering La Patera Lane running south from Cathedral Oaks Road, Goleta. Class II bike lanes exist along both sides of Cathedral Oaks Road. SBMTD provides limited transit service to the park. Family picnic, group picnic, barbecue units, two playground areas, softball, volleyball, horseshoes, drinking fountains, public telephones and restrooms.

Toro Canyon Park - An 88.4 acre park; access is on Toro Canyon Road between Summerland and Carpinteria, about three miles north of Route 101. Family picnic, group picnic, two playgrounds, volleyball, horseshoes, equestrian trail (Santa Barbara Therapeutic Riding Academy), public telephone and restrooms.

Waller Park - Waller Park (161 acres of urban forest) is located at the south end of Santa Maria off the Orcutt Expressway, just north of Skyway Drive. Class II bikeways exist along Blosser Road/Skyway Drive and Lakeview Road. A planned multipurpose trail along the Santa Maria Valley Railroad will also provide access the park in the future. Transit access is provided by SMAT. Family picnic, group barbecue and picnic areas, man-made lake, three playgrounds, softball, baseball, volleyball, horseshoes, hiking, bicycling, pony rides, drinking fountains, public telephone and restrooms. There are two resident rangers.

Major Parks Operated by Cities in Santa Barbara County

CITY OF CARPINTERIA

Carpinteria City Park - A 4.3-acre park (three city blocks between Linden Avenue and Ash Avenue) with ocean frontage and a swimming beach. Class II bike lanes provide access along Linden Avenue.

CITY OF LOMPOC

Beattie Park - Beattie Park, located on Olive Avenue at Fifth Street offers 50.6 acres of recreational area with picnic/barbecue areas, playground equipment, restrooms and drinking fountains. Bicycle access is along city streets. Future Class II lanes are planned along Olive Avenue, from Bailey to Seventh Street.

Ryon Park - This 21.9-acre park, located on Ocean Avenue at "O" Street, offers picnic areas, playground equipment, restrooms and drinking fountains. Bicycle access is on city streets. Future Class II bike lanes are planned on "O" Street, between Olive and Central Avenues, and on Ocean Avenue from the western city limits to "O" Street.

River Park - The major regional park in the Lompoc Valley, located east of city boundaries adjacent to the Santa Ynez River. Auto access via River Park Road off Route 246, with bicycle access along the road shoulders. The 256.6-acre park provides camping, picnicking and playgrounds. There are numerous informal trails for walking and biking along the Santa Ynez River as it flows through the Lompoc Valley and through River Park; however, no formal trail or legal access to the river exists.

Riverbend Park (Proposed) - This is a planned major regional park along the river's bend. As conceptualized, the 20-acre site, located at "A" Street and McLaughlin Road west of the Santa Ynez River, will provide major outdoor sports facilities, passive recreation, an indoor recreation center and restrooms. Bicycle access would be along "A" Street to McLaughlin Road.

CITY OF SANTA BARBARA

Cabrillo Ball Field - This 5.0-acre baseball/softball playing field is located in the triangle formed by Cabrillo Boulevard, Milpas Street and Puerto Vallarta. There are tables and benches but no restrooms. Bicycle access is along city streets.

Dwight Murphy Field (baseball complex) - 10.5 acres, located on Ninos Drive at Por La Mar Drive has athletic fields, with organized soccer, baseball and softball activities. Facilities include a community building, tables, benches, playground equipment, and restrooms. Bicycle access is along city streets.

East Beach - 49 acres, 0.6 miles ocean frontage. Picnic tables, barbecue facilities, volleyball courts, public telephones, restrooms. Snack bar, showers and locker room at the Cabrillo Arts Center (East Beach Pavilion). Cabrillo Bikeway provides bike access to East Beach.

West Beach, Stearn's Wharf and Santa Barbara Harbor - 11.6 acres (West Beach) with ocean frontage. West Beach facilities include the municipal swimming pool (Los Banos Del Mar Swimming Pool), picnic tables, public telephone, showers and restrooms, boat launch ramps. The pool is used by Santa Barbara City College students as well as the community for swimming lessons, swim meets and lap swim.

Along Stearn's Wharf (which divides East and West Beach at the foot of State Street) are restaurants, snack bars, shops, a marine museum (Sea Center and Nature Conservancy), public telephones, and restrooms.

The 74-acre harbor has boat slips for 1,000 boats and four boat hoists, a chandlery, dry dock, restaurants, snack bars, U. S. Naval Reserve Training Station, Harbor Patrol offices, Santa Barbara Yacht Club, public telephones and restrooms.

Cabrillo Bikeway provides bicycle access along the length of this major recreational destination. There is a bicycle shop nearby on State Street where bike repair and rentals are available.

Leadbetter City Beach - 8 acres, 0.6 miles ocean frontage, west of the harbor, on Shoreline Drive. Picnic tables, group picnic area public telephone, and restrooms. Class II bike lanes along Shoreline Drive provide bicycle access.

Earl Warren Showgrounds/Fairgrounds - Major exhibition center for fairs, antique shows and open-air exhibition events on the South Coast, located north of Route 101 at Las Positas Road and Calle Real. Class II bike lanes exist from San Onofre to Route 101; however, there are no separated facilities across Route 101 to connect with the Class II bike lanes on Modoc Road and the Atascadero Creek Bikeway. On the north side of Route 101, the west side of Las Positas from San Onofre to Stanley is striped; but parking is allowed. Both sides of Las Positas are striped from Stanley to State Street, without parking. These segments of Las Positas are proposed for Class II bike lanes, and are currently designated as available alternate routes (aar) on the Traffic Solutions Bike Map (published by the Santa Barbara County Rideshare Office) of the area.

Las Positas Park - Located at 1002 Las Positas Road. Facilities include tennis courts, grandstands, playground equipment and playing fields. Bicycle access is along the Class II bike lanes on Las Positas Road.

Ortega Park - Located at 600 E. Ortega Street, this park has athletic fields for soccer, baseball and softball, a swimming pool, a wading pool, barbecue pits, tables and benches, drinking fountains, a community building, restrooms and showers. Bicycle access is along city streets.

Oak Park - Located at 300 West Alamar Avenue, this park has group and family barbecue pits, tables and benches, tennis courts, soccer, drinking fountains and restrooms.

Pershing Park and Plaza Del Mar - 5.0 acres, located at 100 Castillo Street. Facilities include athletic fields for softball, baseball, tennis courts and restrooms. Bicycle access on city streets.

Shoreline Park - 14.6 acres, located at La Marina and Shoreline Drive. Facilities include barbecue pits, benches and tables, play equipment and restrooms. Bicycle access on city streets.

CITY OF SANTA MARIA

Priesker Park - This 38-acre park is located at the farthest northern point of Santa Maria. Onroad bikeways provide access to the park from the downtown area (Class III bikeways exist along Blosser Road to Taylor Street, on Taylor from Blosser to Broadway and on Broadway from Taylor to SB County boundary). The Levee Multipurpose Trail (a project recently awarded TEA funding) will provide access to the park from the east. Park facilities include family picnic and group picnic areas, children's playground, volleyball court, two softball/soccer fields, pond, trails, several drinking fountains and two restrooms. There are no bike racks at the park.

County Fairgrounds - 35.8 acres. Major exhibition center for fairs and open air exhibit events in Northern Santa Barbara County, located in the southwest sector of the city, off Stowell Road, between Thornberg Road and the Santa Maria Valley Railroad. The fairgrounds include showgrounds and concession facilities. Existing Class III bicycle facility on Thornberg Road provides bicycle access. The east-west multipurpose trail planned along Battles Road and the north/south multipurpose trail planned along the Santa Maria Valley Railroad will provide future access for cyclists to the fairgrounds.

Minami Park/Center - 17.2 acres. The Community Center for Santa Maria, located at the northeast corner of Adam Park South opposite the Adam Elementary School. Existing Class III on Thornberg Road provides bicycle access; the multipurpose trail planned along Battles Road and the north/south multipurpose trail planned along the Santa Maria Valley Railroad will provide future access. Recreation building, volleyball, basketball, bike racks, drinking fountains, public telephones, showers, and restrooms.

Paul Nelson Municipal Pool - Public swimming pool, locker rooms, volleyball, bike racks, showers, and restrooms. Access is on South McClelland Road. Bicycle access is on city streets; the nearest designated bicycle routes are on Miller Street and Morrison Street.

Haggerman Softball Complex - 20.97 acres adjacent to Waller Park and YMCA. This recreational facility includes 6 athletic fields for softball, playground equipment, drinking fountains, public telephones, and restrooms.

YMCA- just south of Waller Park and Softball complex.

Waller Park - This Park is a major recreational destination in City of Santa Maria; see description under County operated parks.

CITY OF SOLVANG

Hans Christian Anderson Park - This 50-acre park is located in the northwest portion of the city along Adobe Creek between Chalk Hill Road and Route 246. Auto access is along Atterdag Road. Bicycle access is from the existing Class I along Route 246 to Atterdag Road, where cyclists travel on the road shoulders to and from the park. Family picnic, group picnic and barbecue area, playground, tennis courts, trails, water fountain, and restrooms.

Elks Field - This is a 6-acre playing field with family picnic, softball, restrooms.

Solvang Park - This 0.8-acre park is a high use park in Solvang with family picnic, passive play area, restrooms, and a bandstand.

Veterans' Memorial Building - This complex provides facilities for a range of indoor functions. The facilities include several meeting rooms, a kitchen and barbecue patio. Bordering the existing parking lot is a small grass area equipped with a picnic table.

Elverhoy Museum - Danish heritage museum. Restrooms, drinking fountain.

PRIVATELY OPERATED PARKS AND RECREATION AREAS IN SANTA BARBARA COUNTY (does not include golf courses and country clubs)

Botanic Gardens - 70 acres, located in Mission Canyon, north of Foothill Road in Santa Barbara. Auto access is on Mission Canyon Road.

El Capitan Ranch - 1,480 acres, 235-unit campground.

Santa Barbara Polo Field - Approximately 48 acres with riding rings stables, three polo fields, a polo clubhouse, eight tennis courts, a tennis clubhouse with a swimming pool and 112 condominiums (with a swimming pool). Located between Carpinteria and Summerland.

Mission Santa Barbara - 23 acres, located in lower Mission Canyon in Santa Barbara, near Rocky Nook Park. Auto access is from Route 101 along Laguna Street north to Los Olivos Street, or from Foothill Road south on Mission Canyon Road. SBMTD provides transit service to the Mission. Class II bike lanes exist on Los Olivos, from Mission Canyon Road to Laguna Street. This small segment of bike lanes does not connect with any other bicycle facility, and cyclists share the road with the cars in this vicinity.

Mission Santa Ines - 50 acres, located in Solvang. Auto access is along Route 246.

Santa Barbara Zoo- Established in 1940, the Santa Barbara Zoo is located in south Santa Barbara County covering 30 acres. This magnificent recreational park is home to over 500 species of animals and a number of plant species. This facility is located off the 101 between Santa Barbara and Carpinteria.

STREETS AND HIGHWAYS CODE

SECTION 890-894.2

890. It is the intent of the Legislature, in enacting this article, to establish a bicycle transportation system. It is the further intent of the Legislature that this transportation system shall be designed and developed to achieve the functional commuting needs of the employee, student, business person, and shopper as the foremost consideration in route selection, to have the physical safety of the bicyclist and bicyclist's property as a major planning component, and to have the capacity to accommodate bicyclists of all ages and skills.

890.2. As used in this chapter, "bicycle" means a device upon which any person may ride, propelled exclusively by human power through a belt, chain, or gears, and having either two or three wheels in a tandem or tricycle arrangement.

890.3. As used in this article, "bicycle commuter" means a person making a trip by bicycle primarily for transportation purposes, including, but not limited to, travel to work, school, shopping, or other destination that is a center of activity, and does not include a trip by bicycle primarily for physical exercise or recreation without such a destination.

890.4. As used in this article, "bikeway" means all facilities that provide primarily for bicycle travel. For purposes of this article, bikeways shall be categorized as follows:

(a) Class I bikeways, such as a "bike path," which provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized.

(b) Class II bikeways, such as a "bike lane," which provide a restricted right-of-way designated for the exclusive or semiexclusive use of bicycles with through travel by motor vehicles or pedestrians prohibited, but with vehicle parking and crossflows by pedestrians and motorists permitted.

(c) Class III bikeways, such as an onstreet or offstreet "bike route," which provide a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists.

890.6. The department, in cooperation with county and city governments, shall establish minimum safety design criteria for the planning and construction of bikeways and roadways where bicycle travel is permitted. The criteria shall include, but not be limited to, the design speed of the facility, minimum widths and clearances, grade, radius of curvature, pavement surface, actuation of automatic traffic control devices, drainage, and general safety. The criteria shall be updated biennially, or more often, as needed.

890.8. The department shall establish uniform specifications and symbols for signs, markers, and traffic control devices to designate bikeways, regulate traffic, improve safety and convenience for bicyclists, and alert pedestrians and motorists of the presence of bicyclists on bikeways and on roadways where bicycle travel is permitted.

891. All city, county, regional, and other local agencies responsible for the development or operation of bikeways or roadways where bicycle travel is permitted shall utilize all minimum safety design criteria and uniform specifications and symbols for signs, markers, and traffic control devices established pursuant to Sections 890.6 and 890.8.

891.2. A city or county may prepare a bicycle transportation plan, which shall include, but not be limited to, the following elements:

(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.

(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.

(c) A map and description of existing and proposed bikeways.

(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.

(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 terminals, ferry docks and landings, park and ride lots, and provisions for transporting bicyclists and bicycles on transit or rail vehicles or ferry vessels.

(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.

(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.

(h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.

(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.

(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.

(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.

891.4. (a) A city or county that has prepared a bicycle transportation plan pursuant to Section 891.2 may submit the plan to the county transportation commission or transportation planning agency for approval. The city or county may submit an approved plan to the department in connection with an application for funds for bikeways and related facilities which will implement the plan. If the bicycle transportation plan is prepared, and the facilities are proposed to be constructed, by a local agency other than a city or county, the city or county may submit the plan for approval and apply for funds on behalf of that local agency.

(b) The department may grant funds applied for pursuant to subdivision (a) on a matching basis which provides for the applicant's furnishing of funding for 10 percent of the total cost of constructing the proposed bikeways and related facilities. The funds may be used, where feasible, to apply for and match federal grants or loans.

891.5. The Sacramento Area Council of Governments, pursuant to subdivision (d) of Section 2551, may purchase, operate, and maintain callboxes on class 1 bikeways.

891.8. The governing body of a city, county, or local agency may do all of the following:

(a) Establish bikeways.

(b) Acquire, by gift, purchase, or condemnation, land, real property, easements, or rights-of-way to establish bikeways.

(c) Establish bikeways pursuant to Section 21207 of the Vehicle Code.

892. (a) Rights-of-way established for other purposes by cities, counties, or local agencies shall not be abandoned unless the governing body determines that the rights-of-way or parts thereof are not useful as a nonmotorized transportation facility.

(b) No state highway right-of-way shall be abandoned until the department first consults with the local agencies having jurisdiction over the areas concerned to determine whether the right-of-way or part thereof could be developed as a nonmotorized transportation facility. If an affirmative determination is made, before abandoning the right-of-way, the department shall first make the property available to local agencies for development as nonmotorized transportation facilities in accordance with Sections 104.15 and 887.6 of this code and Section 14012 of the Government Code.

892.2. (a) The Bicycle Transportation Account is continued in existence in the State Transportation Fund, and, notwithstanding Section 13340 of the Government Code, the money in the account is continuously appropriated to the department for expenditure for the purposes specified in Section 892.4. Unexpended moneys shall be retained in the account for use in subsequent fiscal years.

(b) Any reference in law or regulation to the Bicycle Lane Account is a reference to the Bicycle Transportation Account.

892.4. The department shall allocate and disburse moneys from the Bicycle Transportation Account according to the following priorities:

(a) To the department, the amounts necessary to administer this article, not to exceed 1 percent of the funds expended per year.

(b) To counties and cities, for bikeways and related facilities, planning, safety and education, in accordance with Section 891.4.

892.5. The Bikeway Account, created in the State Transportation Fund by Chapter 1235 of the Statutes of 1975, is continued in effect, and, notwithstanding Section 13340 of the Government Code, money in the account is hereby continuously appropriated to the department for expenditure for the purposes specified in this chapter. Unexpended money shall be retained in the account for use in subsequent fiscal years.

892.6. The Legislature finds and declares that the construction of bikeways pursuant to this article constitutes a highway purpose under Article XIX of the California Constitution and justifies the expenditure of highway funds therefore.

893. The department shall disburse the money from the Bicycle Transportation Account pursuant to Section 891.4 for projects that improve the safety and convenience of bicycle commuters, including, but not limited to, any of the following:

(a) New bikeways serving major transportation corridors.

(b) New bikeways removing travel barriers to potential bicycle commuters.

(c) Secure bicycle parking at employment centers, park-and-ride lots, rail and transit terminals, and ferry docks and landings.

(d) Bicycle-carrying facilities on public transit vehicles.

(e) Installation of traffic control devices to improve the safety and efficiency of bicycle travel.

(f) Elimination of hazardous conditions on existing bikeways.

(g) Planning.

(h) Improvement and maintenance of bikeways.

In recommending projects to be funded, due consideration shall be given to the relative cost effectiveness of proposed projects.

893.2. The department shall not finance projects with the money in accounts continued in existence pursuant to this article which could be financed appropriately pursuant to Article 2 (commencing with Section 887), or fully financed with federal financial assistance.

893.4. If available funds are insufficient to finance completely any project whose eligibility is established pursuant to Section 893, the project shall retain its priority for allocations in subsequent fiscal years.

893.6. The department shall make a reasonable effort to disburse funds in general proportion to population. However, no applicant shall receive more than 25 percent of the total amounts transferred to the Bicycle Transportation Account in a single fiscal year.

894. The department may enter into an agreement with any city or county concerning the handling and accounting of the money disbursed pursuant to this article, including, but not limited to, procedures to permit prompt payment for the work accomplished.

894.2. The department, in cooperation with county and city governments, shall adopt the necessary guidelines for implementing this article.

Appendix E

Design Standards for Bikeways

The following policies are designed to improve and maintain the regional bikeway system. It is recommended that each jurisdiction's Bikeway Element or plan contain policies consistent with those included below.

Class I Bike Paths

Class I bike paths are separated from roadway facilities with motorized vehicles excluded by state law.

1. All Class I facilities should meet or exceed minimum standards set by the California Highway Design Manual and those recommended in this document.
2. Class I and multi-purpose trails should be constructed to permit access by emergency vehicles (police, paramedics, ambulance, etc.), and maintenance equipment.
3. Where Class I bikeways or multi-purpose trails cross major streets, railroad tracks, or sidewalks, proper grade separation or warning devices must be incorporated when feasible.
4. Bicycle paths should provide smooth, hard surfaces at least 8 feet wide for a two-way path, 5 feet wide for a one-way path with 1.5-foot shoulders. Exceptions to this standard may be made where grading would cause excessive environmental degradation (such as on hillsides) or along creeks where space is limited.
5. Where two-way traffic is provided on a paved path, a center stripe should be applied.
6. All access points to bicycle paths should be clearly signed, marked and have convenient connections from public streets.
Areas adjacent to creeks and rivers should be used for bicycle paths where environmentally feasible, because these riparian corridors are often the most direct and only undeveloped way through a built up area. Flood control channels often present a more straightforward right of way acquisition for building bicycle facilities.
8. Bicycle paths along creeks should be located outside setbacks required to protect creek banks, with access points limited in number to avoid removal of significant habitat.

Bicycle paths along agricultural areas and levees should be signed and/or fenced to discourage trespassing onto adjoining land uses. Existing service roads should be used where possible.
10. The use of the Class I bikeways by motorized vehicles should be prohibited; signs indicating "No Motor Vehicles" should be installed along the path at popular access points.

Class II Bike Lanes

Class II bike lanes are lanes striped on the roadways for preferential use by bicycles. The striping is intended to establish demarcation between areas reserved for bicycles

and lanes to be used by motor vehicles.

1. All Class II facilities should meet or exceed minimum standards set by the California Highway Design Manual and those recommended in this document.
2. Consistent with Section 1004 of the Highway Design Manual, signs and pavement markings should be installed as follows:
 - Arterial bike paths should be named and signed to show both that they exist and where they go.
 - Signs and bike lane pavement markings should be installed at the beginning of each block.
 - Where blocks are longer than 500 feet, an additional sign and pavement marking should be placed at mid-block.
3. Whenever possible, bike lane signs should be installed on existing sign poles, traffic signal poles, street light standards or other utility poles.

Bike lanes at intersections should be striped using the following guidelines:

- With right-hand turn pockets for vehicles, through-moving lanes for bicycles should be provided to the left of the turn pocket (as shown in Figure 1003.2C in the Highway Design Manual).
 - Where right-hand turn lanes are not present, all bicycle lane delineations should be dashed prior to the intersection to remind through-moving bicyclists to merge with through-moving traffic and to indicate where right turning motorist should enter the bike lane
 - Bicycle lanes adjacent to on-street parking should be striped on both sides (Photo X). Roadways with high volumes of bicycle traffic coupled with a high turnover rate for car parking should provide a buffer area, demarcated with a striped line, between the on-street parking and bicycle lanes so motorists can safely enter their vehicles without blocking the bike lane. Parking should generally not be permitted if the “door zone” blocks part of a Class II facility.
6. Car parking should not be permitted adjacent to Class II facility near major intersections.
 7. Drainage inlet grates should provide an adequate surface for bicyclists. The best design is the curb-face inlet, as long as the slope to the inlet is not excessive. Grates should be installed level with the pavement, and maintained flush with the surface with resurfacing. Bicycle-safe models are those that resemble honeycombs or cast iron grates with short angled slots.

Traffic levels along city streets designated as Class II bicycle routes should not exceed 10,000 Average Daily Vehicle Trips (ADT) or 35 mph. Where ADT levels and speed exceed these standards, the Class II designated facility should be considered for upgrading to an enhanced Class II or a separated Class I facility where possible.

Alternately, a nearby appropriate street with lower traffic levels should be identified and designated as the bicycle route.

9. Motor vehicle speeds exceeding 45 miles per hour on roadways designated as Class II facilities that do not have at least a 3-foot shoulder or curb area warrant consideration of a separate bikeway. Alternately, the shoulder area provided should be increased (for traffic traveling 45-50 mph, add one foot of shoulder, for 50-55 mph, add two feet).
10. Where feasible, alternate routes for bicyclists should be provided near major arterials that do not have Class II facilities. The busy arterials should be signed to encourage bicyclists to use the alternate route. The use of traffic-calming techniques on the alternate route would greatly enhance its attractiveness and safety for bicyclists. Implementation of traffic calming techniques should be prefaced by a study of pros and cons, on a site-specific basis.
11. Loop detectors installed at signalized intersections should be sensitive enough to detect bicycles and the pavement should be marked with a bicycle logo to show cyclists where the trigger is located. Signal actuation buttons convenient for bicyclists should be installed at intersections along Class II and III routes where there is no loop detector.
12. Bus pockets should be put in, if possible, adjacent to established bike lanes on arterials with high traffic volumes.

Class III Bike Routes

A Class III bike route is a "shared route" in that both bicycle and motor vehicle traffic will use the same roadway surface area. The Class III bike route is generally identified only by signs designating a roadway as part of a bikeway system. There is no delineation showing bicycle right-of-way.

1. Class III facilities should only be considered in low traffic, low speed streets. The designation of such a route would be to serve as a connection between two unconnected Class I or Class II facilities. Class III routes should only be established on those routes which is an integral part of the overall network, or where a logical origin and destination are readily apparent.
2. Convenient and safe shortcuts used by schoolchildren commuting by bicycle should be signed as bicycle routes wherever possible.
3. Bike route signs should be placed at the beginning and end of a bike route, and at the far end of all arterial intersections, and every intervening point of confusion or route decision point.
4. Where a Class III facility has an uncontrolled crossing of a heavily trafficked street, a bicycle symbol (Caltrans W79 sign), and a crossing indicator (W80-XING) mounted below the symbol should be used to warn motorists of an officially designated bike facility crossing the roadway, as described in the Caltrans Traffic Manual. Some signage on the bike route to warn bicyclists of heavy traffic crossing ahead should

also be provided (example: Road Crossing ahead).

5. If traffic levels and speeds on a Class III facility increase, traffic calming techniques, which would avoid the expense or necessity of providing a Class II facility, should be considered.

The main advantage of a Class III route is signage: the bike route signs alert motorists to watch for cyclists, thus to some degree make the route safer for cycling; and the route signs will guide cyclists to a specific destination or through unfamiliar residential areas.

Intersections, Bridges, Tunnels and Freeway Crossings

1. Bike facilities should be incorporated in any reconstruction or major improvement of intersections, bridges, tunnels and freeway crossing that is proposed that links up with, or is located in close proximity to an existing or proposed bikeway. At a minimum, Class II facilities should be provided on the crossings.
2. Only in unusual circumstances should any new or reconstructed freeway crossing not provide for adequate pedestrian and bicycle access when there are nearby bike/pedestrian crossings on the surface streets located on either side of the crossing.
3. In all cases, especially in areas of existing or potential foot traffic, new or reconfigured interchanges should be designed to separate bicycle and pedestrian traffic.

Maintaining Bicycle Facilities

1. Standards for maintaining bicycle paths, lanes and routes should be consistent with the Highway Design Manual and those recommended in this document.
2. Bikeway demarcation (striping and stenciling) should be renewed on a regular basis (e.g., biennially).
3. When streets designated as Class II facilities are repaved, the bike lanes will be re-striped, and pavement markings will be renewed.
4. Rubberized crossing systems when feasible, or similar improvements (like paved, tapered approaches on either side), should be installed at railroad grade crossings.
5. Potential hazards should be corrected as identified:
 - Improvements to grates, manholes, ridges, cracks or grooves, gaps or joints in the bikeway surface consistent with tolerances and recommendations in the Caltrans Design Manual should be made; and other obstacles in the portion of the roadway typically used by bicyclists should be removed. The tolerances are specified to minimize the potential for bicyclists to lose control of their bicycle as a result of quality of the bikeway surface.

- Vegetation should be removed that is on the path surface, or protruding into the bicyclists' right of way on the paths. This would include trimming as necessary bushes (or vines growing on fences) along the sides of the bikeways so that branches are not extending into the bike lanes, and for height clearance (trimming of tree limbs that are hanging in the bicyclists' pathway).
- Sight distance improvements should be made at high volume intersections (for example, the removal of on-street parking or fixed objects near line of sight).
- Regular litter removal and street sweeping should occur on Class II and III bike routes. If reconstruction with chip seal on Class II or III bike routes occurs, special care should be taken to remove the excess chip material from the bike lanes adjacent to the roadway. A more frequent street sweeping program, preferably monthly, should be followed on chip-sealed roads with Class II or III facilities, because the chip seal material will be entrained or swept onto the bike lanes with vehicular traffic on the street.

Bicycle Parking and Storage

1. Short and long-term bicycle parking should be provided whenever a new public building or public use facility, large residential facility, commercial or industrial facility is constructed (or existing facilities are enlarged).
2. Bicycle racks should:
 - Be located where clear and safe pedestrian circulation is ensured, and stand a minimum of 30 inches above ground for better visibility (to avoid the potential for persons tripping over them).
 - Be located as close to the main entrance of the destination as possible.
 - Be visible from the interior of the destination, if possible.
 - Be installed on an asphalt or concrete surface.
 - Support bikes in a stable position, and be coated with rubberized plastic PVC or a similar material to avoid damage to the bicycle frames.
 - Be well lighted.
 - Allow the frame and both wheels (one wheel removed from the frame) to be locked to the rack using a standard-sized "U"-lock.

Enhanced Class II

An "Enhanced" Class II facility is a Danish design that can be used instead of a Class I facility where traffic speed is a concern and where the provision of a Class I facility is deemed inappropriate, infeasible, or too costly. An "Enhanced" Class II provides three levels of grade rather than two, with grade separation between the vehicular traffic and the cyclist, and an

additional grade separation between the cyclist and the pedestrian. This type of facility is widely used in Europe. The advantage is that vehicles are restricted to their lane of travel and do not enter into the bicycle lane the way they can with Class II facilities. Neither the local jurisdictions nor Caltrans have design standards for "Enhanced" Class II facilities with three levels of grade. The use and safety of such facilities should be studied, and design standards established.

An "Enhanced" Class II facility however, does not necessarily have to provide three levels of grade, but instead could provide a separated one-way bike lane on a wider than normal sidewalk on either side of the road, with the two uses (pedestrian and bicycle) clearly marked and signed. The Caltrans Design Manual states that such facilities (sidewalk bikeways) should only be considered to provide bikeway continuity along high speed or heavily traveled roadways having inadequate space for bicyclists, uninterrupted by driveways and intersections for long distances, or on long, narrow bridges or tunnels (over/under-crossings are a possible application under this criteria). The Caltrans Design Manual includes criteria for sidewalk bikeways. The criteria address the potential problems. These criteria would appear to also be appropriate for "Enhanced" Class II facilities where there are three grades in the design.

Enhanced Class III

"Enhanced" Class III facilities are on-street shared facilities (no bike lanes striped) where techniques to calm traffic have been used. Traffic calming techniques include adding speed bumps to slow the travel (where the bumps end with enough distance from the curb to allow bicyclists room to avoid the bumps); reversal of traffic stop signs to favor the bicyclists; positioning of islands with plantings which slow vehicular traffic while allowing straight through uninhibited bicycle flow, etc.

Appendix F Public Outreach

Staff advertized and conducted four public workshops around the County to inform local citizens of changes being implemented into the Regional Bikeway Network. An advertisement flyer was mailed to twelve local bike shops around the county, and placed in adds in the Santa Maria, Lompoc, Santa Ynez Valley, and Santa Barbara newspapers. The supporting bike shops included Bicycle Bob's, Bicycle Connection, Hazard's Cycle Sport, Mad Mike's Bikes, Main Street Cycles, Open Air Bicycles, Pedal Power Bicycles, Santa Barbara Electric Bicycle, VeloPro Cyclery, and Dr, J's Bike Shop. In addition, Santa Barbara Bicycle Coalition and Lompoc Valley Bicycle Club were contacted to help promote the workshops to their members, and increase the presence of local cyclists. The mentioned advertisement proved to be useful and resulted in attracting the interest of seventeen county residents.

The plan was presented to the attending residents in the form of a PowerPoint presentation. The presentation outlined major bicycle issues and the public's comment was solicited on a variety of issues pertaining to bicycle safety, education, enforcement and implementation. A copy of the presentation is included in this Appendix.

Notes were taken at the four public workshops in order to collect the opinions of attending persons. Comments were made regarding the safety of bikeway paths, maintenance of bikeway paths, and recommendations for new bike routes, and education and safety concerns. These meeting notes are included below:

Bike Workshop Notes

Lompoc

- I.
 - A. In attendance, were eight men, members of the Lompoc Valley Bicycle Club, and two children.
 - B. Questions were asked regarding the class II bike path over the River on the east end of Lompoc. This type of path may be feasible, however on a seasonal schedule because of rain and other extreme weather conditions. Access through the riverbed in the northeast part of town can only be crossed on a mountain bike.
 - C. A large number of the local children/students ride their bikes to school, as well as for recreational use. The safety of these young riders is very highly valued.
 - D. Bicycle use in the city of Lompoc is for recreation, exercise and most importantly transportation use.

- E. Purisima Road near the La Purisima Mission needs to be repaved, widened, and maintained. This road is too narrow for riders and discourages the use of bicycles in the area. This is a High Priority.
- F. Rucker Rd is the one of two corridors in and out of Mission Hills this road is dangerous and poorly maintained, discouraging bicycling as mode of transportation to and from the central city.
- G. High School students at Cabrillo High must use Highway 1 to Vandenberg Village. But, this roadway is unsafe and often not used by cyclists. “Because it is easier and safer to drive”
- E. Intersection on Harris Grade just east of the federally owned land contains several roadways splitting in three directions. Cyclists must cross six lanes of traffic and ride on a narrow shoulder to commute to and from Vandenberg Village. Participants understood that a Class I path is proposed to route cyclists away from this commotion and through a safe corridor. This is a High Priority. Staff indicated the segment from the bridge north to Hancock College has received funding; however, it has taken a long time for the City of Lompoc to negotiate with the FCI over the route.
- F. Alternative Path on Mission property proposed by participants, connecting the path between Rucker Rd, and Mission would eliminate problems on the Purisima as long as there is an additional connection from the Mission to state highway 246, and this could be a Class II or Class I.
- G. One speaker stated he and many people do not let their children use the current bike paths because of the danger associated with the busy streets. This particularly true of H Street. The suggestion was that new paths be allocated to streets that are not dominated by cars. Staff indicated this was addressed by the City in their bikeway network.
- H. Improvements to two bridges were specifically requested. The Santa Ynez River near the intersection connecting he city with Alan Hancock College, and a replacement to Robinson Bridge in the southeast part of the city at the end of Ocean.
- I. Much of the new development in the Lompoc has been curbing the cycling commuters because of the increased construction of cul-de-sacs with no pedestrian/bicycle connections to the adjoining area. If a corridor is created for cyclists and pedestrians by linking cul-de-sacs, one can promote alternative modes of transportation by making it easier for commuters to ride through all areas of the city. This is a High Priority.

- J. Problems with inter-modal connectivity; The surf-liner Amtrak trains which allow bikes only come through Lompoc twice a day, and the bike hooks on the train rarely are in working condition.
- K. Bicycle education programs should be offered for those who bike and those who do not. This may decrease the conflict between cyclists and farmers/Winery owners. Cyclists are not second-class citizens. The Solvang Century Bike marathon is held annually, and many times these cyclists do not follow CVC rules and giving local cyclists a bad reputation.
- L. Bicycle safety is an issue for parents all around the city, but more commonly for those who have children who ride under the age of 13. Many of the bike lanes within the city are far too impacted with cars to allow small children to share the road. In addition to unsafe bikeways, there is a lack of helmet use among children riders. Although this illegal there is nothing being done by law enforcement officials and this should be a High Priority.
- M. Clarification was asked about Purisima Rd., city or county road. Staff responded that it was a County road and the County is the responsible agency for repairing the road. However, it was pointed out by staff that the Mission lands, potential archaeological issue, topographic constraints may make this an expensive project. Citizen felt as if North County cities do not receive sufficient funds.
- N. Santa Rosa Road is very popular road for cyclists; however, due the surrounding agricultural land the road becomes muddy and flooded when weather conditions are poor. More attention to maintenance of this road was encouraged. This is a High Priority.
- O. More Class I bikeways within the city are needed to promote general bicycle commuting use. The addition of class I roadways in the city of Lompoc would promote bicycle use to riders of all ages because of the enhanced safety correlated with class I bike pathways.
- P. When electric bikes were discussed, no one in attendance had problems with electric bike of any kind on the paths.
- Q. Some problems expressed with San Miguelito Rd. this road is not maintained, and needs either to be repaved or sealed.
- R. One citizen proposed and Class II path along G St., with protecting stop signs and a 15 mph speed limit for cars to central.

- S. The intersection at McLaughlin and A Street is not an all weather crossing over the river, a bridge may be necessary.

II. Recommendations From Lompoc Valley Bicycle Club

A. Roads frequently used by cyclist and need Maintenance:

1. Santa Rosa Rd.
2. Miguelito Road
3. Drum Canyon Road
4. San Antonio Road

B. Roads that need a bike lane added or expanded

1. Purisima Rd.
2. Rucker Rd
3. Harris Grade Rd. from the Wye to Burton Mesa Blvd.
4. Highway 246 from Mission Gate to River Park
5. Floradale Rd to Santa Lucia to Highway 1
6. Highway 135 from Harris Grade to Los Alamos

C. Areas that would benefit from separate bike path.

1. From Highway 1/ H Street bridge to Hancock.

Santa Maria

III. A. In attendance were a Caltrans Representative and one local resident.

B. The community resident proposed three specific connections between existing paths parallel to Skyway Dr., with Waller County Park and Hagerman City Park. In addition, a path connecting all three recreational cites was proposed along the east side of Hagerman's sports complex.

- The three proposed paths are important to both the county and the city because they connect means of recreation, while creating a safer route for local citizens.
- The proposed paths are currently unpaved links that are far too unsafe for many cyclists, especially children.

C. Questions were posed by Dave Kuperman about the class III designation along SR 246 to SR 154. Staff responded that the role of this route provides access to the Park and ride lot at the Jct. of the two highways.

D. There were questions relating to the bicycle lockers at the intersection of 135 and Clark. The questions pertaining to this subject were related to the poor maintenance of these facilities.

- Dave proposed the idea of implementing polyethylene lockers rather than metal lockers. This change is due to the recent water damage posed on the metal lockers throughout the county. (Staff indicated it would obtain other input on this issue)
- The online traffic solutions bike maps show up as very low resolution, on the web and perhaps this can be enhanced for public use.

Solvang

- IV. A. In attendance was one community resident from Lompoc with similar inquiries to the individuals at the Lompoc workshop. He also did not incur problems with electric bikes on the bikeway paths.
- B. The Lompoc resident suggested that bikeway routes be provided along Purisima Rd., and over Harris Grade, north of Lompoc incorporated area, to Burton Mesa Rd.
- C. There was also suggestion that a bicycle right of way question be added to the CA. written driving test, and perhaps some other way of educating drivers of a cyclist's rights. He also encouraged that bicycle education should be implemented in the schools.
- D. In addition, the resident proposed the implementation of bike events promoting new routes, while expressing the importance of providing a county-to-county bike network.

South Coast:

- V. A. The South Coast meeting attracted the attention of six community residents, whom of which had many comments and suggestions on specific paths and their priorities.
- B. A Class I bikeway was proposed to connect the south coast area with Buellton and Lompoc because of the danger correlated with cycling on the U.S. 101.
- D. Due to the congestion and safety issues along the UCSB bikeways, a local member of the Goleta community suggested that a Class I or Class II bikeway detour be implemented around UCSB, between Santa Barbara and the industrial park.
- E. Several of the attending residents categorized the proposed class I bikeway along the Union Pacific Railroad as a High Priority.

- F. The proposal of safety improvements on current bike lanes was a big issue, most specifically on streets: Garden, Milpas, Cota and Cannon Perdido. In addition, Cliff Dr. is a dangerous bikeway because of the high speeds incurred on the path at peak hours by motor vehicles.
- G. Due to the congestion on beach side Class 1 bike path in the city of Santa Barbara, an additional corridor was proposed. A class 2 bikeway traveling both ways along Cabrillo should reduce cycling traffic problems in the area.
- H. The representative for Safe Routes to School in Cold Springs expressed her opinion on the lack of bike paths connecting residential areas to the local schools. The first proposal by the SR2S representative was a class 2 bikeway path along Sycamore Canyon Rd. Hwy 192. In addition, another Class II bikeway path was proposed along Barker pass connecting Sycamore Canyon Rd. residents with the downtown area of Santa Barbara.
- I. There was a proposal of a class 1 bikeway proposed connecting Santa Clause Lane with Carpinteria Avenue in the Carpinteria area.
- J. The proposal of a recreational class IV path along the bluffs, connecting Rincon County Park at the County line with downtown Carpinteria.
- K. Montecito and Santa Barbara residents proposed the addition of a class 2 bikeway on Hwy 192 between Santa Barbara and Hwy 150 just past Carpinteria.
- L. Although electric bikes in the county are not currently a big issue, it was observed that their use is exponentially growing within the state. The suggestion was to implement a speed limit of 20 mph on all paths for those who use electric or gas powered bikes.
- M. There was an issue with the current maintenance of local and regional bikeway paths. Many paths contain overgrown shrubs and landscape as well as poor road conditions.
- N. Many bicycle parking areas in Santa Barbara should have better lighting.
- O. In terms of inter-modal transportation, one suggestion was made. The addition of larger bike rack on the MTD buses would provide more cyclists with the opportunity to use the bus as an inter-modal connection.
- P. One resident proposed the implementation of statewide education programs in traffic school, elementary schools, and the work place.

- Q. Improved connections to recreational mountain trails was one issue brought up in the south coast. Recreational riders feel it is important to create paths connecting urban parts of Santa Barbara to secluded mountain trails.

- R. A request was made by a south coast resident that Foothill rd. be widened between Hwy 154 and Santa Barbara. This would increase safety for riders who frequent this road. In addition, a proposed Class II on Mission Rd. connecting Foothill to Mission.

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Public Notice



Updating the Regional Bikeway Plan:

The Santa Barbara County Association of Governments, or SBCAG, is holding workshops to receive public comment on updates to the Regional Bikeway Plan.

See what issues are receiving new emphasis in the update of the long-range bike plan.

Learn what bikeways are in the existing plan and what additions are being considered.

Let your voice be heard about what you think are the important regional bikeway needs and improvements.

Attend one of the workshops planned around the county:

Regional Bikeway Plan Update Meeting Schedule

Date and Time	Region	Location
Wednesday February 20, 2008 @6:30 p.m.	Lompoc Valley	Lompoc City Council Chambers 100 Civic Center Plaza Lompoc, CA
Wednesday February 27, 2008 @6:30 p.m.	Santa Maria Valley	County Government Center Board of Supervisors Hearing Room 511 E. Lakeside Parkway Santa Maria, CA
Thursday February 28, 2008 @6:30 p.m.	Santa Ynez Valley	Solvang City Council Chambers 1644 Oak Street Solvang, CA
Wednesday March 5, 2008 @6:30 p.m.	South Coast	Santa Barbara County Board of Supervisors Hearing Room, 4 th floor 105 E. Anapamu Street Santa Barbara, CA

For more information, call SBCAG at (805) 961-8900.



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Slide 1, 2

SBCAG Regional Bikeway Plan



February 2008 Update
Workshop

Overview

- What is SBCAG?
- What is the Regional Bikeway Plan?
- Why is the Plan being updated?
- What issues are being addressed?
- How can I influence the Regional Bikeway Plan?
- What is the Schedule?

Slide 3,4

What is SBCAG

- 13 member body of elected officials, eight cities and the County Board of Supervisors
- Required by state and federal law to conduct comprehensive regional transportation planning and programming
- Required to prepare and update a Regional Bikeway Plan as well as other regional programs

What is the Regional Bikeway Plan

- A long term (20 year) regional bicycle network
- Identifies current and future regional bicycle transportation needs
- Promotes the development of bicycle safety facilities and programs
- Coordinates programs between jurisdictions

Slide 5,6

Why is the Regional Bikeway Plan being updated?

- Santa Barbara County prepared a Regional Bikeway Study in 1984 and incorporated bike maps and policies into our 2004 Transportation Plan.
- Some local agencies have adopted bikeway plans, others have bike maps in their Circulation Elements
- The SBCAG staff is in the process of updating the regional plan to promote progress.
- Promotes eligibility for funding, e.g., Bicycle Transportation Account

What elements are in the Regional Bikeway Plan?

- Purpose
- Regional bikeway network and projects
- Bicycle parking and End-of-trip facilities
- Safety, Education, Encouragement, Enforcement Programs
- Funding
- Bikeway Design Standards
- Policies & Recommendations

Slide 7,8

What are the Caltrans BTA Requirements



- Number bicycle commuters
- Map and description of existing and proposed land use and settlement patterns, employment centers
- Map and description of existing and proposed bikeways
- Description of existing and proposed end-of-trip bicycle facilities
- Map and description of existing and proposed bicycle transport and parking facilities for connecting with and use of other transportation modes
- Map and description of proposed facilities for changing, storing clothes and equipment

What are the Caltrans BTA Requirements



- Description of bicycle safety and education programs which are mandated by local law enforcement
- Description of citizen and community involvement in the development of the plan, including, but not limited to, letters of support
- Coordination with other local or regional transportation, air quality, or energy conservation plans, including incentive programs for bicycle commuters
- Description of the projects proposed in the plan and a listing of their priorities for implementation
- A description of past expenditures for bicycle facilities and future financial needs for projects

Slide 9,10

Chapter 1: Purpose of the Plan

- Update the Bikeway Network
- Meet the Caltrans BTA State Guidelines
- Create Uniformity in Policy and Designs
- Identify Funding, Evaluate Programs

Cyclist Population in Santa Barbara County

- California residents' bike commute to work is twice the national average
- Santa Barbara County Residents have trumped this number by increasing the local job bike commute rate by seven times more than the national average
- Santa Barbara County currently has the 14th highest job bike commute rate among the 3100 US counties

Slide 11,12

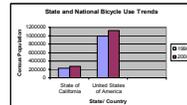
Bicycle Use for Commuting

- Countywide bicycle use for commuting purposes ranges from 2% to 4% of total commute trips
- There is significant variation in bicycle use for commuting around the County
 - Isia Vista: 20%
 - Buellton: 1%

Cyclist Trends: US Census Travel to Work Data



Left: This graph represents the change in cyclist population over a ten year span, in the cities of Santa Barbara (increase 3.2% to 3.4%), Carpinteria (Increase 1.9% to 2.3%), and Santa Barbara County (Decrease 3.4% to 2.7%).



Right: This graph represents Bicycle Use trends over a ten year span in the state of California (Decrease 0.9% to 0.8%), and the USA (Unchanged 0.4%)

**Inconsistent values in the trends representation may be due to the increasing Rate of the National Population.*

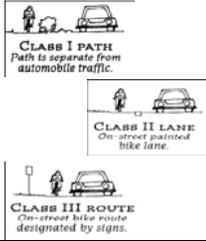
Slide 13,14

What Should We Address in the Regional Bikeway Plan?

- Are there other aspects of bicycle use that we should emphasize?

Chapter 2: Bikeway Design and Standards

- Bikeway Classification descriptions:
 - Off-Street separate paths (Class I bikeways)
 - On-Street bike lanes (Class II bikeways)
 - Shared use bike routes (Class III bikeways)



Slide 15,16

Other Bikeway types

- Unmarked mixed flow streets
- Multi-Purpose Class II bikeways
- Bicycle Boulevards
- Unpaved gravel or dirt Trails (Class IV bikeways)



Innovative Bikeway Treatments

- Colored bike lanes
- Contra-flow bike lanes
- "Sharrows"



Slide 17,18

Additional Facility Improvements

- Drainage grates
- Railroad Crossings
- Intersections
- Roundabouts/ Traffic Circles
- Improved Signal Detection
- Intersections and Freeway Crossings



What Should We Address in the Regional Bikeway Plan?

- What facility issues are important in the bikeway plan?
- How do we reconcile differences in classification, e.g., Multi-purpose trails,

Slide 19,20

Chapter 3: Regional Bikeway Network

- Current state of regional bikeway network
- Bikeway network development
 - Design Guideline
 - Illustrative Projects
 - Route selection Criteria
 - Cyclist Population

Completing the Network

- Connecting the regional missing links
- Signage and connection
- Bikeway network maintenance
- Regional bicycle network maps



Slide 21,22

What Should We Address in the Regional Bikeway Plan?

- **Following this overview of the plan we will review the draft bicycle maps and receive your input on existing and new routes.**
- **Where there are missing links what are the priority segments for completion?**

Chapter 4: Parking & End-of-trip Facilities

- Bicycle Parking Definitions:
 - Bicycle Racks
 - Bicycle Lockers
 - Other secure bike parking facilities
 - Showers and changing facilities



Slide 23,24

Multi-Modal Facilities

- Bicycles and Transit
- Park-And-Ride Lots
- Passenger Rail and Airports
- End-of- trip facilities
- Bicycle Accommodations on transit services



Santa Barbara Bikestation Accommodates bicycle commuters

Connecting the Transit Link For Long Distance Bicycle Commuters

- Santa Barbara Breeze Bus provides a connecting mode of transportation for local cyclist commuters
- The Amtrak system provides a connecting mode of transportation for cyclists traveling long distances.



Slide 25,26

What Should We Address in the Regional Bikeway Plan?

- What specific inter-modal projects do you think are important?



Chapter 5: Education, Encouragement, and Enforcement

- Education:
 - League Certified Instructors (LCI's)
 - CycleSmart Bicycle Education Program
 - Youth Education Programs
 - Safe Routes to School
 - Motorist Education



Slide 27,28

Encouragement:

- Bike Week/ Bike to Work Day/ Rideshare Week
- Team Bike challenge
- Community Bicycle Programs
- Bike to Work Incentives



Safety and Enforcement:

- The issue of bicycle safety is neglected in terms of programming
- Bicycle parts and other resources
- Bike Maps
- Low Cost/Free Helmets & Bike lights (for both underprivileged children and farm workers)
- Law enforcement (Cyclist must adhere to the rules of California Vehicle Code)



Slide 29,30

What Should We Address in the Regional Bikeway Plan?

- What specific education projects do you think are important?



Chapter 6: Funding

- Federal, State, Regional, Local Sources
- Federal
 - Transportation Enhancements Program (TE) projects selected by SBCAG
 - Regional Surface Transportation Program (STP)
- State
 - Bicycle Transportation Account funds, statewide competitive program



Slide 31,32

Chapter 6: Funding

- Regional
 - Transportation Improvement Program
 - Projects recommended by SBCAG
 - Measure D and successor
- Local
 - Measure D
 - Local Surface Transportation Funds
 - Local Transportation Funds

What is Measure D?

- Measure D is a 1/2 cent sales tax for local and regional transportation funding approved in 1989
- Funding has been used for local and regional bikeways, e.g. Class I at Ortega Hill parallel to Hwy. 101
- Measure D expires in 2010

Slide 33,34

What happens after Measure D expires?

- November election this year to continue the sales tax
- 1/2 cent tax for 30 years
- Dedication of regional funds for bike paths, safe routes to schools, pedestrian improvements
- Local agency alternative mode projects could include bike improvements

What Should We Address in the Regional Bikeway Plan?

- What specific funding issues do you think are important?

Slide 35,36

Chapter 7: Recommendations and Policies

Community Input Needed for Electrical Bicycle Options

- Option 1: Allow all Electric Bicycles equal access to that of pedal bicycles
 - Law enforcement uses the Vehicle Code to enforce any and all regulations for pedal bikes and will do the same for electric bicycles and scooters
- Option 2: Adopt similar regulations to that of Santa Cruz.
 - Classify motorized bikes into 4 categories
 - allow equal access to motorized bikes and scooters limited to 20 mph
 - deny access to all other motorized bikes including bikes with the polluting two stroke gas engine

What are the Policy Issues?

- Information
- Bikeway, maintenance, and improved access
- Safety programs
- Regional connections
- What issues do you think exist and how would you like to see these addressed?

Slide 37,38

How can I influence the Regional Bicycle Master Plan?

- Provide Input here at workshop or later
 - www.sbcag.org
- Review and comment on draft Plan

What is the Schedule?

- Initial Workshops: February – March
- Initial Draft of RBP: March
- Review of draft: March/April
- Plan Adoption: May

Appendix G

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PERSONS AND ORGANIZATIONS CONTACTED

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GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

ADT	Average Daily Travel - The average number of vehicles that traverse a given segment of roadway over a 24-hour period.
BTA	Bicycle Transportation Account - Bicycle funding program administered by Caltrans.
Caltrans	California Department of Transportation - Agency responsible for statewide transportation programs in California.
CAP	Clean Air Plan - The comprehensive document that is required under the Federal Clean Air Act (FCAA). The document details the programs and control measures needed to sufficiently reduce emissions to meet the National Ambient Air Quality Standards.
CTC	California Transportation Commission - Agency responsible for approval of State Transportation Implementation Program and bicycle grant applications for state transportation funding programs.
CEQA	California Environment Quality Act - A law that requires that governmental decision makers be provided with adequate information about the potentially significant environmental impacts of proposed projects. CEQA also mandates ways to avoid or significantly reduce damage to the environment.
CMP	Congestion Management Program - The CMP is a comprehensive program designed to reduce auto-related congestion through provision of roadway improvements, travel demand management and coordinated land use planning among all local jurisdictions. The program is required of every county in California with an urbanized area of at least 50,000 people. The CMP is updated biennially.
EIR/EIS	Environmental Impact Report/Environmental Impact Statement - An analysis of the environmental impacts of proposed land development and transportation projects; it is an EIR when conducted in response to the California Environmental Quality Act (CEQA), and an EIS is conducted for federally funded or approved projects per the National Environmental Policy Act (NEPA). A draft EIR or draft EIS (DEIR or DEIS) is normally circulated to the public and agencies for comments.
EPA	Environmental Protection Agency - The United States agency charged with setting policies and guidelines, and carrying out legal mandates for the protection of national interests in environmental resources.
FCAA/CAAA	Federal Clean Air Act (Amendments) - Federal legislation that sets national air quality standards and requires each state with areas that have not met federal air quality standards to prepare a State Implementation Plan (SIP). The 1990 FCAA amendments established new air quality requirements for the development of metropolitan transportation plans and programs.

GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

FHWA	Federal Highway Administration - As an agency under the U.S. Department of Transportation (U.S.DOT), FHWA is responsible for all federal highway programs.
FTA	Federal Transit Administration - Formally known as the Urban Mass Transportation Administration (UMTA), FTA is an agency under the U.S. Department of Transportation (U.S.DOT) responsible for all federal programs related to mass transit.
FTIP	Federal Transportation Improvement Program - The FTIP is a multi-year program of transportation projects for Santa Barbara County that are funded from predominantly federal sources. The FTIP is developed and adopted by SBCAG on a biennial basis. Once adopted, the FTIP is submitted to the California Transportation Commission (CTC) and the federal funding agencies.
HBRR	Bridge Replacement and Rehabilitation Program - Funding authorized under ISTEA, administered by Caltrans.
ISTEA	Inter-modal Surface Transportation and Efficiency Act - Federal legislation signed into law in December 1991, which proposes broad changes to the way transportation funding decisions are made. It emphasizes diversity, balance of modes, and the preservation of existing systems. ISTEA authorizes the expenditure of \$151 billion over its six-year life.
LTF	Local Transportation Funds - See TDA.
LOS	Level of Service - A measure of congestion on a highway facility or intersection based primarily on the comparison between the facility's capacity and its traffic volume. Increasing levels of congestion are designated along a scale from A to F.
Measure D	A 1/2 cent sales tax referendum approved by the voters in 1989 to fund transportation facility maintenance and improvements in Santa Barbara County over the next 20 years. Currently proposed for new authorization under the name Measure A.
NAAQS	National Ambient Air Quality Standards - Standards set by the federal Environmental Protection Agency (EPA) for the maximum levels of air pollutants that can exist in the outdoor air without unacceptable effects on human health or the public welfare.
RTIP	Regional Transportation Improvement Program - Prepared and adopted biennially by SBCAG, the RTIP includes projects from the Regional Transportation Plan (RTP) Action Element nominated for state Flexible Congestion Relief Funds. The RTIP when adopted is submitted to the California Transportation Commission (CTC) for inclusion in the State Transportation Improvement Program (STIP).
RTP	Regional Transportation Plan - The RTP is a long-range plan to improve our region's

GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

state highways; local streets, roads, and bikeways; airports and marine facilities; transit, paratransit, and passenger rail services. A guide for the development of these facilities, the RTP describes the priorities for making investments in our region's transportation system.

SBAPCD **Santa Barbara Air Pollution Control District** - The local agency that governs air quality issues: proposes and adopts local air pollution rules, enforces those rules, responds to air pollution related complaints, issues permits to polluting sources, and inventories sources of air pollution emissions.

SBCAG **Santa Barbara County Association of Governments** - SBCAG is a voluntary council of governments formed under a joint powers agreement executed by each of the general-purpose local governments in Santa Barbara County. SBCAG is an independent entity governed by a twelve-member board consisting of a city council representative from each of the seven cities in the county and the five members of the county board of supervisors. The city representatives are appointed by their respective city councils. SBCAG is the designated Regional Transportation Planning Agency (state planning mandate) and the Metropolitan Planning Organization (federal planning mandate) for Santa Barbara County.

SBCC **Santa Barbara City College**

SBMTD **Santa Barbara Metropolitan Transit District** - SBMTD is the provider of public transit services on the South Coast. SBMTD's fleet consists of heavy-duty diesel buses and electric shuttle buses. Its transit service consists of 26 individual fixed routes operating on a scheduled basis serving 5.8 million passengers in FY 1991-92.

SIP **State Implementation Plan** - A document prepared by each state, with input from local Air Pollution Control Districts, describing the existing air quality conditions and measures that will be taken to attain and maintain national ambient air quality standards (NAAQS).

SMAT **Santa Maria Area Transit** - SMAT is the transit provider in the Santa Maria/Orcutt Area. It operates with a fleet of vehicles on five fixed-routes and provides demand response service.

SRTP **Short Range Transit Plan** - SRTP is a five-year comprehensive plan required of all public transit operators by federal and regional transportation funding agencies.

SLPP **State and Local Partnership Program** - A funding program authorized under Section 2600 of the Streets and Highways Code, administered by Caltrans. Bicycle projects included as part of SLPP-eligible locally funded projects on roadways, or on highways, may be eligible for funding.

STA **State Transit Assistance** - See TDA

GLOSSARY OF COMMONLY USED ACRONYMS AND TERMS

STP	Surface Transportation Program - A program which provides flexibility in the use of available funding for either highway or mass transit capital projects.
TEA	Transportation Enhancement Activities - Bicycle projects may be eligible for this federal funding program authorized by ISTEA.
TCM	Transportation Control Measure - Any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.
TDA	Transportation Development Act - As contained in Section 99200 of the Public Utilities Code, the TDA provides two major sources of funding for public transportation through regional planning and programming agencies: the county Local Transportation Fund (LTF), which is derived from 1/4 cent of the 6 cent retail sales tax collected statewide; and the State Transit Assistance (STA) funds, which are for transportation planning and mass transportation purposes as specified by the legislature.
TDM	Transportation Demand Management - The implementation of measures which encourage people to change their mode of travel, or not to make a trip at all, e.g., ridesharing, pricing incentives, parking management and telecommuting.
TTAC	Technical Transportation Advisory Committee - As one of the two regional advisory committees in Santa Barbara County, TTAC serves as a communication link between SBCAG and all transportation agencies in the county. TTAC reviews and makes policy recommendations on fiscal matters, fund allocations, special studies and planning documents for submittal to the SBCAG policy board. The committee consists of local planning directors, local directors of public works, managers of transit operators, state transportation agency representatives, as well as members from UCSB, APCD, and Vandenberg Air Force Base.
UCSB	University of California, Santa Barbara
VMT	Vehicle Miles Traveled - VMT is the sum of miles traveled by all vehicles during a fixed period of time on a fixed expanse of highways.