2010
Tulare County Regional Bicycle Transportation Plan

September 2010

TCAG
Tulare County Association of Governments

BEFORE THE
TULARE COUNTY ASSOCIATION OF GOVERNMENTS
COUNTY OF TULARE, STATE OF CALIFORNIA

In the matter of:

ADOPTING THE TULARE COUNTY REGIONAL BICYCLE TRANSPORTATION PLAN	)))	Resolution No. 10-045

WHEREAS, the 2010 Tulare County Regional Bicycle Transportation Plan has been prepared to establish various goals and policies regarding bicycle transportation and identify potential future improvements of bicycle facilities within Tulare County; and

WHEREAS, the Tulare County Association of Governments has developed the Plan through its member agencies, the public, and other interested parties; and

WHEREAS, the Tulare County Association of Governments released the draft Plan for comment during the month of August; and

WHEREAS, the Tulare County Association of Governments finds that the proposed Tulare County Regional Bicycle Transportation Plan is consistent with the State Department of Transportation guidelines; and

NOW, THEREFORE, BE IT RESOLVED, that the Tulare County Association of Governments adopts the 2010 Tulare County Regional Bicycle Transportation Plan.

The foregoing Resolution was adopted upon motion of Member Ortega, seconded by Member McKittrick, at a regular meeting held on the 20th day of September, 2010, by the following vote:

AYES: Ishida, Vander Poel, Cox, Worthley, Ennis, McKittrick, Boyer, Kimball, Hamilton, Ortega, Link, Mendoza, Zimmerman, Sparks

NOES: McKinley

ABSTAIN:

ABSENT: Allwardt

TULARE COUNTY ASSOCIATION OF GOVERNMENTS

Pete Vander Poel
Chair, TCAG

Ted Smalley
Executive Director, TCAG

Chapter 1: Executive Summary

Bicycling is an alternative mode of transportation. It is considered one of the most cost-effective ways to reduce air pollution, traffic congestion, wear on local roads, petroleum consumption and demand for additional roads. Tulare County's Regional Bicycle Plan is intended to provide a backdrop towards making bicycling an integral part of daily life in Tulare County.

Tulare County is centrally located within the State of California and has a growing population of 447,814. The eastern two thirds of the County is comprised primarily of public lands within the Sequoia National Park, Sequoia National Forest, Mineral King, Golden Trout and Devils Postpile areas.

The Tulare County Bicycle Transportation Plan has been developed through the efforts of the Tulare County Association of Governments (TCAG) and the Bicycle Advisory Committee. The Bicycle Advisory Committee, staff from the cities of Dinuba, Exeter, Farmersville, Lindsay, Porterville, Tulare, Visalia, and Woodlake, County of Tulare, Caltrans, local cycling clubs, local service clubs and citizens interested in improving the bicycling environment in Tulare County. Without the sustained efforts of these organizations and citizens, the Regional Bicycle Plan would not have been developed. Though prepared under the auspice of TCAG, this plan is intended to serve all local jurisdictions, and most importantly, the citizens of Tulare County.

The most recent Tulare County Regional Bicycle Transportation Plan was completed in 2007, and updated in 2008. The need arises to update the Tulare County Regional Bicycle Plan to improve bicycle planning and meet state requirements which stipulate that a bicycle plan must be no more than four years old to be considered for Bicycle Transportation Account (BTA) funding.

Centrally located within the State of California, Tulare County is situated in a geographically diverse region. The county includes an area of 4,863 square miles (3,158,400 acres), contains over 4000 miles of roadway, and is one of the largest counties in the state. Mountain peaks of the Sierra Nevada range rise to more than 14,000 feet in its eastern half, and the extensively cultivated fertile valley floor in the western half, has allowed Tulare County to become one of the top producers of agricultural commodities in the United States. Agricultural operations and light and medium manufacturing are also important components of the local economy.

In 2004, TCAG prepared the Tulare County Regional Bicycle Transportation Plan that consolidated all the bicycle planning efforts into one document as a Transportation Control Measure. The Regional Bicycle Transportation Plan was divided into nine sections, one for each jurisdiction, to prioritize, plan, estimate and coordinate bicycle activities. All cities as well as the unincorporated area of the county in Tulare County have adopted either the Regional Bicycle Transportation Plan, or created their own, which has also been incorporated into this Plan. The Regional Bicycle Transportation Plan is a comprehensive plan that provides for travel between

major urban areas and within urban areas. The Plan describes an unsigned system of routes designated for improvement.

The Regional Bicycle Plan opens funding opportunities for state Bicycle Transportation Account funds, Safe Routes to School funding, Regional Trail Programs, Transportation Enhancement, and various other state and federal funding sources. Over the past three (3) years (2007-2009) Tulare County Agencies have received over $450,000 in Bicycle Transportation Account funds for bicycle improvements.

State & Federal Planning Requirements:

TCAG is responsible for carrying out federal transportation planning requirements and providing a forum for coordination of governmental activities that require long-term planning. TCAG also acts as a clearinghouse for projects requiring state or federal funding and can assist member agencies to secure funding for bicycle related projects such as bicycle infrastructure, bicycle parking, bicycle racks on transit, and public education/information.

The Tulare County Regional Bicycle Plan was developed to meet state and federal funding criteria and is designed to serve as a reference document for all bikeway improvement funding applications. The state requirements addressed by this plan include the following elements:

a) The estimated number of existing bicycle commuters in the plan area and the estimated increase in the number of bicycle commuters resulting from implementation of the plan;
b) A map and description of existing and proposed land use settlement patterns which shall include, but not be limited to, locations of residential neighborhoods, schools, shopping centers, public buildings and major employment centers;
c) A map and description of existing and proposed bikeways;
d) A map and description of the existing and proposed end-of-trip bicycle parking facilities. These shall include, but not be limited to, parking at schools, shopping centers, public buildings and major employment centers;
e) A map and description of the existing 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 bicycle on transit or rail vehicles or ferry vessels;
f) A map and description of the existing and proposed facilities for changing and storing clothes and equipment. These shall include, but not be limited to, locker, restroom and shower facilities near bicycle parking facilities;
g) A description of bicycle safety and education programs conducted in the area included within the plan, efforts by the law enforcement agency having primary traffic law enforcement responsibility in the area to enforce provisions of the Vehicle Code pertaining to bicycle operation, and the resulting effect on accidents involving bicyclists;
h) A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.

i) A description of how the bicycle transportation plan has been coordinated and is consistent with other local or regional transportation, air quality, or energy conservation plans, including, but not limited to, programs that provide incentives for bicycle commuting;
j) A description of the projects proposed in the plan and a listing of their priorities for implementation; and
k) A description of past expenditure for bicycle facilities and future financial needs for projects that improve safety and convenience for bicycle commuters in the plan area.

Local Government & Citizen Involvement:

The development of the Tulare County Regional Bicycle Plan was written and funded by the Tulare County Association of Governments. A Bicycle Advisory Committee (BAC) was established to advise TCAG in the development and maintenance of bicycle interests within Tulare County. A Visalia based group, Trails and Waterways Committee, also gives direction to the BAC for projects within and near the City of Visalia. Meetings of the BAC are facilitated by the TCAG staff using 'consensus-building' techniques to bring the group to general agreement.

The role of the BAC was to develop a plan which accommodated the diverse needs of the various bicyclists within Tulare County. Therefore, to better understand the needs of these many groups, the BAC was comprised of the members from the following groups:

- Planning & Public Works staff from Tulare County, Visalia, Dinuba, Tulare, Woodlake, Farmersville, Exeter, Porterville and Lindsay;
- Bicycle facilities users;
- Local service clubs;
- Local health officials;
- Law Enforcement officials; and
- Local citizens.

A complete list of the BAC members who participated in this study is included in Appendix C. The BAC meets when needed to address local concerns and to promote bicycling. Agendas from these meetings for the 2010 Plan update are also provided in Appendix C.

Characteristics of Bicyclist

Bicyclists can generally be classified into two groups: recreational and commuter riders. The characteristics of and needs of these two rider types are different as discussed below.

Commuter Riders

Commuter cyclists can be broken down into two general categories: adult bicycle commuters and youth bicycle commuters. Adult cyclists are typically experienced, serious riders who are informed about riding laws and safety issues. The commuters ride on all types of facilities and can commute for a distance or ten miles or more (although most commute trips are less than 4 miles). Similar to students, commuters also travel during peak periods of traffic. This group of rider is most concerned with adequate bicycle facilities that will be provided and maintained.

Youth Cyclist commuters have a majority of their bicycle trips made to and from schools. Because cities typically have three to four elementary schools for each high school, elementary school students live closer to their school than high school students. High School Students are more likely to travel greater distances to school and use arterial streets. Longer commute distances result in more of a need for safe bicycle commuting to and from school. In developing high priority projects, routes in the Plan produced should reflect this importance. Commuters provide a relief to traffic congestion, and can improve air quality.

Recreational Riders

Recreational bike riding is done to and from places of interest, in bike races and touring, or for exercise. The popularity of recreational cycling has increased over the past few years primarily because of an increased awareness of the health benefits of bicycling and the social aspect of cycling.

Recreational riders have different trip characteristics and needs than commuter riders. Unlike commute riders who prefer a fast and direct route, recreational riders tend to ride on routes away from automobile traffic. Recreational riders tend to favor routes that are scenic and allow the rider to begin and end the ride in a central location.

Scope and Organization

The Bicycle Plan is unique because it is designed to serve multiple purposes:

- To provide a Regional Bicycle Plan that ensures that the facilities planned within all eight local jurisdictions are integrated and compatible; and
- To provide "stand-alone" bicycle plans for each jurisdiction which are independent and can be used by each agency to secure funding and implement individual bicycle plans.

The Tulare County Regional Bicycle Plan and the individual plans for each community were developed using a five step approach:

- Define the goals and policies to guide the Regional Bicycle Plan and planning in Tulare County;
- Assess the demand for bicycle travel through public and school surveys and identify existing and planned activity centers such as parks, schools, libraries, transit terminals, etc.;
- Select appropriate facilities that connect the bicycle related activity centers;
- Prioritize the selected facilities and incorporate these into a comprehensive plan for each jurisdiction; and
- Develop a prioritized implementation and funding plan.

Within Chapter 9, the Plan is divided into nine individual plans that act as stand alone Bicycle Plans for the jurisdictions of Dinuba, Visalia, Woodlake, Farmersville, Exeter, Tulare, Lindsay, Porterville and the County of Tulare. Although care was taken to ensure that the bicycle system provided within each community is integrated with the regional system, the system for each jurisdiction was developed to function as a stand alone document.

Local projects not specifically included in this Plan can be adopted and funded by each community as well. All projects in this Plan will require additional feasibility design, environmental, and/or public input prior to being funded and constructed as available. All projects and plans would need to conform to local General Plans and Environmental Impact Reports as needed.

Conclusion

Bicycling is continuing to gain momentum as a healthy recreational activity that virtually anyone can do, and an important alternative trips made by automobiles. Worldwide, bicycle production exceeds automobile production 3 – 1. While ridership and production in the United States only accounts for a fraction of worldwide totals, local and national bicycle commuting is on the rise. With the continued support of Federal and State governments, bicyclists, Tulare County Association of Governments, its' member agencies, and the community at-large, Tulare County stands poised to achieve the commute, air quality, and quality of life goals identified in this Plan.

This Plan is meant as a 20-year guide for making Tulare County bicycle user friendly. The Plan is intended to be updated every four (4) years. The success of the Plan will only be assured by the continued support of Tulare County's cycling community, government agencies and other residents recognizing the benefits bicycling brings to all residents.

The Tulare County Regional Bicycle Plan outlines the actions needed, priorities, costs, and timelines for making Tulare County bicycle friendly.

Chapters

- Chapter 1: The Executive Summary that outlines the highlights of the Plan.
- Chapter 2: Design Standards
- Chapter 3: Goals, Policies, and Objectives
- Chapter 4: Transportation Control Measures/Consistency
- Chapter 5: Safety & Educational Programs
- Chapter 6: Funding
- Chapter 7: Selection Criteria
- Chapter 8: Liability
- Chapter 9: Priorities and Projects.
- Chapter 10: Bicycle maps and project lists for cities and the unincorporated community in Tulare County
- Appendices

Chapter 2: Design Standards

This chapter provides details on the recommended design and operating standards for the Tulare Bikeway System. The bikeway design standards which are most commonly used in California are from the Caltrans Highway Design Manual. The Caltrans bikeway standards are based on American Association of State Highway and Transportation Officials (AASHTO) design standards. The Manual of Uniform Traffic Control Devices is commonly used for bikeway signing standards. If selected, local agencies may adopt additional bikeway standards. Care must be exercised when creating specific standards due to the liability concerns. All local jurisdictions have not adopted local bikeway standards but do follow the recommendations of the above listed documents.

The following section summarizes key operating and design definitions:

- **Bicycle** A device upon which any person may ride, propelled exclusively by human power through a belt, chain, or gears, and having either two or three wheels in tandem or tricycle arrangement.

- **Shoulders** In many areas (such as rural areas) separate bicycle lanes are often not feasible. Cyclists will use the striped shoulders where they are suitable. Future road widening and construction projects are one means of providing adequate shoulders for cyclists.

- **Bikeway** A facility that is provided primarily for bicycle travel.

- **Class I Bikeway (Bike Path)** Provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized. (Highway Design Manual Definitions 1001.4)

  Generally, bike paths are used to serve corridors that are not served by streets and roads. The basic standards are that the bike path have a width of 8’ minimum and an additional 2’ minimum graded shoulder on each side of the path that is not landscaped.

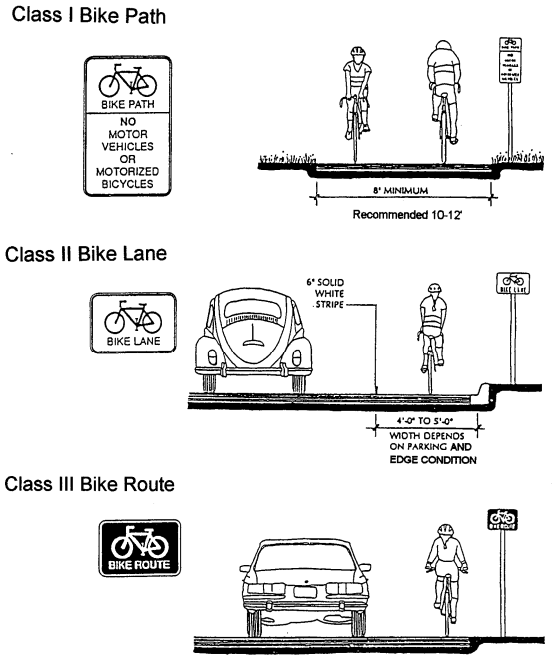
- **Class II Bikeway (Bike Lane)** Provides a striped lane for one-way bike travel on a street or highway. (Highway Design Manual Definitions 1001.4)

  Bike Lanes are generally established along streets where there is a bicycle demand, and where there are distinct needs that can be served by them. Restricted right-of-way designated for exclusive

use of bicycles with through travel by pedestrians and motorists permitted.

- **Class III Bikeway (Bike Route)** Provides for shared use with pedestrian or motor vehicle traffic. (Highway Design Manual Definitions 1001.4)

  Bike Routes are generally shared facilities that provide continuity to other bicycle facilities. Bike routes provide a right-of-way designated by signs or permanent markings and shared with pedestrians or motorists. Class III Bikeways can be done with or without a 6" shoulder stripe. In the case that the route is done with striping, the route will not include the bicycle route pavement.



Caltrans Bicycle Facility Types

A Class III bike route with striping is appropriate when insufficient pavement width is available to provide a standard Class II bike lane facility, but is desirable to designate a portion of the roadway for bicyclists. This fourth facility meets Caltrans' standards (for a Class III facility) and simply adds a 6" shoulder stripe to the pavement to provide an additional level of comfort for the bicycles because bicyclists are riding in a delimited shoulder area.

Other types of bicycling facilities are:

Touring: This facility designation is used for streets which cannot be given a formal designation (Class I, II or III) because of cost or liability concerns but are

used as a primary cycling route by more experienced cyclists. These roads are often narrow, without shoulders, or carry high speed traffic and or heavy vehicles. These streets do not provide the level of protection or comfort for the casual, less experienced riders. Therefore, a touring roadway is one on which only experienced cyclists should attempt.

Shared-Roadway: Although not formally designated as part of this plan (and no bikeway designation by Caltrans), is where most bicycle travel in the state now occurs on streets and highways without bikeway designations. The usage of any public roadway can be 'shared' with bicyclists. In some instances, entire street systems may be fully adequate for safe and efficient bicycle travel, and signing and pavement marking for bicycle use may be unnecessary. In other cases, prior to designation as a bikeway, routes may need improvements for bicycle travel.

Bicycle Parking Facilities

Bicycle parking facilities are an important component of bicycle usage but are often overlooked. The lack of adequate and theft-resistant parking discourages bicycle commuting. There are three types of bicycle parking facilities.

Class I: These parking facilities include bicycle locker and/or locked enclosures in supervised areas that provide weather and vandalism protection. These facilities are located in areas where day long or longer storage is needed on a regular basis.

Class II: These parking facilities consist of stands or racks that allow a user to secure a bicycles frame and one or both wheels with a U-lock or cable. This type of rack supports the entire bike frame rather than a wheel only. Class II parking facilities should be located near commercial areas, places of employment, schools and any other areas where there is a need to store bicycle for several hours or more with minimum supervision.

Class III: Class III parking facilities are traditional stands that support the bicycle by the front wheel only. These stands do not support or secure the frame and are difficult to use with high-security U-locks. Although common in use, this type of facility is not recommended, especially with the growing popularity of fat-tire mountain bikes which are incompatible with many Class III racks and quick release wheels making theft easy. For these reasons, existing Class III stands should be phased out and replaced with Class II parking.

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Chapter 3: Goals, Objectives & Policies

Goals

Goals provide the context for the specific objectives and policy actions discussed in the Bicycle Transportation Plan. The goals provide the long-term vision and serve as the foundation of the plan. Goals are broad statements of purpose that do not provide specific descriptions of the objective, while policy actions provide a bridge between general policies and actual implementation guidelines, which are provided in the following sections. As with the Plan recommendations, none of the goals or objectives are funded at this time. The Regional Bicycle Transportation and the goals, objectives, and policy actions herein do not mandate any specific action by the Tulare County Association of Governments or local jurisdictions.

A survey was conducted throughout the month of May 2010 that was aimed on receiving feedback from the general public in Tulare County regarding bicycle usage to determine how the Tulare County Regional Bicycle Plan would be able to emphasize some of the concerns and issues current riders have with bicycling in Tulare County. The survey was developed using input from the Tulare County Bicycle Advisory Committee. The survey sought to find out more as to where people are riding, when people are riding, what causes one not to ride, and some of the habits bicycle riders currently practice. The results of the survey have been incorporated into some of the objectives and policies for the Plan. It is hoped that the proposed projects and improvements to bicycling as a result of this Plan would encourage more bicycle use in Tulare County and minimize some of the discouragements people currently face.

The survey was conducted online via SurveyMonkey.com, and was also made available in paper form at TCAG functions and offices. The survey was advertized via e-mail and was posted on the TCAG website. Over 130 people responded to the survey provided in Appendix B. Approximately 86% of the respondents to the survey were between the ages of 19 and 60, most of which reside in an incorporated city in Tulare County.

Results of the survey provided the following insight to bicycle usage: Cyclists in Tulare County ride an average of 21.2 miles a week throughout the year, with the highest number of miles being built during a good weather week in the summer (36.9 miles) and the spring (29.3 miles). The most common response as to why people ride their bicycles was that they enjoyed being outdoors, it is great exercise and keeps them in shape, followed closely by bicycling because it reduces stress, it is something fun to do with family and friends, and it saves money. Very few respondents (less than 2%) stated that they ride a bicycle because they do not have a car or that they do not have good public transit options.

Some of the factors that influence why people do not ride their bicycle are weather conditions, lack of bike lanes/facilities, and poor road conditions. Some of least influential factors in why people do not ride are street lighting, being chased by dogs, and that traffic signals are not sensitive to bicycles. Other factors of influence on bicycle riding include: bad or inconsiderate drivers, lack of adequate bicycle parking, and time constraints.

Some of the preferred facilities for transportation bike rides and commuting included: roads with low volumes and speeds, the most direct route to a destination, and striped bike lanes. The most preferred facilities for recreational bike rides were roads with low speeds and volumes, off road bicycle paths, and striped bicycle lanes. The least preferred facilities for both recreation and transportation based bicycle trips was on sidewalks and on unpaved bicycle paths and shoulders.

Most trip destinations identified were neighborhood oriented, recreationally oriented, or to run errands. The results of the survey demonstrated some of the characteristics and ways of existing bicycle riders. The survey was distributed across the County to aim for the best representation of the existing conditions.

Goals and Objectives for the Regional Bicycle Transportation Plan

Make the bicycle an integral part of daily life in Tulare County, particularly for trips of less than five miles, by implementing and maintaining a bikeway network, providing end-of-trip facilities, improving bicycle/transit integration, encouraging bicycle use, and making bicycling safer in Tulare County.

The following objectives address these goals in detail. More detailed plans for implementation of these goals and objectives are contained in the following sections.

Objective A

Implement the Bicycle Transportation Plan, which identifies existing and future needs, and provides specific recommendations for facilities and programs over the next four (4) years and beyond.

Objective A Policy Actions

1. Assign a coordinator who is familiar with the plan, act as a liaison to the public, and pursue funding.
2. Establish and maintain uniform standards so major developments are required to make bicycle improvements as development happens.
3. Update the Tulare County Regional Bicycle Plan every four years (as required by Caltrans) to reflect new policies and requirements for non-motorized transportation funding.
4. Coordinate between all municipalities, schools, and community organizations to review and comment on bicycle and non-motorized issues of mutual concern.

5. Regularly monitor bicycle-related accident levels and seek a significant reduction on a per capita basis over the next twenty years.
6. Encourage Plan adoption by all local jurisdictions within Tulare County.

Objective B

Complete a network of bikeways that is feasible, fundable over the life of the Plan, and that serve bicyclists' needs, especially for travel to employment centers, schools, commercial districts, transit terminals and recreational destinations.

Objective B Policy Actions:

1. Encourage jurisdictions to develop a bicycle network that connects neighborhoods, cities and communities.
2. Seek funding for bikeway projects through regional, state, and federal funding programs and encourage multi-jurisdictional funding bicycle improvements.
3. Develop and implement destination-based signage for the bikeway network.
4. Coordinate with local jurisdictions and developers in Tulare County to ensure appropriate opportunities for bicycle connections are planned, constructed, and maintained.

Objective C

Maintain and improve the quality, operation, and integrity of the bikeway network and facilities.

Objective C Policy Actions:

1. Encourage member agencies to undertake required maintenance of the bikeway network and facilities, such as sweeping bicycle lanes and routine surface repair, as funding and priorities allow.
2. Encourage member agencies regarding repair and construction of transportation facilities to minimize disruption to the cycling environment to the extent practical.
3. Encourage member agencies to undertake bicycle improvements that do not negatively impact the environment.
4. Encourage member agencies to prioritize bicycle improvements based upon the projects' ability to provide connectivity to other bikeways and destinations.
5. Encourage member agencies to work with Caltrans to widen shoulders on the State Highway System throughout the County to improve intercity cycling conditions.

Objective D

Provide short- and long-term bicycle parking and amenities in employment and commercial areas, in multifamily housing, at schools, and at recreation and transit facilities.

Objective D Policy Actions:

1. Consider modifying zoning code ordinances requirements for bicycle parking so developments and new residential development are less dependent on automobile parking provisions.
2. Encourage the installation of short and long term bicycle parking in the public right-of-way.
3. Encourage local agencies to work with area elementary, middle, and high schools to promote bicycle commuting and to assist in purchasing and planning long- and short-term bicycle parking.
4. Provide current and relevant information to bicyclists regarding bicycle parking opportunities through a variety of formats.
5. Encourage local agencies to require bicycle parking at major events to help ease traffic and parking.

Objective E

Increase bicycle ridership in Tulare County.

Objective E Policy Actions:

1. Increase the number of bicycle commuters by at least 70% in the next four (4) years
2. Include bicycle facilities as an integral part of future developments across Tulare County, and connect to other existing and proposed bicycle facilities.
3. Provide bicycle access to transit vehicles whenever feasible on all municipal and regional transit buses within Tulare County.
4. Provide convenient bicycle access and bicycle parking at schools, parks, neighborhoods, shopping centers, government buildings, and local businesses.
5. Encourage transit providers in providing and promoting secure bicycle racks and lockers in the transit system to encourage bicycle use.
6. Request that any future transit service in Tulare County provide adequate bicycle and pedestrian access and bicycle parking.

Objective F

Develop and implement education and encourage plans aimed at youth, adult cyclists, pedestrians, and motorists. Increase public awareness of the benefits of bicycling and of available resources and facilities.

Objective F Policy Actions:

1. Develop adult and youth bicycle, pedestrian education and encourage safety programs at schools and community events.
2. Market the health benefits of bicycling.
3. Market the existing opportunities for bicycling in Tulare County.

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Chapter 4: Transportation Control Measures/Consistency

Tulare County is designated as a nonattainment area for meeting federal and state ozone Particle Matter 2.5 (PM2.5). For these designated areas, the 10990 Federal Clean Air Act Amendments (CAAA) and the California Clean Air Act (CCAA) of 1988 require the implementation of transportation control measures (TCM) to bring the County into compliance with state and federal air quality regulations. TCMs are defined as any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling or traffic congestion for the purpose of reducing motor vehicle emissions.

The objective of the Regional Bicycle Plan is to promote and enhance the use of bicycles as an alternative to the automobile. More commuters will consider bicycling as a feasible alternative to driving provided it is convenient, with the availability of safe routes of travel and safe storage for bicycles at destination points.

Bicycle use can be promoted for commuter and recreational travel which have the primary benefits of reducing traffic congestion and providing a non-polluting transportation mode. TCAG currently offers the Employee Incentive Program for government employees to commute via alternative modes of transportation including bicycling, walking, carpool, vanpool, and transit.

Measures to encourage the use of bicycle and pedestrian modes and measures to increase transit ridership mutually assist one another because the modes are often complementary. Implemented successfully in other areas, as well as in Tulare County, is the integration of bicycles with other transportation modes, accomplished by providing bicycle racks on transit buses. This integration will continue to promote even greater air quality benefits.

Consistency with Other Plans and Programs

The Regional Bicycle Transportation Plan is consistent with the 2007 and 2011 Tulare County Regional Transportation Plan which includes air quality conformity documentation. The Plan also highlights and encourages the development of the bicycle facilities listed in the Final 2006 ½ Cent Transportation Sales Tax Measure Expenditure Plan for Measure R.

This Plan is also consistent with cities in Tulare County who have adopted their own trail, bicycle, or walking Plans. These plans include The City of Farmersville Waterway Trails Masterplan (2008), the City of Lindsay Bicycle Plan (2008), the City of Visalia Waterways and Trails Masterplan (2010) and the Santa Fe Trail Traffic Evaluation (2009).

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Chapter 5: Safety & Educational Programs

Existing Programs

A 2006 telephone survey of local schools showed that 72% of elementary schools, 44% of junior high schools and no high schools have existing safety/educational programs. These programs occur annually and are typically presented by law enforcement officials. School officials felt that the following programs are effective and should be continued or improved:

- Safe bicycling pamphlets available for distribution to area schools;
- New legislation requiring bicycle helmets for children under 18 years old;
- Tulare County bicycle maps which list the rules of the road, preferred bicycle routes and safety tips;
- Stop-on-a-Dime programs offered by the Hanford Police Department; and
- Dinuba Kiwanis presentation of bicycle safety/educational programs.

Most public safety departments in cities provide some sort of training for their communities in the form of a bicycle rodeo.

Future Programs

The existing schools safety/educational programs should be continued and where non-existent, a regular program to educate school age children about bicycle safety should be established. There are several agencies at the state and national level that are available should include one or more of the following:

- Annual bicycle safety presentation and discussions at local elementary, junior high and high schools;
- Explanations of existing law that prohibit bicycle riders from riding against traffic, require stopping at traffic signals and stop signs and the mandatory use of helmets by children;
- Annual bicycle rodeo to be held at schools and/or shopping centers. This event might include:
    1. Basic skills course;
    2. Safety instruction and
    3. Maintenance clinic.
- Distribution of information through the medium of public service announcements, local TV commercials and newspaper articles should be targeted toward bicycle safety for Tulare County youth;
- Distribution of the Tulare County Bikeway Maps to the bicycle community that contains a summary of the bicycle section of the California Vehicle Code, bicycle safety tips, bicycle routes with the County and phone numbers of local bicycle resources.

Statewide Integrated Traffic Records System Accident Data Years 2007-2009 (SWITRS) processes all reported fatal and injury collisions which occurred on California's state highways and all other roadways, excluding private property. The report was completed as a result of vehicle traffic collision reports received from local police and Sherriff jurisdictions and from CHP field offices. The report is prepared in accordance with section 2408 of the California Vehicle Code. A copy of the entire report can be viewed at http://www.chp.ca.gov under "information & resources", click on "SWITRS Reports" and the current annual report will be available. The following table shows the total number of bicycle involved collisions by jurisdiction from 2007-2009.

Statewide Integrated Traffic Records System Accident Data Years 2007-2009

Jurisdiction	Number of Bicycle Involved Collisions 2007 (SWITRS 2007 Report)		Number of Bicycle Involved Collisions 2008 (SWITRS 2008 Report)		Number of Bicycle Involved Collisions 2009 (SWITRS 2009 Report)		Total # of Bicycle Collisions for 3 Years	Average # of Bicycle Collisions per Year	2010 Estimated Population (California Department of Finance)	Accidents per 1000 people/yr. (State Average of .30/1000)
	Fatality	Injury	Fatality	Injury	Fatality	Injury				
Dinuba	0	3	0	3	0	0	6	2	21,542	0.09
Exeter	0	3	0	4	0	1	8	3	10,752	0.28
Farmersville	0	3	0	2	0	2	7	2	10,971	0.18
Lindsay	0	1	0	1	0	1	3	1	11,800	0.08
Porterville	1	21	0	19	0	14	55	18	52,960	0.34
Tulare	0	14	0	20	0	8	42	14	59,535	0.24
Visalia	1	49	0	58	2	30	140	47	125,971	0.37
Woodlake	0	1	0	0	0	2	3	1	7,927	0.13
Unincorporated	2	21	1	17	0	5	46	15	146,356	0.10
TOTAL	4	116	1	124	2	63	310	103	447,814	0.23

Chapter 6: Funding

There are a variety of potential funding sources including local, state, regional, and federal funding programs that can be used to fund the proposed bicycle improvements. Many of the federal, state, and regional programs are competitive, and involve the completion of extensive applications with clear documentation of the project need, costs, and benefits. Many funding sources require a local match, usually in the range of 11-20%. Local funding for bicycle projects typically comes from Transportation Development Act (TDA) funding, which is prorated to each community based on gasoline taxes. Funding for many of the proposed programs and local matches would need to be funded either with TDA, general fund (staff time or dollars), or Measure R funds (a Tulare County ½ Cent Sales Tax Measure).

A detailed program-by-program list of available funding programs along with the latest relevant information is provided on the following pages. The following pages provide a summary of available funding along with timing, criteria, funding agency and recently funded bicycle projects.

Once bicycle projects and costs are identified, each project can be targeted for specific funding sources where it can be expected to compete effectively.

Federal Sources

In 2005, the President signed into law the ***Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users*** (SAFETEA-LU). With guaranteed funding for highways, highway safety, and public transportation totaling $244.1 billion, SAFETEA-LU represents the largest surface transportation investment in our Nation's history. The two landmark bills that brought surface transportation into the 21st century—the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21)—shaped the highway program to meet the Nation's changing transportation needs. SAFETEA-LU builds on this firm foundation, supplying the funds and refining the programmatic framework for investments needed to maintain and grow our vital transportation infrastructure. SAFETEA-LU has addressed the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment – as well as laying the groundwork for addressing future challenges. SAFETEA-LU promotes more efficient and effective Federal surface transportation programs by focusing on transportation issues of national significance, while giving State and local transportation decision makers more flexibility for solving transportation problems in their communities.

SAFETEA-LU will continue a strong fundamental core formula program through September 30, 2010. After the law expires, it is anticipated that the president will sign into law a new funding source for a similar type of program.

Congestion Mitigation and Air Quality Improvement (CMAQ) - The CMAQ program, continued in SAFETEA-LU at a total funding level of $8.6 billion through 2009, provides a flexible funding source to State and local governments for transportation projects and programs to help meet the requirements of the Clean Air Act. Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas). The formula for distribution of funds, which considers an area's population by county and the severity of its ozone and carbon monoxide problems within the nonattainment or maintenance area, with greater weight given to areas that are both carbon monoxide and ozone nonattainment/maintenance areas, is continued. Twenty percent of CMAQ funds are dedicated to highly-cost effective projects. TCAG released a call for projects in the fall of 2009.

Recent CMAQ funded projects include:

- Various shoulder stabilization projects in Tulare County
- Street sweepers
- Riggin Avenue Bike Path in Visalia

Recreational Trails - A total of $370 million is provided through 2009 by SAFETEA-LU to develop and maintain trails for recreational and trail-related purposes that include pedestrian, equestrian, bicycling and non-motorized snow activities as well as off-road motorized vehicle activities. The RTP is an assistance program of the Department of Transportation's Federal Highway Administration (FHWA). Federal transportation funds benefit recreation including hiking, bicycling, in-line skating, equestrian use, cross wheel driving, or using other off-road motorized vehicles.

Transportation Enhancements (TE) –Fifty percent of TE funds received by Tulare County have been dedicated to Measure R projects in Tulare County. The approximate $500,000 annually would serve as an offset of Measure R funded bicycle projects starting in fiscal year 2011/2012. TE funds require approximately a 12% match by the applicant. TE funds are usually programmed in coordination with the Federal Transportation Improvement Program (FTIP) and is done in advance. These funds can be used for facilities for pedestrians and bicycles that enhance transportation corridors ($60M/yr statewide, 75% programmed by RTPAs; 25% by Caltrans).

Recent TE projects include:

- Santa Fe Trail lighting in the City of Tulare
- Downtown Lindsay pedestrian plaza enhancements
- Downtown Exeter enhancements including lighting, landscaping, and pedestrian amenities
- Ivanhoe Main Street corridor enhancement
- Right of Way acquisition and construction of Packwood Creek in Visalia
- Mill Creek Arboretum Trail in Visalia
- Construction of the Santa Fe Trail in Visalia.

Transportation, Community, and System Preservation Program (TCSP) - The TCSP is intended to address the relationships among transportation, community, and system preservation plans and practices and identify private sector-based initiatives to improve those relationships. State and local governments, metropolitan planning organizations (MPOs), and tribal governments are eligible for discretionary grants, authorized at $270 million through 2009, to carry out eligible projects to integrate transportation, community, and system preservation plans and practices.

Non-motorized Transportation Pilot - SAFETEA-LU establishes a new program, authorized at a total of $100 million through 2009, to fund pilot projects to construct a network of nonmotorized transportation infrastructure facilities in 4 designated communities is. The purpose is to demonstrate the extent to which walking and bicycling can represent a major portion of the transportation solution in certain communities.

Non-motorized Transportation Pilot – HSIP, authorized by SAFETEA-LU authorizes a new core of Federal aid funding program beginning in FY 2006 through 2009 to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. Funds may be used for projects on any public road or publicly owned bicycle and pedestrian pathway or trail. The federal share is 90 percent.

Recent HSIP Project includes:

- The City of Tulare received an HSIP grant to install in pavement crosswalk lighting at the Santa Fe Trail crossing of Laspina Street.

Safe Routes to School (SRTS) – The Federal Safe Routes to School program was authorized by SAFETEA-LU. The program provides $46 million available to agencies in California. Caltrans received about $178 million in applications for infrastructure and non-infrastructure projects around to K-8 schools. Infrastructure projects must be within two (2) miles of a grade school or middle school. No match is required.

State funding Sources

Safe Routes to School Program (ST2S) – The State legislated Safe Routes to School program is contained in Streets & Highways Code Section 2330-2334. This program has been active since 2000 and Assembly Bill (AB) 57 extends the program indefinitely. New Caltrans administered program that can fund bicycle, pedestrian and traffic calming projects to make it safer for kids to walk and bike to school ($20M/yr). Each agency can apply for a maximum of $900,000 with a 10% match. Application deadline is November 16th. The funds can be used for projects at schools k-12, located in the vicinity of a school. Only infrastructure improvement projects are eligible.

Bicycle Transportation Account (BTA) – BTA provides state funds for city and county projects that improve safety and convenience for bicycle commuters. The applying agency must adopt a bicycle Plan that complies with Streets and Highways Code Section 981.2 that has been submitted to the MPO for compliance with the Regional Transportation Plan, and must have a

letter of approval from the Caltrans Bicycle Facilities Unit. BTA will have $1M/yr available statewide that will soon be near $5M/yr.

Recent BTA projects include:

- Bike lanes on Noble and Mineral King in Visalia
- Bike lane loop connecting Cameron, Court Street, and County Center in Visalia
- Citywide bikeway project in the City of Woodlake
- Citywide Bicycle Parking, including bicycle racks on transit, in Dinuba
- Bike lanes on the western portions of Roeben Road, Whitendale Avenue, Walnut Avenue, and Tulare Avenue
- Avenue 416 Class II Bikeway between Dinuba and Orosi
- Various Class II and Class III bikeways in Porterville.

Transportation Development Act (TDA) Article 3 Funds - Revenues generated by a quarter cent of the statewide sales tax that are returned to counties for the purpose of transit, bicycle and pedestrian facility funding, and streets and roads. Up to two percent (2%) of the funds can be made available to counties and cities for facilities provided for the exclusive use of pedestrians and bicycle

California Clean Air Act (CCAA) – Remove II Program – Sponsored by the San Joaquin Valley Air Pollution Control District. The annual budget for the Remove II program is $1 million. It is preferred that applications come from projects within a couple months of construction. Class I projects are the preferred type of projects ($150,000 per project maximum) though a class II route can also be funded (up to $100,000 per project maximum). Funding is awarded on a first come first serve basis beginning every fiscal year.

Local funding Sources

Measure R ½ Cent Sales Tax - A 30 year ½ cent sales tax increase was passed by Tulare County voters in November of 2006. The Expenditure Plan for the sales tax measure dedicates $91.3 million or 14% of the funds to transit/bikes/environmental mitigation. The finding program requires matching funds from CMAW and TE. The Bike/Pedestrian projects funded by Measure R are listed in the 2006 ½ Cent Transportation Sales Tax Measure Expenditure Plan. An incentive will be provided to agencies who receive outside funds to pay for projects listed in the Expenditure Plan, with a 50% match from TCAG (all matches are eligible with the exception of CMAQ and TE). A Bike Fund Program was established in an amendment to the Expenditure Plan to include a match to grants received by member agencies for a maximum of $2,000,000 over 30 years.

New Construction – Future road widening and construction projects are one means of providing bicycle lanes. To ensure that roadway construction projects provide bike lanes where needed, it is important that an effective review process is in place to ensure that new roads meet the standards, guidelines, and planned projects presented in this Plan.

Impact Fees – A potential local source of funding are developer impact fees. These fees are generally tied to trip generation rates and traffic impacts produced by a proposed project. A developer may reduce the number of trips by paying for an on or off site bikeway improvements which will encourage residents to bicycle rather than drive. In-lieu, parking fees may be used to help construct new or improved bicycle parking. Establishing a clear nexus or connection between the impact fees and the project's impacts is critical in avoiding potential lawsuits.

It is important to note that each city and the County can adopt this Plan and meet state and federal requirements for grant funding sources to develop the projects contained within. However, each jurisdiction has the option to develop and approve its own bicycle plan, or to utilize some portion of this Plan to do so. To the extent feasible, this Plan has incorporated existing local plans and priorities as part of its recommendations to eliminate that need.

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Chapter 7: Selection Criteria

All projects included in the Tulare County Regional Bicycle Plan shall be ranked using the following criteria:

- Safety
- Educational programs created or expanded
- Completion of regional links
- Connections with other transportation modes
- Connections with activity centers
- Use of grant funds
- Public support
- Project consistency
- Time and cost effectiveness

A checklist was developed that included each of the above criteria. Points are assigned for each item and projects are scored based on the way that they meet the criteria.

A. Safety

1. How does the project eliminate or improve a problem area on routes that serve bicyclists?
2. How does the project eliminate or reduce hazards that contribute to bicycle related accidents?

B. Completion of Regional Links

1. How does the project eliminate obstacles, gaps, or other deterrents to bicycling?
2. Does the project link with existing and future bikeways?

C. Connections with other Transportation Modes

1. Does the project link together other transportation modes? (Park and ride lots, rail, transit, air ports, etc.)

D. Connections with Activity Centers

1. Does the project provide connections with at least one activity center (employment, shopping or educational facilities)?

E. Use of Grant Funds

1. Are additional funds for the project identified?
2. Has the agency provided ongoing financial commitments to increase safe and efficient bicycle use in the past?

F. Public Support

1. Have there been letters of support for this project?

2. Does the agency have a public participation planning process that was used in the selection of the project?

G. Project Consistency

Is the project consistent with the following guidelines?

1. Applicable Bicycle Plan; and
2. Regional Transportation Plan and General Plan; and
3. Does the project meet TCAG and Caltrans' standards for proposed facilities?

H. Time and Cost Effectiveness

1. Is there a reasonable certainty that the project will be completed within two years?
2. Are the estimated costs of the project reasonable and within standard project costs?

Chapter 8: Liability

The bikeways planned for Tulare County and each of the eight cities are Class I, Class II, or Class III (including Class III with a shoulder stripe). From a liability perspective, Class II, and III bikeways are treated similar to roadways and sidewalks, meaning that the City becomes liable only if the facility is improperly designed, constructed, or maintained.

Therefore, a maintenance program is encouraged to be adopted by each jurisdiction to ensure that the bikeways are being adequately maintained. However, improper maintenance due to funding shortfalls generally does not put the jurisdiction at risk.

Design Liability

Liability in this area is decreased by meeting the recommended guidelines for bikeway design as presented in the following documents:

- Caltrans Highway Design Manual, Chapter 1000, Bikeway Planning and Design
- Most recently adopted version of the California MUTCD for bikeway signage and pavement striping.

Operational Liability

Deteriorating conditions that develop over time represent potential liability concerns. A regular maintenance and monitoring program will help reduce liability. Therefore, each jurisdiction should adopt a program for monitoring the safety of the bikeway system, such as early identification of hazards and response to actual accidents. Written records of these efforts should be maintained. Care must be taken not to promise increased "safety" for bicyclists, make any claims to the safety of the system or segments, or identify "hazardous" or "dangerous" areas without providing the means to correct the system.

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