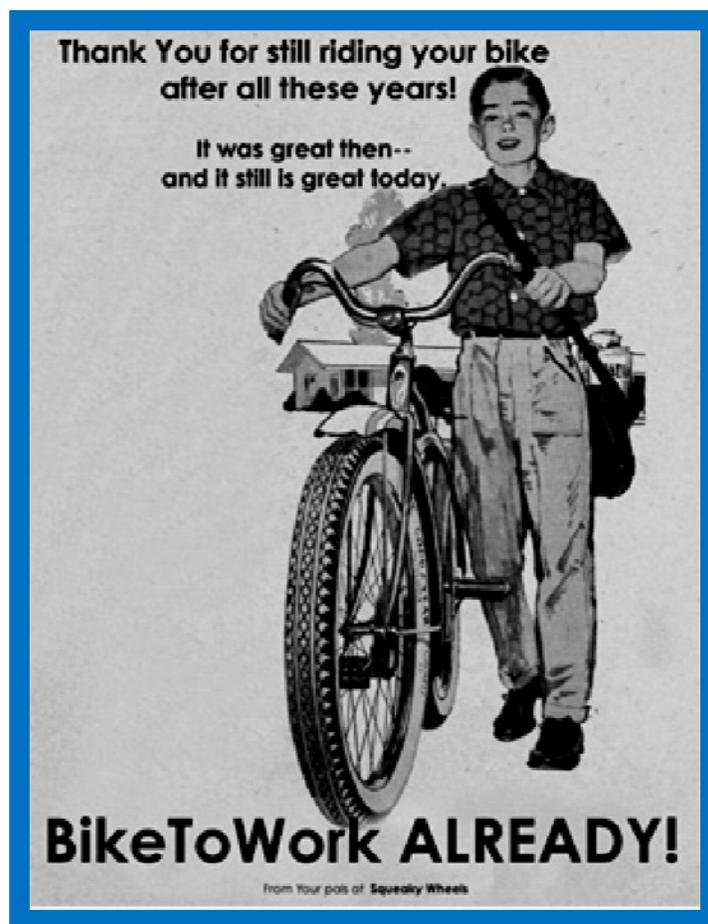


CITY OF SCOTTS VALLEY BICYCLE TRANSPORTATION PLAN

March 2012



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Special acknowledgement to Ariana Green of the City of Capitola for original draft

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CHAPTER 1 | INTRODUCTION

The City of Scotts Valley Bicycle Transportation Plan (BTP) assesses commuter needs, identifies funding sources and directs the future development of bicycle facilities in the City. It also seeks to carry out the Five Es used by the League of American Bicyclists to identify and rank Bicycle Friendly Communities. The five Es are Evaluation, Engineering, Education, Encouragement and Enforcement. Listed below are questions that define each category.

- **Evaluation:**
How well does a community evaluate its own bikeway network and systematically plan to improve it?
- **Engineering:**
Is the physical bicycle infrastructure well connected, accessible, safe and well maintained?
- **Education:**
Are cycling educational programs available to bicyclists and motorists of all ages?
- **Encouragement:**
Does the community support and promote bicycling through special events, clubs and recreational programs and facilities?
- **Enforcement:**
Do well enforced laws exist which improve bicycle safety?

Communities which support bicycling through the simultaneous achievement of the 5 Es are considered to be Bicycle Friendly Communities. The goals and objectives of the Scotts Valley BTP were created with the 5 Es in mind in order to realize the vision of a pro-bicycle city. The Scotts Valley BTP was created as a result of community input, and reflects the needs of bicycle commuters in the City of Scotts Valley and the greater region. By meeting the 5 Es criteria and engaging members of the community, the implementation of the Scotts Valley BTP will result in a safer, more convenient, and more pleasurable place to bicycle.

SECTION 1.1 PURPOSE OF THE PLAN

The Scotts Valley BTP sets goals and objectives for the purpose of increasing the safety and convenience of bicycle commuting in the area. The BTP is an update of the 2005 City of Scotts Valley BTP. It includes or expands upon the goals and objectives put forth in 2005 to improve network connectivity, address dangerous or hazardous areas, and increase education and bicycle

resources. In addition to remaining consistent with major City planning documents, the 2011 BTP implements the policies and programs of the Circulation Element of the General Plan. The BTP is intended to aid City of Scotts Valley planners and engineers in prioritizing bicycle improvement projects with the goal of increasing bicycle commuting, recreation, tourism and safety.

As traffic congestion, air pollution, obesity, and energy costs have become more serious problems, bicycling has become a practical alternative mode of transportation. Comprehensive planning efforts will help the bicycle reach its full potential as a viable transportation mode for commuting and shopping as well as for recreation. The BTP defines goals, objectives, policies, and implementation programs involved in the planning, design, and construction of an integrated system of regional bicycle facilities. The BTP defines a network of bikeways, with an emphasis on commuter routes, which coordinate with and compliment other routes in Santa Cruz County.

SECTION 1.2 HISTORY OF BICYCLES

The bicycle was originally developed as a transportation vehicle and gained prominence 100 years ago as a sporty alternative to the horse drawn carriage. With the emergence of the motor vehicle, however, the situation quickly changed. Unlike in Europe, where automobiles took decades to supersede cycling, American cyclists never had the chance to coexist with the automobile community. As a result, when the exchange of transportation modes occurred, bicycles experienced a rapid drop in status from high-class fashion to mere child's toy. No merging of these two modes was made. From there the bicycle's popularity fluctuated with the relative availability of cars and fuel costs, and was considered at best a working class mode of transportation.

Cycling began its great comeback after the postwar urban sprawl. More and more young people turned to bicycles as their only transportation to and from the suburbs and this, in turn, encouraged the development of more suitable bicycles. Then other groups began catching on: open road lovers, fitness enthusiasts and recreational riders. Enrollment in cycling clubs grew rapidly, and new and inexperienced members brought with them their childhood-taught "fear of motor vehicles." This viewpoint placed cyclists and motorists in competition with each other instead of encouraging cooperation and mutual respect. This viewpoint, predominant at the time, led to the bicycle path trend of the 1970's. Bicycle paths created at that time physically separated the two types of vehicles so that there could be no competition. They also reinforced the "fear of motor vehicles" viewpoint by keeping cyclists off the road. Experience with separated bicycle paths proved that they alone could not meet the needs of bicyclists. Firstly, bicyclists will not use poorly designed bicycle paths, due to inconveniences and safety problems. Well designed separated paths function well for some trip purposes and poorly for others. When riding for recreational purposes or commuting to only one destination, separated paths can be useful to bicyclists. The issue of access arises when a trip destination is off of the bicycle path and can only be reached by a street network shared by motorized vehicles. The two apparent solutions to the issue of access are to create separated bicycle paths that run throughout the city, or encourage motorists, cyclists and pedestrians to share the road.

Today the cycling trend is to "share to road." This viewpoint promotes the integration of motorists and cyclists by improving existing roadway systems to accommodate bicycles.

Bicyclists then share the roadway along with general motor vehicle traffic. Not only does this conserve funds, but it also unites the two groups under one set of rules of the road for better cooperation and safer operation.

SECTION 1.3 BENEFITS OF BICYCLE TRANSPORTATION

Bicycle riding not only improves physical health through exercise, and the environment by offsetting green house gas emissions, but it requires less expensive operational and infrastructure maintenance than driving an automobile. Investment in bicycle infrastructure has also proven to benefit local economies by attracting environmental and bicycle tourism (Flusche, 2009). It is difficult to realize the daily cost of driving an automobile, as not all costs are direct such as a bus fare, and many costs are subsidized or hidden. In order to help people quantify the financial and environmental impacts of driving, the Santa Cruz Regional Transportation Commission created an online interactive tool which calculates the “True Cost of Driving” (<http://www.commuterolutions.org/calc.htm>). The tool counts direct costs such as fuel, maintenance, insurance and parking in cents per mile. What is unique about the calculator is that it also includes indirect costs which are often overlooked such as infrastructure improvements and maintenance, air and water pollution, land use impacts, noise and congestion costs. By inputting the number of miles driven annually, the calculator can tally the costs and assign a dollar value to the amount of driving an individual does in a year. According to Commute Solutions.org, the true cost of driving is \$1.36/mile. Therefore, a person who drives 5 miles to and from work each day spends approximately \$3,000 each year. Most people drive to places other than work, which means that \$3, 000 per year is a low estimate, and for many the total cost of driving will exceed this amount.

Increasing the bicycle mode share and improving bicycle facilities can also reduce automobile congestion. Bicyclists will often choose different routes than automobiles, and physically take up less space on the road which reduces the traffic load on major arterial streets. Bicycles also take up less space than an automobile when parked, which frees up land for other uses. Approximately 8 to 10 bicycles can fit in the space of one car parked on the street. A standard curb parking space is 8 feet by 22 ft or 176 ft². If businesses could meet a portion of their parking requirements by providing bicycle facilities instead of car parking, it could potentially free up a substantial amount of land for uses other than parking in the future. Bicycles also increase the accessibility of public transit which reduces congestion by transporting more occupants than a car. Congestion caused by parents driving their children to school can be reduced by encouraging children to walk or ride their bicycles.

Another benefit of bicycling is that it increases the mobility and independence of non-drivers such as youth under age 16, low income groups who cannot afford automobiles, and the elderly and disabled.

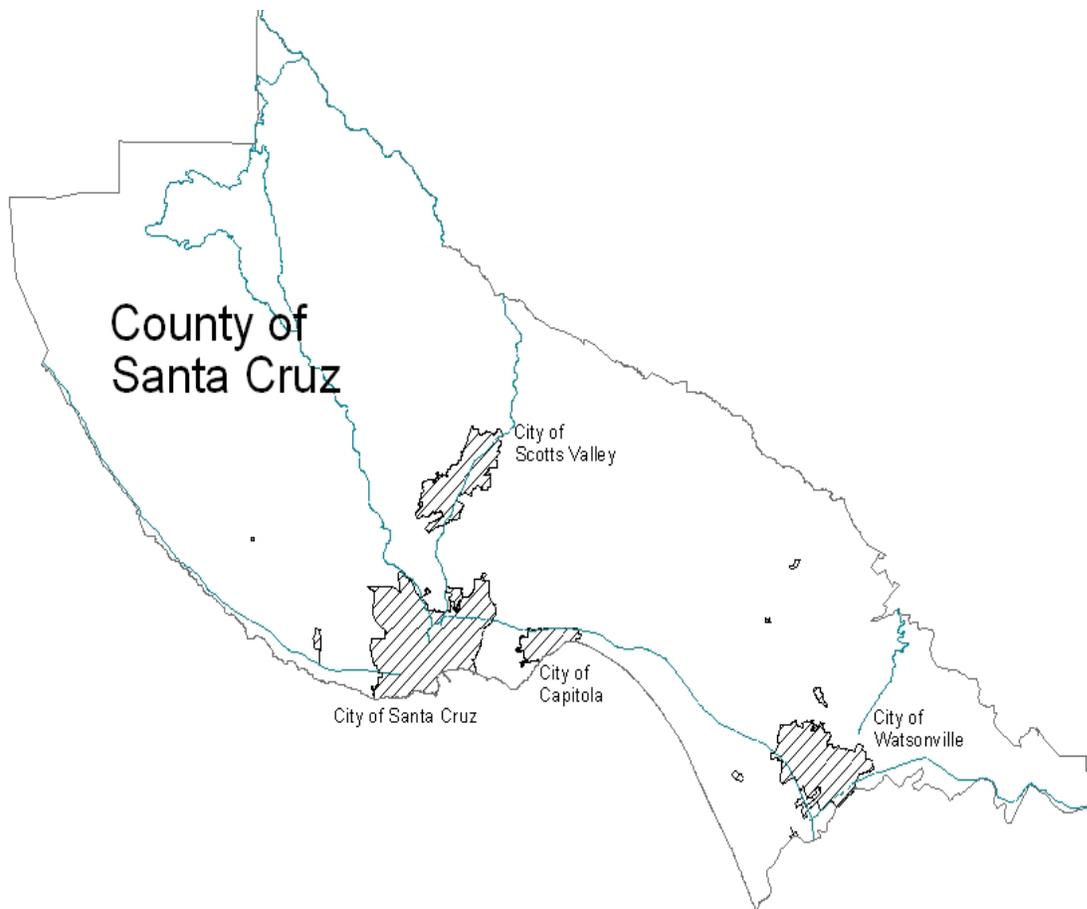
There is no specific age at which a driver’s license is revoked, so there are individuals who are legally allowed to drive past the age of 65. However, there are 8 million people in America over the age of 60 who no longer have a driver’s license (Gotschi, 2008). As the Baby Boom population ages, it is expected that the number of senior citizens living in Scotts Valley will increase, creating a demand for alternative transportation modes. For some, loss of balance or diminished capacity

for physical activity becomes a limiting factor in regards to their mobility. Tricycles and electric bicycles mitigate such problems, and make it easier for those with disabilities or health issues to get around safely. There are several retailers in Santa Cruz County that offer electric bicycles at affordable prices. Electric bicycles are helpful to some, although unnecessary for many individuals, as bicycles are the most efficient means of human powered transportation (Wilson, 1973).

SECTION 1.4 SETTING

The City of Scotts Valley is a small city of 11,385 people located in Santa Cruz County (Figure 1-1). With an area of 4.62 square miles, the compact nature of the city, mild weather, and mostly flat terrain make Scotts Valley an ideal place for bicycling. The City is connected by a network of bikeways to the City of Santa Cruz, a “Silver” Bicycle Friendly Community (League of American Bicyclists) and other parts of the county.

Figure 1-1 Map of Santa Cruz County



SECTION 1.5 PLANNING PROCESS

The Scotts Valley BTP was prepared by the public works department in order to insure the efficiency and cost-effectiveness of bicycle facility improvement projects. The Scotts Valley BTP is the result of community input including comments and suggestions from members of the public and staff recommendations. This report also uses some of the City of Capitola's BTP prepared by Adrian Green for the City of Capitola.

The Scotts Valley BTP has also been reviewed by the Santa Cruz County Regional Transportation Commission's staff. Also, a public meeting was held before the Santa Cruz County Regional Transportation Commission's Bicycle Advisory Committee on February 13, 2012 to receive comments and suggestions from members of the public as well as confirming the plan was consistent with the Regional Transportation Plan and State Highway Code Section 891.2. The Scotts Valley City Council on March 21, 2012 adopted the Bicycle Transportation Plan. The Scotts Valley BTP was also reviewed and certified by the Santa Cruz County Regional Transportation Commission.

SECTION 1.6 PLAN ORGANIZATION

The Plan is organized in the following chapters:

CHAPTER 1	Introduction
CHAPTER 2	Goals, Policies and Objectives
CHAPTER 3	Existing Conditions
CHAPTER 4	Needs Analysis
CHAPTER 5	Bicycle Plan Projects
CHAPTER 6	Bicycle Safety and Education Programs
CHAPTER 7	Funding Sources

SECTION 1.7 BTA COMPLIANCE

The Bicycle Transportation Account (BTA) was created to implement the California Bicycle Transportation Act, Streets and Highway Code Sections 890-894 (1994). BTA money may be used for infrastructure projects aimed at improving bicycle commuting and safety. Only projects which are listed and described in the local Bicycle Transportation Plan are eligible to receive BTA funding. The Scotts Valley BTP is consistent with the criteria stated in the California Streets and Highways Code section 891.2 listed in Appendix B: Bicycle Transportation Plan Checklist. Therefore, the projects listed within the Bicycle Transportation Plan are eligible for BTA funding.

CHAPTER 2 GOALS AND OBJECTIVES

This chapter introduces the goals and objectives of the Scotts Valley BTP, and discusses the consistency of the Plan with other City and Regional planning documents. Bicycling currently falls into four general use categories: commuting/utility, recreational, touring, and racing. The goals and objectives of the Scotts Valley BTP focus primarily on improving bicycle facilities and programs for commuters. Commuting/utility riders are those who regularly travel to and from a specific destination, usually as quickly and directly as possible, for very practical purposes, such as to purchase or transport goods and services or to travel to and from work, school, or events. Many people commute by bicycle for environmental or economic reasons, exercise and for the pleasure of riding.

Recreational cyclists include those who take day-long local excursions and are generally riding for pleasure or fitness. Off-road mountain bicycling is a very popular recreational activity. Touring, on the other hand, extends over longer periods of time. Touring requires more planning since the destination and routes are important factors. Racing is a specialized sport and race courses may use public roadways with appropriate public agency approval and permits.

To accommodate all cycling types, route systems should be accessible and frequent enough to be within a few blocks of all residents. They should be understandable and have adequate signs and graphics to make clear where routes are, and where they are going. Route systems should be safe, visible, relatively flat, and have adequate lane width. In addition, it is important to keep in mind that excessive motor vehicle traffic volume and speed make bicycling less safe and less fun. There is a need to design transportation systems that provide more balance between modes, a more efficient use of energy in the movement of people, and a more harmonious interaction between transportation and the environment. The goals and objectives of this plan address the aforementioned needs and seek to improve the bicycle infrastructure in Scotts Valley for commuters and other cycling enthusiasts.

SECTION 2.1 CITY OF SCOTTS VALLEY PLANNING DOCUMENTS

The 1998 Scotts Valley General Plan Circulation Element includes objectives, policies and programs to develop a safe and efficient bikeway system with an emphasis on commute and recreational uses. The preparation and implementation of a City Bicycle Plan facilitates achieving this goal by developing an action plan that can be used to seek County, regional, and statewide funding and grants. The Bicycle Plan is in support of the following Scotts Valley General Plan Circulation Element Policies and Programs:

- The City shall maintain a comprehensive bicycle system plan for the City of Scotts Valley and shall, where possible, integrate the plan with those of adjoining jurisdictions.
- The City shall designate a network of bicycle routes.
- The City shall develop funding sources for bicycle transportation system implementation and maintenance.

SECTION 2.2 SANTA CRUZ COUNTY REGIONAL TRANSPORTATION PLAN

The Santa Cruz County Regional Transportation Plan (RTP) was adopted by the Santa Cruz County Regional Transportation Commission in June 2010. The 2010 RTP contained only minor changes to the 2005 RTP, thus many of the goals and objectives from 2005 have been continued in the 2010 plan. Similarly to the Scotts Valley BTP, the 2010 Regional Transportation Plan (RTP) also seeks to increase bicycle travel, reduce conflicts between bicycles and other modes of travel and increase the potential of combining bicycle travel with other modes of transportation. The RTP seeks to develop bikeway systems, including bicycle lanes, which provide for safe bicycle travel. The Bicycle Plan is consistent with the following RTP bicycle planning policies that seek to update bikeway plans and implement projects to close gaps in the bikeway network and provide safe and convenient bicycling facilities. *Regional Transportation Plan (RTP)* numbers refer to specific objective and policy numbers found in that plan.

- RTP 1.4.1: Encourage signal standardization and signal timing improvements, with respect for pedestrian mobility and bicycle access, and discourage unwarranted stops on streets.
- RTP 1.5.4: Retain and/or enhance existing sidewalks, bikeways and bus turnouts in road improvement projects incorporating “Complete Streets” concepts.
- RTP 1.6.2: Reduce bicycle and pedestrian collisions by reducing the potential for conflicts between bicycles and autos and between pedestrians and autos.
- RTP 1.6.3: Minimize adverse impacts on bicyclists and pedestrians during construction and maintenance activities by prompt repair, sweeping, and avoiding longitudinal seams on all road edges and curb areas including bicycle lanes and by following current best practices.
- RTP 1.6.4: Encourage law enforcement agencies to take a more active role in the enforcement of laws governing the operation of bicycles and of motorists who are at fault in bicycle-motor vehicle accidents.
- RTP 1.6.5: Encourage driver instruction about sharing the road with bicycles and encourage bicyclists to attend safety education programs; support continuation of bicycle traffic school for bicyclist offenders.
- RTP 1.6.9: Improve bicyclists’ safety by eliminating impediments along all streets and bikeways, including but not limited to conducting Regular Street and pathway sweeping, bike lane repainting, trimming vegetation, and implementing traffic signal detection of bicycles.
- RTP 2.1.1: Consider the needs of the non-motorized traveler in all programming, planning, maintenance, construction, operations, and project development activities and products. Whenever feasible, the incorporation of pedestrian, bicycle, and transit facilities should be incorporated in all capital projects.
- RTP 2.7 Increase percentage of work trips done by bicycle to five percent of all trips and 20 percent of all work trips by 2035; do so by prioritizing bikeway projects based on: 1) increased safety or access; 2) complete gaps in the regional bicycle network; 3) high-

demand, high-density areas and commute routes; 4) along popular recreational routes. Develop a program to measure and monitor growth rates.

RTP 2.7.1: Construct and mark bikeways on roads and bridges consistent with state standards.

RTP 2.7.2: Locate bikeways as bicycle lanes on roads unless a more direct bike path can be provided.

RTP 2.7.4: Support promotion and transportation safety programs to encourage safe and frequent use of alternative transportation modes.

RTP 2.7.5: Ensure that the public is informed about safe bicycling routes and options.

RTP 2.7.6: Support programs which deter bicycle thefts.

SECTION 2.3 GOALS, OBJECTIVES, POLICIES AND ACTIONS

City of Scotts Valley cyclists envision being able to ride safely, conveniently and pleurably to all destinations. This Bicycle Plan is to serve the commuter and recreational objectives of bicycling, in concert with other citywide recreational programs such as city parks, equestrian and hiking trails, as defined in the *1996 Scotts Valley Parks Master Plan*. This Plan emphasizes safe and convenient commuter bicycle routes and facilities which complement other transportation modes (e.g., transit, carpool, etc.) and which serve places of employment, commercial districts, schools, and parks.

Bicycle Plan goals, objectives, policies and actions as outlined in the approved Circulation Element of the *1994 City of Scotts Valley General Plan*, *1996 Scotts Valley Parks Master Plan (SVPMP)*, *2010 Santa Cruz County Regional Transportation Plan (RTP)*, and the City of Scotts Valley Trip Reduction Ordinance No. 158.1 (TRO) include:

Goals:

The primary goals of the Bicycle Plan are to:

- 1) Improve bicycle circulation within the City of Scotts Valley and with adjoining jurisdictions;
- 2) Increase use of bicycling for short- and long-range trips, and reduce the use of motor vehicles;
- 3) Provide a safe and efficient bicycle transportation system within the Planning Area;
- 4) Design all streets and roads to be "bicycle friendly" to equally accommodate both bicycles and private motorized vehicles, in addition to equestrians, pedestrians, and transit ; and
- 5) Reduce traffic congestion by encouraging all residents, visitors and employees within the City to voluntarily increase bicycle trips for the benefit of all.

Objectives, policies and actions:

Objectives, policies and actions are listed under the following categories:

- A) System Continuity
- B) Design Construction, and Maintenance
- C) Commuting
- D) Bicycle Parking
- E) Funding
- F) Safety and Education.

A) SYSTEM CONTINUITY:

- A1.0 **Objective:** Establish a network of bicycle routes as part of the Planning Area's integrated transportation system.
- A1.1 **Policy:** The City shall maintain a comprehensive bicycle system plan for the City of Scotts Valley and shall, where possible, integrate the plan with those of adjoining jurisdictions.
 - A1.1.1 **Action:** The Public Works Department shall periodically review and recommend amendments to the citywide comprehensive bicycle system plan of the Parks Master Plan, and incorporate it into the City's integrated transportation plan. Coordinate this plan with Santa Cruz County and Caltrans to ensure a comprehensive regional plan.
 - A1.1.2 **Action:** Prepare and regularly update bikeway development plans and implement the non-capital intensive projects to reduce automobile-bicycle conflicts, and to close gaps in the bikeway network.
- A1.2 **Policy:** Develop bikeway systems according to the following priorities: a. Where bikeways can significantly increase bicyclist's safety or access, b. Along through routes, c. In high demand, high density areas, and d. Along popular recreational routes. When bicyclists' safety is a major concern, these priorities may be modified.
- A1.3 **Policy:** The City, working cooperatively with appropriate agencies and jurisdictions, shall designate a network of bicycle routes.
 - A1.3.1 **Action:** Existing and proposed multi-use trails and bicycle paths within the Planning Area should be officially designated as trails and pathways with access protected by ordinance and development review.
 - A1.3.2 **Action:** Continue to cooperate with the Santa Cruz County Regional Transportation Commission's Bicycle Committee to establish a network of bicycle lanes and paths.

Incorporate acquisitions and improvements of the bicycle lanes into the City's capital improvement program.

- A2.0 **Objective:** Provide designated bicycle, pedestrian and equestrian trails and pathways linking neighborhood and community park and recreation facilities.
- A2.1 **Policy:** In order to make neighborhood and community parks accessible to residents, a system of connecting pedestrian and bicycle paths and multi-use trails are needed.
- A3.0 **Objective:** Develop and maintain an integrated transportation system that is within the City's ability to finance and operate.
- A3.1 **Policy:** The City shall work with the Santa Cruz Metropolitan Transit District to develop a central multi-modal transit center along Mt. Hermon Road.
- A3.2 **Policy:** The City shall coordinate its transportation planning effort with appropriate agencies to promote an integrated transportation system which favors bicycles, pedestrians, public transit, transit stations, Park and Ride lots, and other lesser polluting transportation alternatives to the single occupancy vehicle.
- A3.2.1 **Action:** Submit capital improvements proposed for the City's transportation system to appropriate agencies, such as Caltrans, Santa Cruz County Regional Transportation Commission, and bicycle organizations, for review and comment.
- A3.2.2 **Action:** Adopt a new citywide transportation master plan that de-emphasizes the role of the automobile and emphasizes the role of alternative forms of transportation.
- A3.2.3 **Action:** Join and maintain membership in the Ecology Action's Sustainable Transportation Employer Membership Program offering multiple programs and incentives to the City of Scotts Valley employees, and the Association of Monterey Bay Area Governments (AMBAG).
- A3.2.4 **Action:** Encourage bicycle use by public agency employees (including police cyclists and parking control officers) for short business-related trips.

B) DESIGN, CONSTRUCTION, AND MAINTENANCE:

- B1.0 **Objective:** Minimize the potential adverse effects associated with development of an integrated transportation system.
- B1.1 **Policy:** The integrated transportation system shall be designed, constructed and maintained for the safety of its users and to preserve and/or enhance the beauty of the area.
- B1.2 **Policy:** Coordinate the planning, design and construction of bikeway systems with all implementing agencies.

- B1.3 Policy:** The integrated transportation system shall be designed, constructed, and maintained to minimize adverse impacts on the Planning Area, particularly on adjoining uses of land.
- B1.3.1 Action:** Through the environmental review process consider mitigation measures for traffic impacts which encourage the use of non-motorized vehicles and transit.
- B1.4 Policy:** Require those entities performing roadside work to maintain the road edge in the best possible condition during construction, explore ways to avoid lengthwise seams in bike lanes and require prompt repair (even pavement) and repainting of bike lanes before the project is considered complete.
- B1.5 Policy:** Ensure that bicycle facilities remain in a usable condition through regular maintenance and sweeping.
- B1.5.1 Action:** The Public Works Department shall perform the necessary maintenance on all established bicycle lanes to keep them free of obstacles that would pose safety hazards for commute-style bicycles.
- B1.6 Policy:** Construct and mark bicycle routes in conformance with state standards, as outlined in Planning and Design Chapter of the Highway Design Manual, published by the California Department of Transportation.
- B1.6.1 Action:** Build all bridges with enough width to safely accommodate bicycle travel. Allow for the 4-foot (1.2m) minimum bike lane.
- B1.6.2 Action:** When installing bike lanes measure out the bike lane from either side to ensure planned width throughout. At spots of inadequate width to maintain a standard bike lane, instead of painting a substandard bike lane, maintain as wide an outer lane as possible and sign as a Class III bike route.
- B1.7 Policy:** Retain all existing bikeways along with roadway improvement projects ensuring that bike lanes are not narrowed to the point that they become substandard.
- B1.8 Policy:** The City shall require new developments located along designated bicycle routes to provide an appropriate bicycle path, including rights-of-way and construction.
- B1.8.1 Action:** As a part of permit processing, require new developments to provide rights-of-way and install bicycle route improvements, per the Parks Master Plan adopted by the City Council March 1996.
- B1.9 Policy:** The City shall include bicycle lane construction in all road improvement and expansion projects on designated bicycle.
- B1.9.1 Action:** Provide facilities for safe bicycle travel, including bicycle lanes, as part of construction or improvement to all major arterial and collector roadways. Where bicycle lanes are not possible due to right-of-way restriction, etc., include a wide curb lane (at least 14' without on-street parking).

- B1.9.2 Action:** Include bicycle lane right-of-way acquisition and improvements in transportation improvement projects.
- B1.9.3 Action:** Multi-use trails should be graded, 8 feet wide and 2 feet buffers on each side, with drainage facilities as necessary, in accordance with Caltrans standards.
- B1.10 Policy:** Locate bikeways as bicycle lanes adjacent to the main traveled way unless a more direct and useful separated bike path can be provided. Where bicycle lanes are not possible due to right-of-way restrictions, etc., include a wide curb lane (at least 14' [4.26 meters] without on-street parking).

C) COMMUTING:

- C1.0 Objective:** To develop a bikeway network maximizing the safety and convenience of users of all levels of experience within that system. The network should be primarily for commuter travel designed to increase the potential of combining bicycle travel with other forms of transportation and also include the opportunity for recreational use.
- C1.1 Policy:** Consider and pursue the possibility for a more direct commute route offered by some bike paths.
- C1.2 Policy:** Limit on-street parking on arterial and collector streets, encourage parking alternatives, pursue off-street parking development as methods to provide Class-II bike lanes and do not eliminate joint bike lanes/parallel shoulder parking unless the new bike lanes are effectively as wide or wider.
- C2.0 Objective:** Develop and direct resources to increase the access to and convenience of bicycle commuting.
- C2.1 Policy:** Strongly encourage the inclusion of showers and lockers in new commercial, industrial and government development and in existing development.
- C2.2 Policy:** The City will encourage and support employer efforts towards the Congestion Management Plan's goal of achieving a 1.35 average vehicle ridership at major employment sites.
- C2.3 Policy:** The City will encourage land developers to distribute available information to employees and customers regarding alternative transportation.

D) BICYCLE PARKING:

- D1.0 Policy:** The City shall encourage enclosed bicycle parking at shopping centers and businesses.

- D2.0 **Policy:** Provide and maintain secure long-term bicycle parking with the development of new and existing transit centers and shelters and park-and-ride lots. Park-and-ride lots should include bicycle lockers.
- D3.0 **Policy:** Provide secure bicycle parking at major bus stops, especially along routes which serve educational facilities.
- D4.0 **Policy:** Encourage that event sponsors provide safe bicycle access and secure bicycle parking at special events.
- D5.0 **Policy:** Continue the program to install bicycle parking on City-owned property at or near high demand areas through the Santa Cruz Regional Transportation Commission Bike Secure Program and/or other funding sources.

E) FUNDING:

- E1.0 **Policy:** The City shall develop funding sources for bicycle transportation system implementation and maintenance.
- E1.1 **Action:** Pursue State bicycle improvement grant funds, local revenue sources and assessment district financing to implement bicycle system improvements.
- E1.2 **Action:** The Public Works Department shall include the estimated costs to maintain the bicycle lanes in the annual public works budget.
- E1.3 **Action:** Obtain trail easements by encouraging private donation of land, by public purchase, or by dedication of trail easements, in full compliance with state and federal law.

F) SAFETY AND EDUCATION:

- F1.0 **Objective:** Reduce the conflict between bicycles and other modes of travel, reduce the number of accidents involving bicycles.
- F1.1 **Policy:** The City shall construct and maintain designated bicycle lanes in conformance with established safety standards.
 - F1.1.1 **Action:** The Public Works Department shall inspect all bicycle lane improvements for conformance with established safety standards and adopted plans.
 - F1.1.2 **Action:** Alternative bicycle routes will be found to avoid congested areas where possible.
- F1.2 **Policy:** The City shall discourage street parking along designated bicycle lanes.
 - F1.2.1 **Action:** Extend “No Parking” Zones to include all improved bicycle lanes.

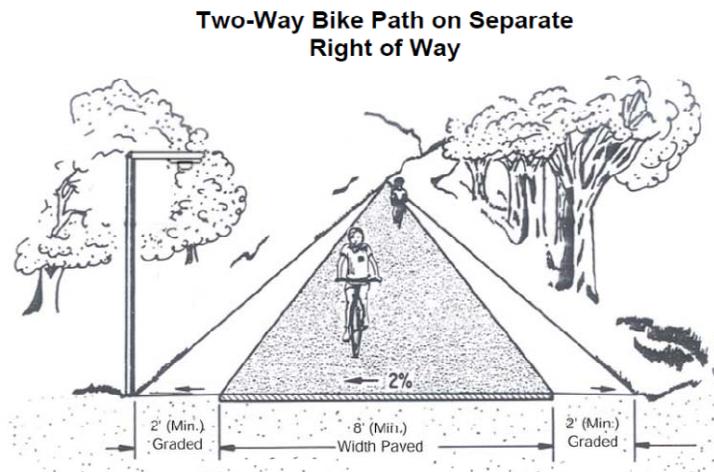
- F1.3 **Policy**: On-street parking along arterials shall be prohibited.
- F1.3.1 **Action**: Retain the ordinance prohibiting parking on Mt. Hermon Road and Scotts Valley Drive.
- F1.4 **Policy**: The City shall promote a bicycle safety educational program of the Scotts Valley Police Department.
- F1.4.1 **Action**: Encourage bicycle rider training program for all elementary school children in Scotts Valley and a better instruction of motorists about sharing the road with bicyclists should be included in all driver's education courses for high school students and adults.
- F1.5 **Policy**: Continue the cooperative bicycle hazard reporting program and report action taken.
- F1.6 **Policy**: Limit the number of driveways when planning new commercial/ residential developments in order to reduce automobile-bicycle conflicts.

SECTION 3.1 EXISTING BICYCLE FACILITIES

The California Department of Transportation recognizes three types of bikeways, Class I, Class II and Class III. The City of Scotts Valley bicycle network is composed of a combination of all three. Each Class of bikeway is distinguishable by its structural design and location in relation to the road. Descriptions of Class I, Class II and Class II bikeways are as follows:

Class I Bikeway (Bicycle Path) is typically grade-separated from motor vehicles, providing two-way bicycle and pedestrian travel on a single wide path. Bicycle paths work best in areas with few crossings (i.e., along edges, such as river fronts). Where bicycle paths do cross motor vehicle routes, extreme care must be taken to make the crossing for bicyclists as safe as possible. Caltrans minimum width is 8 feet (4 feet each way, with a stripe down the center), with a 2 foot added shoulder on each side. A Class I bicycle path is conceptually illustrated in Figure 3-1.

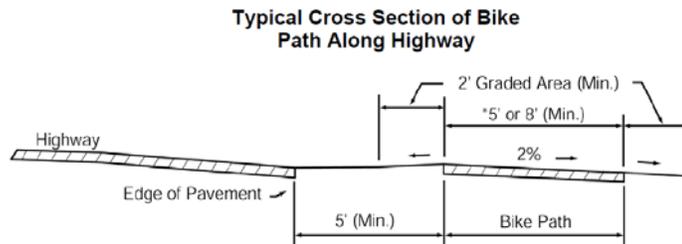
Figure 2-1: Class I Bikeway



Note: For sign clearances, see MUTCD, Figure 9B-1.

(Caltrans, 2009)

Figure 3-2: Class I Bikeway Section



NOTE: See Index 1003.1(5)

*One - Way: 5' Minimum Width
Two - Way: 8' Minimum Width

(Caltrans, 2009)

Class II Bikeways (Bicycle lanes) are striped lanes on roadways that are marked by signage, pavement striping, and/or stencils, Figure 3-3. Class II bicycle lanes are located on arterial streets and major collector streets in accordance with the City of Scotts Valley General Plan.

The Caltrans minimum recommended width for roadways with bike lanes is shown on Figure 3-5.

Figure 3-3: Class II bikeway (Scotts Valley Dr.)

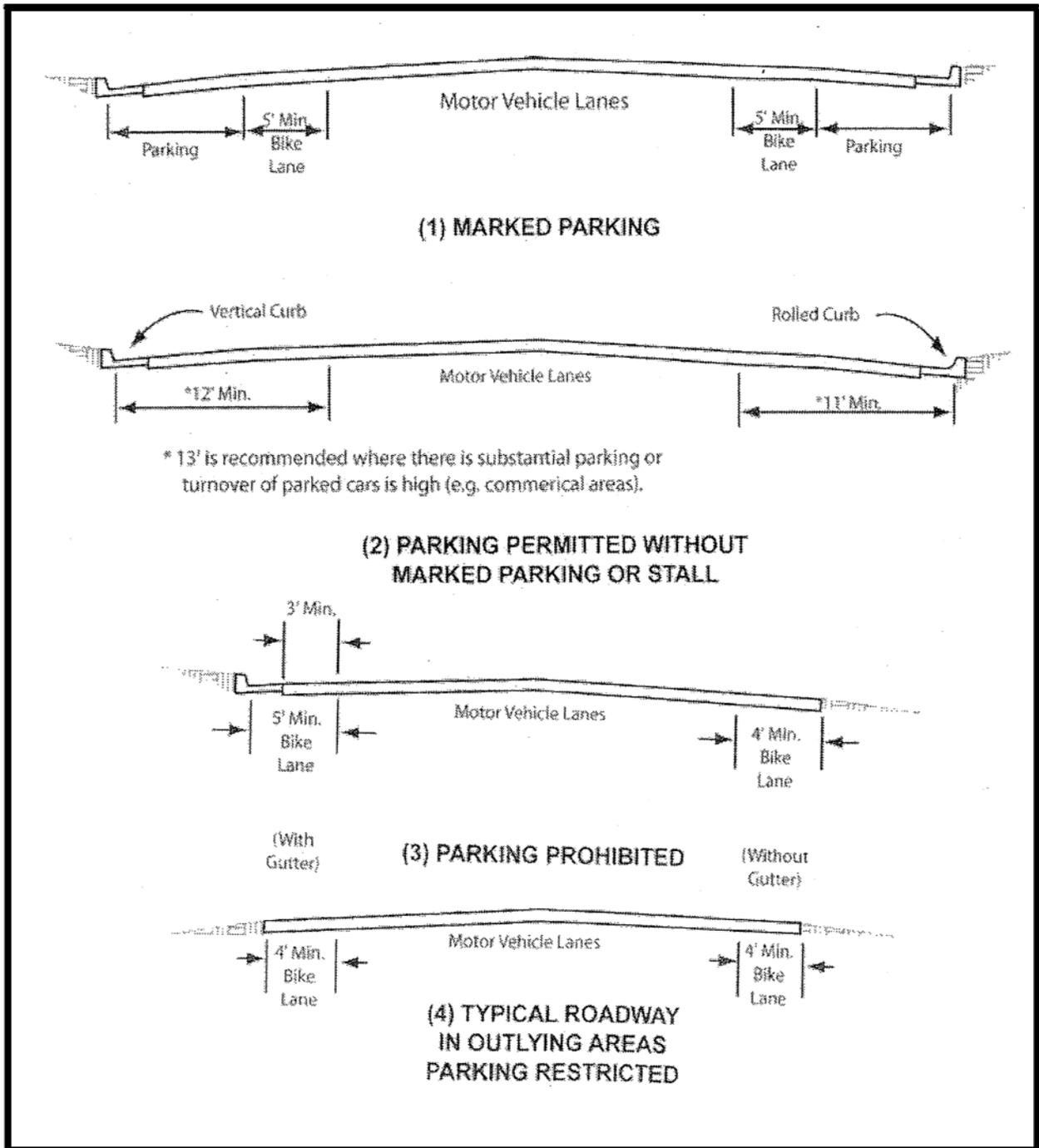


Class III Bikeways (Bicycle Routes) are shared with motorized vehicle traffic and are used on streets where auto traffic volume and speed do not warrant other facilities. The City of Scotts Valley’s uses the shared lane pavement markings, aka “sharrows” on Bicycle Routes to indicate to bicyclists and motorists the appropriate footprint for bicycle travel (Figure 3-5).

Figure 3-4: Class III bikeway (Bean Crk Rd., west of Bluebonnet Ln.)



**Figure 3-5 Typical Class II Bike Lane Cross Sections
(On 2-Lane or Multilane Roadways)**



Note: For Pavement Marking Guidance, see California MUTCD, Section 9C.04

(Caltrans, 2009)

A Bicycle Boulevard is an enhanced route for cross-town bicycle travel (traffic signals or 4-way stops at all arterial crossings are essential), which also prevents or discourages motor vehicles from also using the street as a thoroughfare. Successful bicycle boulevards have low volumes of auto traffic and slow auto speeds, and therefore do not require striped bicycle lanes. The primary way to prevent the street from being used as an auto thoroughfare (which the recommended traffic controls at arterial crossings would otherwise encourage) is to use "traffic calming" devices to slow down traffic. Traffic calming devices include "speed humps", "bulbouts", "mid-street islands" with trees or foliage, and narrow traffic lanes.

The City of Scotts Valley currently has approximately 16.47 miles of bike paths (Class I bikeway) and bike lanes (Class II bikeway). Table 3-1) (Appendix A2, Scotts Valley Bicycle Facilities Map).

Table 3-1: Santa Cruz County Annual Bikeway Miles 1994-2010

Jurisdiction	1994	1997	1999	2002	2003	2004	2005	2006*	2007	2008*	2009	2010
Capitola	5.8	6.2	6.4	6.4	8.3	10.4	11	10.8	10.8	14.58	14.58	14.58
Santa Cruz	28.8	30.9	31.8	31.8	31.8	35.2	35.2	54.6	54.6	56.77	57.32	57.69
Scotts Valley	2.8	4.4	4.8	8.5	9.3	9.5	9.5	11.46	11.76	13.07	14.67	16.47
Watsonville	5.8	5.8	6	9.2	9.2	9.2	11.4	22.66	23.95	27.19	27.2	27.2
Unincorp.	24.7	26.4	26.7	28.1	32.6	32.6	32.6	92.98	95.26	95.86	95.86	95.86
UCSC								2.28	2.28	2.76	3.37	3.37
S.C. Co. Total	67.9	73.7	75.7	84	91.2	96.9	99.7	194.78	198.65	210.23	213.00	215.17

Source: Santa Cruz County Regional Transportation Commission, 2010

Notes: Totals are for bike paths (Class I bikeway) and bike lanes (Class II bikeway)
 Bike paths are counted as centerline miles and include one way paths
 Bike lanes are counted as directional miles

* A complete recount of all bikeway facilities using consistent methodology was conducted for years indicated.

For a comprehensive bikeways map of Santa Cruz County see Appendix A3 of this Bicycle Plan. The bikeway map is produced by the Santa Cruz County Regional Transportation Commission and provided to the community free of charge. The map provides a detailed look at existing bicycle lanes and paths within the City of Scotts Valley and throughout Santa Cruz County, informational items on bicycling tips and laws, and local bicycle resources.

SECTION 3.2 EXISTING LAND USE

Land use and housing density are directly related to transportation systems. Certain transportation modes such as train or light rail depend on medium to high density populations in order to be successful. Conversely, low-density development is dependent upon the automobile.

Bicycle transportation can be successful in both high-density downtown areas as well as low-density suburban development, provided that adequate infrastructure exist.

It is important that bikeways and bicycle paths connect residential neighborhoods to commercial and entertainment areas and employment zones. The City of Scotts Valley's commercial and entertainment areas and employment zones are along two arterial streets of Scotts Valley Dr. and Mt. Hermon Road. Bike lanes currently are provided on these major arterials.

Scotts Valley Drive is a four-lane, north-south roadway. Scotts Valley Drive has an intermittent raised median in the project vicinity, but generally has a two-way center left-turn lane. Scotts Valley Drive extends from Mt. Hermon Road in the south to its terminus in the north just beyond its intersection with Sawyer Circle. South of Mt. Hermon Road, Scotts Valley Drive becomes Whispering Pines Drive.

Granite Creek Road is a two-lane, local collector that runs generally in an east-west direction in the vicinity of SR-17, and then travels in a north-south direction east of SR-17. This roadway extends from Scotts Valley Drive in the north to Branciforte Drive in the south. Note: Regional access to the City is provided via SR 17. SR 17 is a four-lane north-south freeway, with two mixed-flow lanes in each direction. SR 17 extends from I-880 in San Jose in the north to its terminus at State Route 1 in Santa Cruz, south of Scotts Valley. SR 17 provides access to Scotts Valley via interchanges at Granite Creek Road and at Mt. Hermon Road.

Mt. Hermon Road is a four-lane, east-west arterial. Mt. Hermon Road is the only principal arterial in the City of Scotts Valley extending from SR-17 in the east to Graham Hill Road (minor arterial) in the west.

Residential zones are connected to commercial zones primarily by Class I and Class II bikeways. The City of Scotts Valley Zoning Map can be found in Appendix A1 for a detailed illustration of land use patterns in the City.

CHAPTER 4 | NEEDS ANALYSIS

The need for bicycle transportation does not exist solely on the local level, but on the State and National level as well. This chapter will discuss the issues that can be addressed through increased bicycle travel, current local bicycle commuter trends and statistics, and commuter needs.

Perhaps the greatest issue which is applicable on the local, State and National levels, is a heavy dependence on fossil fuels for transportation, energy and agriculture amongst other things. Not only does the burning of fossil fuels pollute the environment, but its limited accessibility and national supply can leave consumers vulnerable to fluctuating prices. Because housing development and land use have centered on the automobile over the past 50 years, an increase in gas prices can have a significant financial impact on commuters. This is evidenced by the fact that in many households in the U.S., transportation is the second greatest household expense after housing. Gas prices and driving are inversely related; when gas prices are low more people drive. Conversely, in 2008 the price of gas increased to \$4 per gallon and the total Vehicle Miles Travelled (VMT) in the United States decreased by 57.8 billion miles from 2007 (Flusche, 2009). Although high gas prices can be devastating especially to low income working families or those who commute great distances by car, they can also be an opportunity for change. When fuel is expensive and fewer people drive, alternative modes of transportation should be promoted and improved to increase and sustain ridership.

In response to the problems caused by the burning of fossil fuels, the State of California passed Senate Bill 375: Redesigning Communities to Reduce Greenhouse Gasses. The bill requires that local jurisdictions plan for alternative modes of transportation and stop urban sprawl amongst other strategies to reduce harmful emissions. Although SB 375 is aimed at reducing emissions and not necessarily reducing fossil fuel consumption, the two are intrinsically connected, and therefore the latter may also be addressed in the implementation of the bill. Bicycling as a mode of transportation is not only greenhouse gas emission-free, but it allows more freedom in time of travel than public transit, and allows for travel of greater distances than walking. The bicycle has built in incentives and is widely applicable, as it is an inexpensive alternative to the automobile that is viable in low-density or high-density neighborhoods alike. Because of this, increasing bicycle ridership through programs and small infrastructure improvements is a relatively quick and affordable way for local jurisdictions to reduce greenhouse gas emissions.

SECTION 4.1 TRIP GENERATORS

Trip generators are popular destinations that are regularly frequented. They include popular parks and public buildings, beaches, regional shopping centers, schools and tourist attractions. Because these places attract more people, they are good candidates for public transit service and alternative modes of transportation. Alternately, traffic congestion, large parking lots and the presence of many cars can detract from the charm, attractiveness or accessibility of a place.

One benefit to bicycling is that often times it is possible to park much closer to the desired destination than with other modes of transportation. In order to encourage individuals to choose

to ride a bicycle instead of drive, it is important to have ample and secure bicycle parking at popular destinations.

SECTION 4.2 COMMUTE PATTERNS AND COMMUTER NEEDS

It is important to analyze commute patterns when addressing climate change and pollution, as the majority of commuter trips are taken by automobile and 45% of greenhouse gas emissions in Santa Cruz County are attributed to transportation. The modal split is a useful indicator as to whether or not a transportation network adequately accommodates multiple modes of transportation. In the case of commuting, the modal split is the percentage of employees that travel by each mode of transportation to and from work. An uneven modal split may indicate a transportation system that favors one mode of transportation over others (2005 AMBAG Baseline Report). The modal split for City of Scotts Valley employees commuting to work in 2008 was:

- 80% drove alone
- 2% used a bicycle, or public transit
- 18% split their commuting methods between driving alone and carpooling

The overwhelming percentage of automobile trips made by City employees suggests that the transportation system in the City of Scotts Valley and surrounding areas favors the automobile. This theory is strengthened by the fact that the majority of employees live within 5 miles of the workplace, a distance that is within the range of alternative modes of transportation such as bicycling, walking and transit. The result of an automobile-dominant mode split is poor air quality, traffic congestion and a large portion of land devoted to parking. City employee commute trips accounted for 8% of the overall emissions due to City government operations, or 66 metric tonnes of CO₂ (AMBAG, 2009). In order to reduce greenhouse gas emissions, the City will lead by example and strive for a modal split for employee commute trips of:

- 60% drive alone
- 15% use a bicycle, public transit, carpool or walk
- 25% split their commuting methods between driving alone and carpooling

This goal will be achieved if the above modal split is accomplished by 2020. In order to increase bicycle ridership the City will offer incentives to those who do not drive to work. Some incentives may include monetary compensation, bicycle commuter facilities, discounted transit passes, zero interest bicycle loans and emergency ride home services. The City will also analyze vehicle fleet trips, which account for 35% of greenhouse gas emissions due to government operations. Bicycles will be added to the City fleet, and when feasible, fleet vehicle trips will be replaced with bicycle trips.

Table 4-1: City of Scotts Valley Commuter Mode Split

	Commuters	Percent of Total
Car, Truck or Van		
Drove Alone	4994	80.5%
Carpooled	589	9.5%
Alternative Transportation		
Walk	341	5.5%
Bicycle	105	1.7%
Bus	87	1.4%
Other means	62	1.0%
Motorcycle	26	0.4%
TOTAL	6204	100%
Source: (U.S. Census, 2000)		

In 2000, only 105, or 1.7% of all commuters who lived in Scotts Valley rode their bicycles as their main mode of transportation to work (Table 4-1). In terms of alternative transportation to the automobile, walking was the most popular with 341 people, followed by bicycling, and the third most popular mode was the bus with 87 riders. These figures are most likely lower than actual ridership, as the U.S. Census only counts the primary mode of transportation to work. According to this method of counting, an individual who primarily drives alone to work but rides a bicycle once or twice a week would only be counted for “drove alone”. Additionally, if an individual rides a bicycle to the bus or transit, transit will be counted for the trip.

An overwhelming number of workers “drove-alone” even though 50% of workers commuted less than 20 minutes away (2005 Baseline Report). The uneven mode split suggests that there are factors other than distance which deter people from commuting on bicycle. The most common barriers to bicycle commuting are concerns about safety, access to showers and changing facilities, distance and the ability to run errands after work or reach family quickly in an emergency (michianabiketowork.org; Voiland, 2008). Local jurisdictions are working to break down these barriers by offering incentives and programs such as Ecology Action’s Sustainable Transportation Employer Membership which offers zero interest bicycle loans, discounted transit passes and an “Emergency Ride Home Service”.

In 2000, roughly one third of all commuters in Scotts Valley had a less than 15 minute trip to work, which suggests that the distance travelled was likely less than 9 miles if driving at 35 mph, 2.5 miles if bicycling, or 1.25 miles if walking briskly (Table 4-2). By breaking down barriers to bicycle commuting especially to those who live within 9 miles of work, the City of Scotts Valley will strive to achieve 5% of total trips and 20% of commuter trips by bicycle by the year 2020 for all residents.

Table 4-2: Travel time to Work

Travel Time to Work	City of Scotts Valley	% of Commuters
Less than 15 minutes	2,028	32.7%
15 to 29 minutes	1,923	31%
30 to 44 minutes	571	9.2%
45 to 59 minutes	869	14%
60 minutes or more	813	13.1%
Total	6,024	100%
Source: US Census 2000. Summary File 3, QT-P23: Journey to Work.		

CHAPTER 5|BICYCLE PLAN PROJECTS

The City of Scotts Valley seeks to provide bikeways for commuting and connections that will provide greater access between residential, employment, and educational centers. The development of new bikeways is prioritized by the criteria listed below in the following order:

1. High density, high demand areas and school routes
2. Low density areas where cyclist's safety is a concern (neighborhoods)
3. Recreational routes in low density, low demand areas

Critical needs that are met with each project also are identified in the Proposed Project List (Appendix C1) to enable planners and decision-makers to prioritize funds as they become available.

The Planning and Design Chapter of the Caltrans Highway Design Manual provides specific detail on design speeds, signing, striping, and other related bikeway design issues as does the U.S. Manual on Uniform Traffic Control Devices for streets and highways (MUTCD).

The high priority bicycle plan projects include the completion of bicycle lanes on existing streets, on-street bicycle safety improvements and studies, a bicycle safety and education program for students, and the installation of bicycle detector loops or video sensors at signalized intersections and replacement of antiquated or ineffective infrastructure. These projects have the clear benefit of providing greater convenience and safety for bicyclists. Other projects that improve bicycle facilities and encourage cycling include bicycle lane maintenance, parking facilities, and inter-modal connections, as well as studies to address unsafe areas for bicyclists. Proposed bicycle projects are described in this chapter; existing bicycle safety and education programs are discussed in Chapter 6.

SECTION 5.1 PROPOSED BIKEWAYS

For a comprehensive list of proposed bikeways refer to Appendix C1 Proposed Project List.

For a comprehensive list of completed bikeways refer to Appendix C2 Proposed Project List.

SECTION 5.2 BIKEWAYS AND ROAD MAINTENANCE

California Vehicle Code requires bicyclists to ride in a bicycle lane if provided. Bicyclists are permitted to ride outside of the bicycle lane if there is an obstruction or unsafe conditions. If not maintained, Class II paths can collect debris and crack making them unfit for the use of bicyclists. The City of Scotts Valley and the Regional Transportation Commission have recognized that to facilitate bicycling, bikeways must be maintained.

Yearly the City spends approximately \$15,000 to maintain bike lanes. Maintenance funds include sweeping bike lanes, restriping faded lane markings, patching potholes, and cutting overhanging vegetation.

Maintaining the integrity of bikeways during construction is an appropriate use of conflict bikeway funds. Such funds can also be used to remove hazardous fixed objects, which include features of existing infrastructure.

Construction activities typically occur in the portion of the road where cyclists travel, so it is important that such activities maintain a safe environment for bicyclists. Through the encroachment permit process, the City of Scotts Valley will work with contractors and utility companies to insure that roadway standards are maintained during and after construction projects are completed. To this end, the City supports and upholds the recommended guidelines for construction areas put forth by the Santa Cruz County Community Traffic Safety Coalition (Appendix F).

SECTION 5.3 BICYCLE PARKING AND SUPPORT FACILITIES

There are several additional components to a successful bicycle network besides bicycle lanes. Facilities and amenities that support and encourage bicycling include secure and convenient bicycle parking facilities, shower and changing facilities, bicycle sensitive signals at intersections, and intermodal connections.

Providing convenient and secure bicycle parking is a good way to increase bicycle ridership. Several cities in California and across the Country have converted street parking spaces into permanent bicycle parking in commercial areas. Although there was an initial concern that removing a space for car parking would be detrimental to local businesses, it was soon realized to be the opposite. Ten to twelve bicycles can be parked securely in place of one car, thus the number of potential patrons of local businesses increases dramatically when spaces are converted to bicycle parking.

A common myth is that individuals who ride their bicycle to commercial areas do not spend as much money at retail stores as individuals who drive. A 2010 study conducted by San Luis Obispo Regional Rideshare, shows that drivers do not spend more money downtown than bicyclists on average. Although drivers spend more money per trip, bicyclists take more trips downtown than drivers. Bicycle parking requirements are established in the City of Scotts Valley Zoning Ordinance for new development. Rates vary according to the type of use. The bicycle parking standards will be updated to specify the number of bicycle racks required, where they should be located and basic design requirements. The City will consider increased bicycle parking in certain commercial or recreational areas.

The Santa Cruz County Regional Transportation Commission also administers a program to help fund the installation of secure bicycle racks and lockers in commercial and public facility areas. Since 1993, the "Bicycle Secure" program has provided inverted u racks or subsidized bicycle lockers for agencies and businesses resulting in the installation of over 2000 new bicycle parking spaces.

Currently, there are few public places for changing and storing bicycle clothes and equipment. To encourage commuter bicycling use, some jurisdictions have adopted ordinances, which require new employment-generating uses to provide onsite bicycle parking, lockers, and facilities for showering and changing clothes. These types of requirements for new or expanded development provide incentives for employees to use bicycling as a commuting alternative. City-wide site design requirements for worksites have not been adopted. If considered in the future, ordinances should include requirements for bicycle storage, showers, and clothes lockers to further encourage bicycle commuting.

SECTION 5.4 TRANSIT AND INTERMODAL FACILITIES

There is a need to design transportation systems that provide more balance between modes, a more efficient use of energy in the movement of people, and a more harmonious interaction between transportation and the environment. This can be achieved by requiring that all users be considered when planning new transportation infrastructure. For example, bicycle parking should be required along with automobile parking for new development.

Scotts Valley is serviced by Santa Cruz Metro for regional bus transportation. Santa Cruz Metro makes an effort to be “bicycle friendly” by offering bicycle racks mounted on the front of each bus, bicycle lockers at the Scotts Valley Transit Center located off of Kings Village Road, and allowing folding bicycles on board the buses. By combining bicycle and bus, bicyclists are able to travel further distances without the use of an automobile. Connections between the various transportation modes allow people to use a combination of transportation modes for daily trips. People can combine bicycling with bus, automobiles, carpooling, vanpooling, train travel, and walking for their commuter and recreational trips. Facilities that can help cyclists combine transportation modes include: bike racks on buses and vanpools, and bike racks and lockers at transit stops, park-and-ride lots, and parking structures. Connections between the various transportation modes allow people to use a combination of transportation modes for daily trips. People can combine bicycling with bus, automobiles, carpooling, vanpooling, train travel, and walking for their commuter and recreational trips. Facilities that can help cyclists combine transportation modes include: bike racks on buses and vanpools, and bike racks and lockers at transit stops, park-and-ride lots, and parking structures. The Scotts valley Transit Center also serves as Park-and-Ride lot where bicyclists can catch the Highway 17 Express bus, carpools and vanpools. Bicycle parking facilities will soon be available at this site. More lots with bike locking facilities are being planned for the future along the Highway 17 corridor

CHAPTER 6.0 BICYCLE SAFETY AND EDUCATION PROGRAMS

Scotts Valley is serviced by many bicycle safety and education programs, as well as advocacy groups. Bicyclists need to know the vehicle laws and need to develop good cycling skills, so they can coexist safely with motorists. Motorists need to know that cyclists have a legal right to the roadways and need to learn coexistence strategies. Education programs can provide motorists with valuable information they need and bicyclists with on-bike training. It is essential that the safety benefits of helmets and other protective measures be stressed. Over the years these programs have helped reduce the number of bicycle accidents in Scotts Valley. In 2009 Scotts Valley had a total of 6 bicycle accidents, 2 of which were injury accidents. In 2010 these numbers were reduced to 3 bicycle accidents, none of which involving injury accidents.

The Community Traffic Safety Coalition compiles data from the Statewide Integrated Traffic Records System (SWITRS) each year regarding bicyclist injury and death rates. SWITRS collects fatal and non-fatal traffic accident data from CHP areas and police departments across California. The Santa Cruz County Bicycle Injuries and Fatalities 2000-2008 data, put out by the Community Traffic Safety Coalition, can be found in Table 6-1. The data from these reports is used to inform local jurisdictions within the county of collisions involving bicyclists, so that appropriate measures can be taken to improve safety.

Table 6-1: Bicyclist Injuries and Fatalities for Santa Cruz County

Bicyclists Injured & Killed 2000-2009										
Injured	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Capitola	11	8	10	11	20	7	5	6	8	4
Santa Cruz	60	59	58	77	63	71	82	64	91	68
Scotts Valley	2	4	4	4	6	2	0	14	4	8
Watsonville	17	22	20	7	17	12	13	3	16	18
Unincorporated	65	58	61	67	56	59	54	63	70	76
UC Santa Cruz	n/a	12								
S.C. County Total	155	151	153	166	162	151	154	150	189	186
Killed	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Capitola	0	0	0	0	0	0	0	0	0	0
Santa Cruz	1	0	0	1	0	0	0	1	2	0
Scotts Valley	0	0	0	0	0	0	0	0	0	0
Watsonville	0	1	0	0	0	0	0	0	0	1
Unincorporated	0	1	0	0	0	1	1	1	0	2
S.C. County Total	1	2	0	1	0	1	1	2	2	3

(Bicyclist Injuries and Fatalities for Santa Cruz County, 2009)

Bicycle education is a critical piece of bicyclist safety. Programs that teach individuals the importance of safety equipment and bicycle maintenance, as well as road etiquette and bicyclist

rights and responsibilities, save lives every year. The City of Scotts Valley is committed to work with the Soquel Unified School District, Ecology Action, the Santa Cruz County Department of Health and Safety, and other organizations with programs and projects that meet the goals bicycle safety.

There are several education and safety programs available to residents and students in Scotts Valley. In addition to educating bicyclists, it is also important to reach out to automobile drivers who may not be familiar with the legal rights of bicycles on the road. The California Department of Transportation currently does not require bicycle education as a part of the permitting and licensing of automobile drivers, so it is up to local organizations and government to inform the public.

Bicyclists need to know the vehicle laws and they also need to develop good cycling skills, so that they can coexist safely with motorists. Motorists need to know that cyclists have a legal right to the roadways and they need to learn coexistence strategies, as well. Education programs can provide motorists with valuable information they need and bicyclists with on-bicycle training. The safety benefits of helmets and other protective measures also need to be stressed. The bicycle education and safety programs and resources are listed in the following sections of this chapter.

The following organizations offer bicycle safety training, education and bicycle support to Scotts Valley residents:

Santa Cruz County Regional Transportation Commission - Plans for, funds, and supports numerous bicycle projects. A SCCRTC Transportation Planner serves part-time as a Bicycle Coordinator and staff person for the Bicycle Advisory Committee; handles bicycle hazard reporting (of potential or existing hazards on roadways or bikeways), applications for Bikes Secure, providing bicycle parking at private lots, vanpools and other locations (<http://www.sccrtc.org/>). The SCCRTC also produces the Santa Cruz County Bikeways Map which is distributed free to the public.

Commute Solutions - A rideshare program that provides callers with commute information, such as carpool and vanpool matching, transit schedules, bicycle commuter brochures, bikeway maps, and route suggestions, amongst other resources (<http://www.commutesolutions.org/>).

Bicycle Advisory Committee – advises the Santa Cruz County Regional Transportation Commission (SCCRTC) on bicycle planning and policy related issues. The Committee provides technical review of proposed bicycle projects and funding applications as well as theft prevention, bicycle parking programs, education and safety, and other bicycling related issues (<http://www.sccrtc.org/ros-bike.html>).

Ecology Action – a non-profit environmental consultancy that offers bicycle education and safety programs, technical support, and incentive programs to encourage active transportation. Ecology Action works closely with local jurisdictions, schools and businesses, and is an active presence in the community (<http://www.ecoact.org/Programs/Transportation/index.htm>).

Bike to Work/School Program - Offers two County-wide Bike to Work/School Day events per year as well as the Spring Bike Week. These events are fun, inclusive, and educational, and encourage, support, and promote more people to bicycle for transportation.

Bike Smart – A Safe Routes to School program run by the Transportation Division of Ecology Action, a local non-profit organization. Bicycle safety training is done in the classroom and outside where youth of all ages participate in “Bicycle Rodeo” obstacle courses.

Cabrillo College Go Green (Partnered with Ecology Action) – Offers up to \$500 no-interest loan to purchase a bicycle for commuting to and from school and/or work. The College also hosts a bicycle co-op and offers bicycle lockers and secure bicycle parking.

Community Traffic Safety Coalition - a public safety organization representing over 30 community and government organizations, funded by a grant from the State Office of Traffic Safety. Some of its activities include: "Share the Road" with bicyclist signs, low-cost helmet distribution, outreach and education of enforcement agencies, Latino Community outreach, night-riding education (<http://www.sctrfficsafety.org/>).

Ride n’ Stride Bicycle and Pedestrian Safety Program – Teaches elementary school children to safely ride their bicycles and walk. The program covers traffic and safety laws including helmet use and proper street crossing.

Bicycle Traffic School – A program aimed to hold bicyclists who receive traffic violations responsible for illegal behavior and educate them so the behavior is not repeated. Bicycle traffic safety classes are offered to individuals who receive traffic violation tickets in lieu of paying the fine.

People Power - a grass-roots advocacy group that monitors and advocates for positive bicycle associated issues (<http://peoplepowersc.org/>).

CHAPTER 7|FUNDING SOURCES

There are a variety of funding sources on the Federal, State and local levels available for bicycle facilities and programs. As the opportunity arises the City of Scotts Valley Public Works Department will apply for such funding. A detailed list of current funding options is included in Appendix D of this Plan. Additionally, some funding programs are listed below. Adoption of this Bicycle Plan by the Scotts Valley City Council will enable the City of Scotts Valley to apply for Bicycle Transportation Account (BTA) funding offered by the State of California.

SECTION 7.1 FEDERAL FUNDING SOURCES

- Safe Routes to School Program (SRTS)**
- Section 402 – State and Community Highway Safety Program**
- Federal Lands Highway Funds**
- Recreational Trails Program**
- Federal Highway American Recovery and Reinvestment Act (ARRA)**
- Transportation Enhancement (TEA)**

SECTION 7.2 STATE FUNDING SOURCES

State funding sources:

- Bicycle Transportation Account (BTA)**
- Wildlife Conservation Board Public Access Program**
- California Conservation Corps**
- California Safe Routes to School (SR2S)**
- State Transportation Improvement Program (STIP)**
- Environmental Enhancement and Mitigation (EEM)**

SECTION 7.3 LOCAL FUNDING SOURCES

Local funding sources:

- Transportation Development Act (TDA)**
- Vehicle Registration Surcharge Fee (AB 2766)**
- City Sales Tax**

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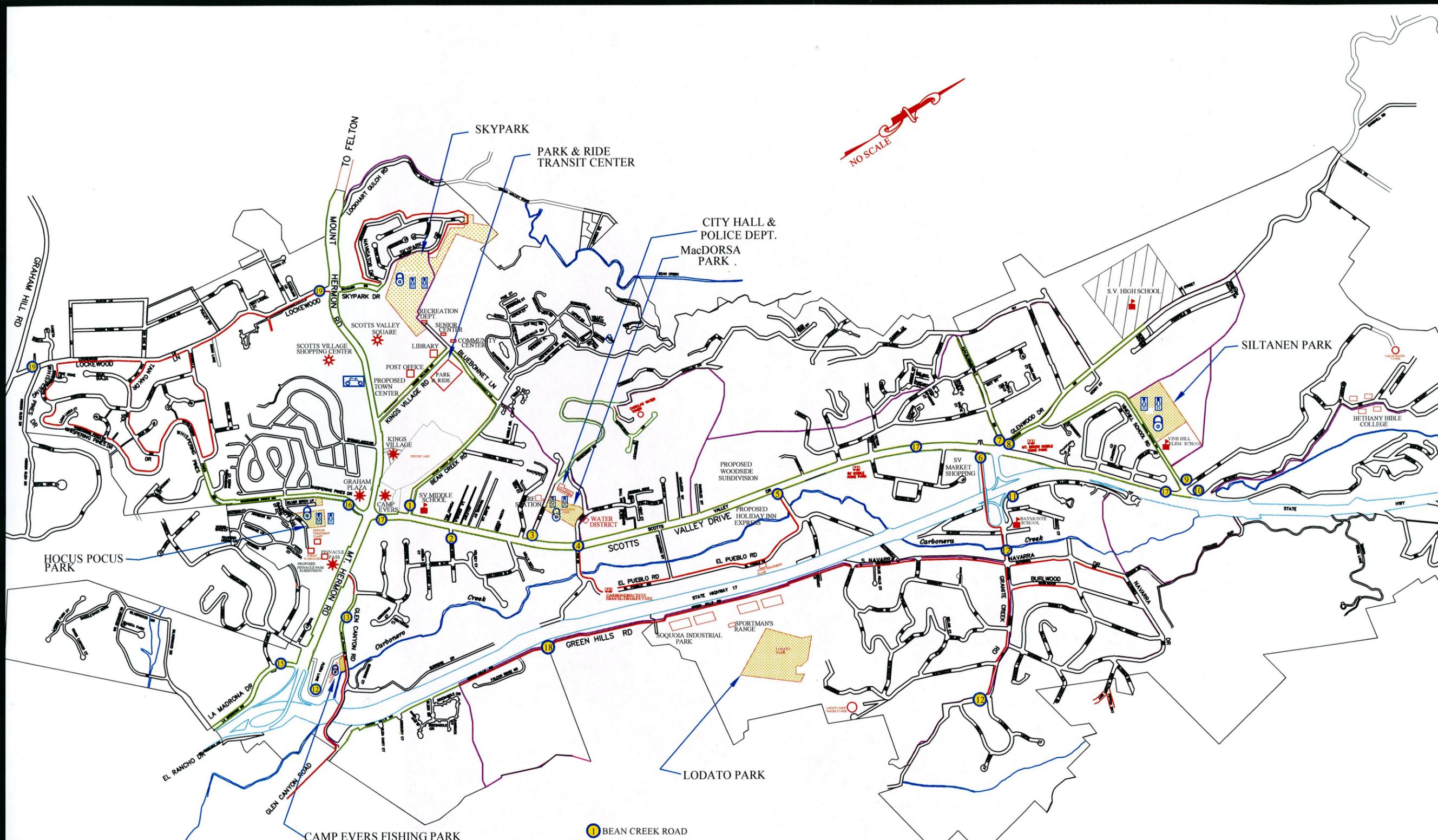
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APPENDICES

To View Click or Ctrl + Click to Follow

<http://www.scottsvalley.org/downloads/planning/ZoningMap.pdf>

SEE MAP BELOW



BIKEWAYS MAP LEGEND

BIKE LANE		BIKE SHOP	
BIKE ROUTE		PUBLIC BATHROOMS (NO SHOWER FACILITIES)	
PROPOSED BIKE LANE/BIKE PATH		BIKE RACK	
		SHOPPING CENTER	

- 1 BEAN CREEK ROAD
- 2 QUIEN SABE ROAD
- 3 ERBA LANE
- 4 CIVIC CENTER DRIVE/ DISC DRIVE
- 5 EL PUEBLO DRIVE
- 6 GRANITE CREEK OVERPASS
- 7 HACIENDA DRIVE
- 8 GLENWOOD DRIVE
- 9 VINE HILL SCHOOL ROAD/TABOR DRIVE
- 10 BETHANY DRIVE
- 11 SANTAS VILLAGE ROAD
- 12 GRANITE CREEK ROAD
- 13 FLORA LANE
- 14 GLEN CANYON ROAD
- 15 LA MADRONA ROAD
- 16 WHISPERING PINES DRIVE
- 17 SCOTTS VALLEY DRIVE
- 18 GREEN HILLS ROAD
- 19 LOCKWOOD LANE

To View Click or Ctrl + Click to Follow

<http://sccrtc.org/wp-content/uploads/2011/04/2010-bike-map-countyside.pdf>

and

<http://sccrtc.org/wp-content/uploads/2011/04/2010-bike-map-cityside.pdf>

APPENDIX B | BICYCLE TRANSPORTATION PLAN CHECKLIST

Requirement	Location
(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.	Chapter 4 Table 4-1 pg 25, 26
(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.	Pg 7, 22 & Appendix A-1, pg 37
(c) A map and description of existing and proposed bikeways.	Appendix A-2 , pg 38
(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.	Pg 22 & Appendix A-2, pg 38
(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.	Pg 28, 29 & Appendix A-1, pg 37
(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.	Pg 28, 29 & Appendix A-1, pg 37
(g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists.	Chapter 6, pg 31 & 32
(h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.	Chapter 1, pg 9.8
(i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting.	Chapter 2, pg 9 &10
(j) A description of the projects proposed in the plan and a listing of their priorities for implementation.	Appendix C1, pg 41
(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.	Appendix C2, pg 43

APPENDIX C1 | PROPOSED PROJECTS LIST

Project	Priority	Existing Conditions	Goal(s) Achieved	Estimated Cost	Potential Funding
1) Glen Canyon Road, Class II, Phase II (Camp Evers Park to Green Hills)	H	<ul style="list-style-type: none"> • Narrow 2-lane road • High speeds • HWY 17 Overpass 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$500,000	RTC/BTA/Local
2) Mount Hermon Road, Class II, Phase II (Skypark/Lockwood Ln. to Lockhart Gulch Road)	H	<ul style="list-style-type: none"> • High volume • High trucks 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership	\$500,000	BTA/Local
3) Bethany Dr Class I (Scotts Valley Dr. to Bethany College)	M	<ul style="list-style-type: none"> • Narrow roadway • Residential • High volumes during commute 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$800,000	BTA/Local
4) Glenwood Drive, Class II, Phase II (Casa Way to City Limit)	H	<ul style="list-style-type: none"> • Narrow roadway • Residences • High School 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$500,000	BTA/Local
5) Granite Creek, Class II including Highway 17 overpass	H	<ul style="list-style-type: none"> • Narrow in places • Residential • High volumes during commute 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$500,000	BTA/Local
6) North Navarra Dr. through Sucinto Drive, Class II	M	<ul style="list-style-type: none"> • Undeveloped area behind Borland 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$400,000	BTA/Local
7) Lockwood Lane, Class I Mt. Hermon Rd. to Whispering Pines Dr.	H	<ul style="list-style-type: none"> • Narrow • Medium traffic volumes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$200/sign	RTC/Local

8) El Rancho, Class II	M	<ul style="list-style-type: none"> • Narrow • Medium traffic volumes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$300,000	Local/BTA/Caltrans
9) Lockhart Gulch Road, Class II	M	<ul style="list-style-type: none"> • Narrow, No bike lane • Primarily Residential 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	\$500,000	Local/BTA/Caltrans
10) Camp Evers Park, Carbonero Creek at Glen Canyon and Camp Evers Creek, bike rest stop	H		Goal 2 - Increase Ridership	\$100,000	BTA/Local
11) Skypark, Bike rest stop	M		Goal 2 - Increase Ridership	\$100,000	BTA/Local
12) County-Wide Bike Route Signage Program	M	<ul style="list-style-type: none"> • Lack of way-finding signage on popular bike routs 	Goal 1 – Circulation, Connectivity & Access	\$10,000	RTC, Local

APPENDIX C2 | “COMPLETED” PROPOSED PROJECTS LIST

Project	Priority	Existing Conditions	Goal(s) Achieved	Projected Cost	Potential Funding
1) Glen Canyon Road, Class II, Phase I (Mt. Hermon Rd. to Camp Evers Park)	H	<ul style="list-style-type: none"> • Narrow 2-lane road • High speeds 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	RTC/Local
2) Mount Hermon Road, Class II, Phase I (HWY 17 to Skypark/Lockwood Ln.)	H	<ul style="list-style-type: none"> • High volume • High trucks 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership	Complete	SR2S, Local
3) Glenwood Drive, Class II, Phase I (Scotts Valley Dr. To Casa Way)	H	<ul style="list-style-type: none"> • Businesses • Residences • High School • Some areas widened to 4 lanes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	
4) Scotts Valley Drive, Class II Mt. Hermon Rd to Glenwood Dr. to Tabor Dr.	H	<ul style="list-style-type: none"> • High speed • High volume • High trucks 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	BTA/Local
5) Kings Village Road, Class II	H	<ul style="list-style-type: none"> • Commercial Zone • Sidewalks and bike lanes needed 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	RTC/Local
6) Bluebonnet Lane, Class III	H	<ul style="list-style-type: none"> • Commercial zone, Include in Bluebonnet Lane Assessment District 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	RTC/Local

Project	Priority	Existing Conditions	Goal(s) Achieved	Projected Cost	Potential Funding
7) Civic Center Drive, Class II	H	<ul style="list-style-type: none"> • Narrow road • Sidewalks and bike lanes needed 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	RTCA/Local
8) Bean Creek Road, Class II, Scotts Valley Dr. to Bluebonnet	H	<ul style="list-style-type: none"> • Narrow • Medium traffic volumes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	BTA/RTC/Local
9) Hacienda Dr., Class II, Glenwood Dr. to Casa Way	H	<ul style="list-style-type: none"> • Narrow • Medium traffic volumes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	BTA/RTC/Local
10) Vine Hill School Road , Class II, Glenwood Dr. to Scotts Valley Dr.	H	<ul style="list-style-type: none"> • Narrow • Medium traffic volumes 	Goal 1 - Circulation, Connectivity and Access Goal 2 - Increase Ridership Goal 3 - Safety	Complete	BTA/Local

APPENDIX D| FUNDING MATRIX

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
FEDERAL SOURCES						
Congestion Mitigation and Air Quality Improvement (CMAQ)		SCTA/MTC				Funds may be used for bicycle facilities and programs. Website:www.mtc.ca.gov/funding/STPC MAQ
Transportation, Community and System Preservation Program (TCSP)		FHWA				Focuses on improving the efficiency and accessibility of the transportation system through planning and implementation. (www.fhwa.dot.gov/tcsp/pi_tcsp.htm)
Highway Safety Improvement Program		Caltrans		10%		The HSIP provides funding for bicycle safety improvement projects. (www.dot.ca.gov/hq/localprograms/hsip .htm)

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETY-LU)		RTPA & Caltrans	varies	11.47%	Federally certified Jurisdictions	SAFETY-LU is the major federal funding source for surface transportation funding. The majority of funds are meant for capital improvement projects; however, 10% of funds may be used for safety and education programs.
Surface Transportation Program (STP)	varies	RTPA/MPO/ Caltrans/FHWA	Approx. \$200 million to state	11%-20% non federal	Federally Certified jurisdictions	Contact RTPA. Funds can be used for a wide variety of projects. STP is exchanged every year. After exchange, money belongs to RTPA's. (www.mtc.ca.gov/funding/STPCMAQ)

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
Transportation Enhancements (TE)		FHWA			Municipality, County, State agency, University, Federal government, or Non-profit. Only state and federal agencies can apply for ITIP TE.	Surface transportation related bicycle infrastructure projects and education programs are eligible for funding.
Section 402 – State and Community Highway Safety Grant Program		DOT Traffic and Safety				Funding may be used for bicycle safety and education programs, educational materials and/or safety equipment (helmets).
STATE SOURCES						

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
<p>State Transportation Improvement Program (STIP) Related Programs. The statewide four-year Capital Improvement Program adopted biennially by the California Transportation Commission, which included all major transportation projects funded by state or federal funds. These projects are submitted by the local jurisdictions through the RTPA's RTIP/STIP budget process.</p>						
<p>Regional Share (Major Projects \$300,000 and up.)</p>	<p>July 1 odd years to RTPA</p>	<p>CTC, RTPA</p>	<p>varies</p>	<p>11.47% for transit only</p>	<p>RTPAs</p>	<p>Emphasis is on reducing traffic congestion & increasing capacity. RTPA determines projects for the region within CTC guidelines. Must be adopted into RTIP by Dec. 1 of odd # years. (Except 12/98)</p>
<p>Bicycle Transportation Account (BTA)</p>	<p>December 1 to Caltrans District 5</p>	<p>Caltrans</p>	<p>\$7 million/yr</p>	<p>n/a</p>	<p>Cities, County</p>	<p>Contact Caltrans. State account designated to fund bicycle facilities. Local jurisdictions must have a Bicycle Plan approved by RTPA & State. Project requests must not exceed \$170,000.</p>

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
State Highway Account (SHA)	Summer in odd # years	Caltrans, RTPA	\$360,000	n/a	Caltrans District Offices	Contact Caltrans. Must be associated with State Highway and be able to provide for enhanced safety. Funds available to districts for bicycle facilities on state right of way.
Minor A/B programs	Ongoing, Approve by April, odd years	Caltrans	n/a	Approx.\$ 4 mil/yr to Dist. 5	Local Jurisdictions & special districts	Contact Caltrans. For projects (\$107,000-\$750,000) Minor A program; Minor B for projects up to \$107,000.
Habitat Conservation Fund Grant Program		California State Parks & Recreation	varies	50% non-state match	Local Jurisdictions & special districts	Contact CA Parks & Rec. Projects that attract people to park and wildlife areas. Fund will last until 2020. Must comply w/ CEQA, NEPA, & must demonstrate land ownership.

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
Environmental Enhancement and Mitigation Program (EEM)		State Resources Agency	\$10mil/yr	0%, but favored	Nonprofit agencies, local, state, and federal agencies.	Contact State Resources. Projects that enhance or mitigate existing or future transportation projects. Will be available until year 2000. \$500 K is the maximum allocation for a project. Must be above and beyond what CEQA requires for traffic-generating project. The Resources agency makes final recommendations to Caltrans.
Safe Routes to School		Caltrans	\$22 million/yr	10%, \$450k max	Local Jurisdiction	Contact Caltrans
		Energy Commission	varies	n/a	MPOs, Transit Districts	Contact CA Energy Commission. Funded through oil companies violation fees. Projects must demonstrate energy savings. Requests are made via the State Legislature.

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
Land and Water Conservation Fund		California State Parks & Recreation	varies	50% non state	n/a	Contact Parks & Rec. States must adopt a State Comprehensive Outdoor Rec Plan. For recreational parks facilities.
Recreational Trails Program (RTP)		California State Parks				Supports the development and maintenance of recreational trails. (www.fhwa.dot.gov/environment/recreational/index.htm)
Coastal Conservancy		California State Coastal Conservancy				Encourages projects that will increase or improve public access to the coast, rivers and creeks. It also supplies funding for resource conservation projects. (scc.ca.gov/category/grants/)
LOCAL SOURCES						

Grant Source	Due Date	Administering Agency	Annual Total	% Match Required	Eligible Applicants	Comments
Transportation Development Act (TDA), Article 8	ongoing	RTPA	varies	0%	Cities, County	In Santa Cruz County, the funds are allocated annually according to formula. Local Jurisdiction proposes projects to the Bicycle Committee and the Regional Transportation Commission for final approval. Article 8 funds are used in Santa Cruz primarily for bicycle and pedestrian projects.
Vehicle Registration Surcharge Fee (AB 2766)	April	MBUAPCD	Est. over \$1 million/yr district wide	0%, but preferred	Private and Public agencies	Contact MBUAPCD. For projects that contribute to the reduction of motor vehicle air pollution emissions in the MBUAPCD District (3 counties are included: Santa Cruz, San Benito, and Monterey)

APPENDIX E | TRANSPORTATION ACRONYMS (FOR GRANT FUNDING INFORMATION MATRIX)

<p>AMBAG</p>	<p>Association of Monterey Bay Area Governments</p>	<p>A voluntary association of Santa Cruz, and Monterey Counties and the incorporated cities in the two counties. Serves as the federal MPO for transportation planning purposes. San Benito County is included in this Association with respect to transportation planning. Handles interregional issues including transportation planning, water quality, air quality conformity analyses and demographic forecasts.</p>
<p>CEQA</p>	<p>California Environmental Quality Act</p>	<p>Legislation which requires state and local agencies to disclose, consider and mitigate any environmental impacts associated with their projects or actions.</p>
<p>CTC</p>	<p>California Transportation Commission</p>	<p>A nine member board appointed by the Governor (with the Legislature's confirmation) to oversee transportation funding and project delivery. This board is responsible for review of the Regional Transportation Improvement Programs. This board approves the State Transportation Improvement Program which allocates state and federal funding.</p>
<p>DO</p>	<p>District Office</p>	<p>Shorthand for California Department of Transportation District Offices. The DO for the Central Coast is Caltrans District 5 located in San Luis Obispo.</p>

FHWA	Federal Highway Administration	A branch of the US Department of Transportation. This federal agency has responsibility for review and approval of transportation projects and programs which impact the designated federal interstate system. Also oversees federal transportation planning agencies and MPO requirements.
FTA	Federal Transit Administration	A branch of the US Department of Transportation. This federal agency has responsibility for review and approval of transportation projects and programs which impact transit systems.
MBUAPCD	Monterey Bay Unified Air Pollution Control District	This regional agency holds jurisdiction over the implementation and enforcement of state and federal air quality regulations and guidelines in the three county area which includes Santa Cruz, Monterey and San Benito counties.
MPO	Metropolitan Planning Organization	This agency is designated by the Governor to administer the federally mandated transportation planning processes in metropolitan areas (over 50,000 population). AMBAG is the MPO for our region.

<p>RTIP</p>	<p>Regional Transportation Improvement Program</p>	<p>A state mandated capital improvement program for regional transportation projects which will use federal and / or state funding sources. The Santa Cruz County Regional Transportation Commission (SCCRTC) adopts the Santa Cruz County Regional Transportation Improvement Program (RTIP) which is then forwarded to the CTC for inclusion in the final STIP. A key component of the RTIP is the selection of projects for state “regional share” funds.</p>
<p>RTPA</p>	<p>Regional Transportation Planning Agency</p>	<p>Local agencies designated by the State legislature to conduct state mandated regional transportation planning and programming activities. In Santa Cruz County, Santa Cruz County Regional Transportation Commission (SCCRTC) is the Regional Transportation Planning Agency. The corresponding agency in Monterey County is the Transportation Agency for Monterey County (TAMC). RTPAs often coordinate the distribution of several different state and federal funds such as STP/CMAQ, TEA, TDA & STA.</p>
<p>SAFE</p>	<p>Service Authority for Freeway Emergencies</p>	<p>An authority enabled by state law and established by local jurisdictions to collect a \$1 fee for the purpose of developing and maintaining a highway motorist aid system with the cellular callboy as its main component.</p>

<p>SCCRTC</p>	<p>Santa Cruz County Regional Transportation Commission</p>	<p>SCCRTC is the designated Regional Transportation Planning Agency (RTPA) for Santa Cruz County. It has primary responsibility for development of regional transportation policy and plans and programming of funds within the Santa Cruz County area. SCCRTC is also the congestion management agency, the regional ride share agency (Commute Solutions), and the Service Authority for Freeway Emergencies (SAFE) for Santa Cruz County.</p>
<p>TAMC</p>	<p>Transportation Agency for Monterey County</p>	<p>TAMC is the designated Regional Transportation Planning Agency (RTPA) for Monterey County. It has primary responsibility for development of regional transportation policy and plans and for programming of funds within the Monterey County area.</p>
<p>TDA</p>	<p>Transportation Development Act</p>	<p>A 1971 state law which provides for the collection of a ¼¢ sales tax dedicated for local transportation projects. Revenues are allocated on an annual basis by the Santa Cruz County Regional Transportation Commission (SCCRTC).</p>



COMMUNITY TRAFFIC SAFETY COALITION

Recommended Guidelines to Protect the Safety of Bicyclists, Pedestrians, and Disabled Travelers during Road Construction

As stated in the California MUTCD (2003 Edition with Revisions Number 1 and 2 Incorporated, December 2007), “The needs and control of all road users (motorists, bicyclists, and pedestrians within the highway, including persons with disabilities in accordance with the Americans with Disabilities Act of 1990 (ADA) Title II, Paragraph 35.130) through a TTC zone shall be an essential part of highway construction, utility work, maintenance operations, and the management of traffic incidents.”

THE PROBLEM

There are three general situations which impact bicyclists, pedestrians, and disabled travelers:

Work in the *bikeway** or *walkway* which forces bicyclists or pedestrians to compete with motor vehicles in a narrow car lane.

Work which is not in the *bikeway* or *walkway* but which puts equipment, debris, or warning signs in the *bikeway* or *walkway*.

Work which blocks the direction of travel without a clear, safe, and convenient detour for cyclists, pedestrians, or wheelchair travelers.

In addition, please be aware of these specific hazards for bicyclists, pedestrians, and disabled travelers.

* For the purposes of these guidelines, “*bikeway*” will be used to refer to where bicyclists usually travel on a given road, including painted bike lanes, paved shoulders, the right side of a wide travel lane, or the center of a narrow travel lane if there is no bike lane or shoulder. “*Walkway*” will be used to refer to sidewalks, shoulders, and paths where pedestrians and wheelchairs travel.

Hazards to Bicyclists

Signs, equipment, or debris in the *bikeway*.

***Bikeway* blocked without advance warning.**

Rough pavement or gravel without advance warning.

Poor pavement transitions, especially when parallel to the line of travel (eg: metal plate edges or pavement removal/resurface areas which are not tapered).

Inadequate time to pass through a signalized one-lane, two-way traffic control.

Hazards to Pedestrians

Blocked or hazardous *walkway* which is not marked in a way that is visible in advance, especially at night.

Alternate route or detour which is not negotiable by wheelchairs, strollers, carts, etc.

Special Hazards to Visually Impaired Pedestrians

Blocked or hazardous *walkway* without a barrier which is solid enough to be discernible by guide dog or cane.

Special Hazards to Wheelchair Travelers

Signs, equipment, or debris partially blocking the *walkway*.

Sidewalk blocked with no curb cut or ramp to exit sidewalk, or advance warning to exit at a prior curb cut.

Rough pavement, grooves, or gravel without advance warning. Rocks of 3” diameter or greater are especially hazardous because they may cause the wheelchair to stop abruptly and eject the occupant

THE SOLUTION

The California MUTCD (Section 5-01-2) includes these “fundamental principles” for bicyclists and pedestrians in construction and maintenance work zones:

Bicycle and pedestrian “movement should be disrupted as little as practicable”.

“Pedestrians and bicyclists should be provided with access and passage through, or around, the temporary traffic control zone at all times.”

Bicyclists and pedestrians “should be guided in a clear and positive manner while approaching and space traversing the temporary traffic control zone.”

In addition, please consider the following specific safety and access measures.

Detours

When construction blocks the *bikeway*, accommodations should be made for bicyclists if they are made for motor vehicles, including safe and well marked detours for cyclists when needed. In some situations when motor vehicles are detoured, a safe corridor can be left open for bicyclists. If not possible, post “End Bike Lane” and “Share the Road” (or “Merge Left”) caution signs to encourage cyclists to merge into the through lane. Rather than directing bicyclists to walk their bikes in pedestrian zones, try to provide a rideable alternative.

If construction or signs must block the *walkway*, establish safe, well-signed detours for pedestrians which are accessible for wheelchairs, strollers, carts, etc.

When one-lane, two-way traffic control is done by temporary traffic signals, timing should accommodate bicyclists, who will be slower than motor vehicles especially in the uphill direction. Consider push button signals for bicyclists or special bicycle loops, if practical.

Barriers should include a portion low enough and solid enough to be easily discernible by a cane, guide dog, or child. If necessary, use flaggers to guide pedestrians.

Signs

Whenever possible, construction warning signs should be placed out of the *bikeway* and *walkway*, so that the sign itself is not a barrier for bicyclists for wheelchair travelers. Remove construction signs promptly when construction pauses or ends.

Any construction or sign which blocks the *bikeway* should have sufficient sight distance, including night-time visibility, to allow cyclists time to merge safely into the car lane. Use “End Bike Lane” and “Share the Road” signs.

Any construction or sign which blocks the *walkway* should have prior warning to allow wheelchairs time to exit the walkway at a prior curb cut.

For all construction where the *bikeway* or *walkway* is blocked or the lane narrows, post “Share the Road” caution signs to warn motorists to slow down and watch for bicyclists and pedestrians.

Pavement Surface

Temporary pavement or metal plates installed during construction should have cold mix asphalt tapered at the edges for bicyclist, pedestrian and wheelchair safety. When locating metal plates, avoid placing edges in the middle of the *bikeway*. Debris in the *bikeway* or *walkway* should be cleared at the end of each workday.

If no smooth surface is available for bicyclists, pedestrians, or wheelchairs, post signs warning “Rough Surface” or “Uneven Pavement” at the beginning of the work area. Keep signs posted at the end of the workday. Use reflective signage on barricades with flashers for night safety.

Prior to “sign off” on projects, verify that the pavement in the *bikeway* and *walkway* is even. Overlay should be smoothed at drainage grates, manholes, and gutter pan, and after narrow trenching in the *bikeway*.