

2011 Kings County Regional Bicycle Plan



Presented by the Kings County Association of Governments in cooperation with the Cities of Avenal, Corcoran, Hanford, and Lemoore, and the County of Kings.

BEFORE THE KINGS COUNTY ASSOCIATION OF GOVERNMENTS
TRANSPORTATION POLICY COMMITTEE

IN THE MATTER OF ADOPTING)
THE 2011 KINGS COUNTY)
REGIONAL BICYCLE PLAN)

RESOLUTION NO. 11-11
RE: 2011 KINGS COUNTY
REGIONAL BICYCLE PLAN

WHEREAS, the Kings County Association of Governments (KCAG) is a Regional Transportation Planning Agency (RTPA), pursuant to State designation and a Metropolitan Planning Organization (MPO) pursuant to federal designation; and

WHEREAS, the Kings County Association of Governments (KCAG) prepared and adopted the "2005 Kings County Regional Bicycle Plan" which was certified by Caltrans as being in compliance with State law and the "Kings County Regional Transportation Plan"; and

WHEREAS, KCAG has prepared an updated "2011 Kings County Regional Bicycle Plan" which includes individual plans for the County of Kings and the cities of Hanford, Lemoore, Corcoran, and Avenal; and

WHEREAS, the "2011 Kings County Regional Bicycle Plan" was prepared in coordination with the Bicycle Advisory Committee which consists of members from bicycle groups; local citizens; local agency planning, public works, and police departments; local school districts; Caltrans; and California Highway Patrol; and

WHEREAS, the "2011 Kings County Regional Bicycle Plan" will formulate bicycle goals, improve air quality, address bicycle safety, recognize bicycle funding, and prioritize bikeway projects.

NOW, THEREFORE, BE IT RESOLVED, that the KCAG Transportation Policy Committee does hereby adopt the "2011 Kings County Regional Bicycle Plan".

BE IT FURTHER RESOLVED, that the KCAG Transportation Policy Committee has determined that the "2011 Kings County Regional Bicycle Plan" is in compliance with State law and the "Kings County Regional Transportation Plan".

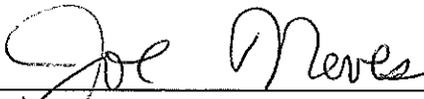
The foregoing Resolution was adopted on a motion by Commissioner Verboon, and seconded by Commissioner Casida, at a regular meeting held on the 26th day of October, 2011, by the following vote:

AYES: Verboon, Casida, Neves, Lerma, Murray, Bretz

NOES:

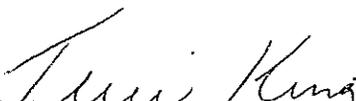
ABSENT: Chin

KINGS COUNTY ASSOCIATION OF GOVERNMENTS
TRANSPORTATION POLICY COMMITTEE



Chairman

WITNESS, my hand this 26th day of October, 2011.



Terri King, Executive Director

Bicycle Transportation Plan Checklist

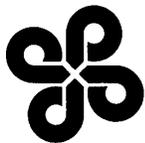
Streets and Highways Code §891.2 (a)-(k)

Page(s)	Code Requirement	
33, 41, 47, 66	(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.
36-37, 44-45, 49-51, 59-62, 69-70	(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.
36-37, 44-45, 49-51, 59-62, 69-70	(c)	A map and description of existing and proposed bikeways.
36-37 44-45, 49-51, 59-62, 69-70	(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.
36-37, 44-45 49-51, 59-62, 69-70	(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.
36-37, 44-45, 49-51, 59-62, 69-70	(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.
18-19, 34-35, 42-43, 48, 56-58, 59-62, 66&68,	(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.
1, 2, 4, App A	(h)	A description of the extent of citizen and community involvement in development of the plan, including, but not limited to, letters of support.
1-4	(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.
36, 44	(j)	A description of the projects proposed in the plan and a listing of their priorities for implementation.
34, 43, 49, 57, 67	(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.

Kings County Regional Bicycle Plan

Adopted:

Prepared by:



KINGS COUNTY ASSOCIATION OF GOVERNMENTS

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Appendix A Bicycle Advisory Committee

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Section I

Introduction



I. INTRODUCTION

A. Purpose and Need

The 2010 Kings County Region Bicycle Plan Update is being prepared by the Kings County Association of Governments (KCAG) in collaboration with our member jurisdictions and the Bicycle Advisory Committee in consultation with the people of Kings County at an important crossroads in transportation planning. Since the publication of the 2005 Regional Bicycle Plan, we have seen a series of changes regarding how people think about transportation planning in California. Since 2005, transportation, public health, and land use planning have become inextricably tied through the San Joaquin Valley Blueprint process and the passage of three key legislative acts, the:

- i. California Global Warming Solutions Act of 2006 (AB 32);
- ii. Transportation Planning, Travel Demand Models, Sustainable Communities Strategy, Environmental Review Act of 2008 (SB 375); and
- iii. California Complete Streets Act of 2008 (AB 1358).

Because of these legislative changes, planning efforts in each of these domains have become more comprehensive and inclusive in nature. With the additional focus on integrating land use planning and public health into transportation planning decisions, utilizing performance measures that meet the climate and health concerns of our county in the project selection process makes documents like this bicycle plan more critical than ever.

B. History of Kings County Bicycle Plans

- 1973 “Bicycle Facilities Report”: First effort by a citizen committee to highlight the increasing popularity of bicycle travel and advocate for increased bicycle connectivity;
- 1979 “Non-motorized Element Supplement to the Regional Transportation Plan” prepared by KCAG: This was a much broader endeavor that identified the need to make bicycling safer through public education, the need for secure bicycle parking facilities at key traffic generators, and the need for increased enforcement of bicycle laws. The supplement also recommended specific Class II and III bikeway projects;
- 1983 “Kings County Bikeways Facilities Plan”: Selected a system of commuter bikeways based on a study of bicycle commuting patterns in the county. Reiterated the need for public education;
- 1990 & 1991 Passage of the Americans with Disabilities Act (ADA), the Intermodal Surface Transportation Efficiency Act (ISTEA), and the Clean Air Act Amendments (CAA);
- 1994 “Kings County Regional Bicycle Plan”: This plan continued the advocacy for bicycle projects adding the emphasis of the transportation control measures (TCM) for air quality purposes;

- 1998 “Kings County Regional Bicycle Plan”: KCAG presented a coordinated and comprehensive bicycle plan to integrate with the local jurisdictions construction plans. This plan also identified potential funding resources for bicycle facilities;
- 2001 “Kings County Regional Bicycle Plan”: This plan continues the efforts of previous plans. This plan provided an outline for enhancing the bikeway system by focusing on the implementation of prioritized projects through an estimation of bicycle commuters;
- 2005 “Kings County Regional Bicycle Plan”: This plan updates the information and recommendations of the prior plans and establishes a base line for the current bicycle plan update.

C. 2010 Regional Bicycle Plan: A Crossroads in Transportation Planning

In considering the role transportation systems play in our communities, sustainability is a concept that will likely shape future planning endeavors more than any other. Planners across the world are implementing strategies to make our communities more sustainable for future generations, with bicycle planning being at the crux of sustainable transportation endeavors.

As a metropolitan planning organization (MPO) in California, KCAG is tasked with developing the region’s first Sustainable Communities Strategy (SCS) as part of our 2015 Regional Transportation Plan (RTP). Although it is still too early to tell what will be included in our first SCS, KCAG anticipates bicycle planning, and other alternative modes of transportation, will play a component in this process.

As a mode of transportation, the bicycle remains one of the most efficient on earth. As gas prices continue to rise, bicycling saves money, reduces congestion, improves air quality, and provides the rider with the added benefit of exercise. Obesity in adults and children in the United States has reached epidemic proportions. Public health experts predict the obesity problem will heavily tax our health care system in the near future if precautions to curb the trend are not undertaken immediately. In keeping with the sea of change at hand in the transportation planning realm, KCAG has increased its collaborative efforts with Kings County public health officials to facilitate positive public health outcomes from transportation planning decisions.

As a metropolitan planning organization (MPO), KCAG appreciates our role in promoting bicycling and fighting the obesity epidemic through sustainable land use planning. We understand that one of the best ways we can do this is by being a local champion for alternative modes of transportation in Kings County. With this plan, KCAG is committed to facilitating the development of bicycle lanes and paths within our communities both to reduce congestion and to help Kings County residents improve their health.

KCAG appreciates that land use authority remains wholly the responsibility of our member agencies. However, we want to help our member agencies develop bicycle connectivity by overcoming any hurdles that may be in their way. To begin this process, KCAG held a series of preliminary meetings in 2009 to better understand the obstacles our member agencies face in developing increased bicycle connectivity in our area.

Arguably the biggest setback our member agencies face in developing increased bicycle connectivity is limited resources. KCAG will continue to seek out and communicate

information on bicycle grant opportunities and low-cost programs to our local agencies. We have also heard concern over the lack of funding available for maintaining bicycle facilities. In times of budgetary straits, member agencies have reservations about long term maintenance costs that could exacerbate already extended local resources.

Another issue raised by our member agencies is public safety. Increased public safety outreach and education are necessary so that people feel safer getting out of their cars and on their bicycles. Effective bicycle planning and public safety outreach go hand in hand.

D. Study Areas

The study area includes all of Kings County's 1,396 square miles. Kings County is located in the south-central San Joaquin Valley, a subset of the California Central Valley, and is bounded by Fresno, Tulare, Kern, Monterey, and San Luis Obispo counties. The San Joaquin Valley is generally defined as the area south of the Central Valley delta, bordered on the east by the Sierra Nevada Range, on the west by the Coastal Range and on the south by the Tehachapi Mountains. It is 390 miles long with an average width of approximately 50 miles and is the heart of California's agricultural productivity. Kings County's landscape is relatively flat, except in the areas of the Tulare lake basin and the foot of Table Mountain in the extreme southwestern portion of the county, where the elevations range from 175 feet to 3,473 feet respectively. Two-thirds (613,373 acres) of the county's land area is level, irrigated farmland

Kings County's topography and ample sunshine three seasons of the year make it ideal for bicycle travel. Unfortunately, the area experiences severe fog between the months of November and February, which decreases bicycle trips during these months. Kings County is largely rural and undeveloped except for the four incorporated cities of Hanford, Lemoore, Corcoran, and Avenal and the unincorporated communities of Stratford, Kettleman City, and Armona. These specific areas were comprehensively evaluated and individual plans were developed for each of the following jurisdictions:

- County of Kings
- City of Hanford
- City of Lemoore
- City of Corcoran
- City of Avenal

E. State and Federal Bikeway Master Plan Elements

The 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 and federal requirements addressed by this plan include the following elements:

- Public involvement
- Local government involvement
- Preparation of a comprehensive plan (including route selection, land use, transportation interface and provisions for rest and parking facilities)

- Assessment of existing conditions
- Recommendations to increase bicycle usage
- Cost of recommended improvements
- Prioritization/phasing
- Potential air quality benefits

F. Local Government and Citizen Participation

The development of this Regional Bicycle Plan was directed by the Kings County Association of Governments (KCAG). A Bicycle Advisory Committee (BAC) was established to advise KCAG in the development and maintenance of bicycle interests within Kings County. Meetings of the BAC are facilitated by the KCAG staff using "consensus-building" techniques to bring the group to general agreement.

The role of the BAC was to update the 2005 Regional Bicycle Plan, which reflects and accommodates the diverse needs of the various characteristics of bicyclists within Kings County. Therefore, to better understand the needs of these many groups, the BAC was comprised of members from the following groups:

- Planning and Public Works staff from Kings County and the cities of Hanford, Lemoore, Corcoran and Avenal
- Caltrans
- Bicycle facility users
- School Officials
- Law Enforcement Representatives
- Local citizens

The BAC meets as needed monthly to address local bicycling concerns. Agendas from these meetings for the 2011 update are included in Appendix B. A complete list of the BAC members who participated in this plan update is also included in Appendix B.

G. Characteristics of Bicyclists

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

Child Riders

The majority of child bicycle trips are made to and from schools. In developing the bicycle plans for each community, the BAC determined that access to schools should be given a high priority and the bicycle plans produced reflect this emphasis. 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 do. Therefore, their trips are shorter and are likely to be taken on residential and collector streets. High school students are more likely to travel greater distances to school and use arterial streets.

Commuters

Bicycle commuting is an attractive transportation alternative to vehicular travel and becomes more appealing to a wider segment of the population - particularly when fuel prices rise. Adult bicycle commuters are typically experienced, serious riders who are knowledgeable about riding laws, and safety issues. They ride on all types of facilities and can commute for a distance of ten miles or more (although most bicycle commute trips average 3.6 miles). Similar to students, commuters also travel during periods of heavy vehicular traffic. This group of riders is most concerned with adequate bicycle facilities that will be provided and maintained.

Recreational Cyclists

Recreational bike riding is done to and from places of interest, in bike races, and 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, improved facilities, 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 scenic routes which allow the rider to begin and end the ride at one central location. The road surface and shoulder conditions are also very important to the recreational cyclist.

H. Scope and Organization

This bicycle plan is unique because it is designed to serve dual purposes:

- To provide a Regional Bicycle Plan that ensures that the facilities planned within all five local jurisdictions are integrated and compatible.
- 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.

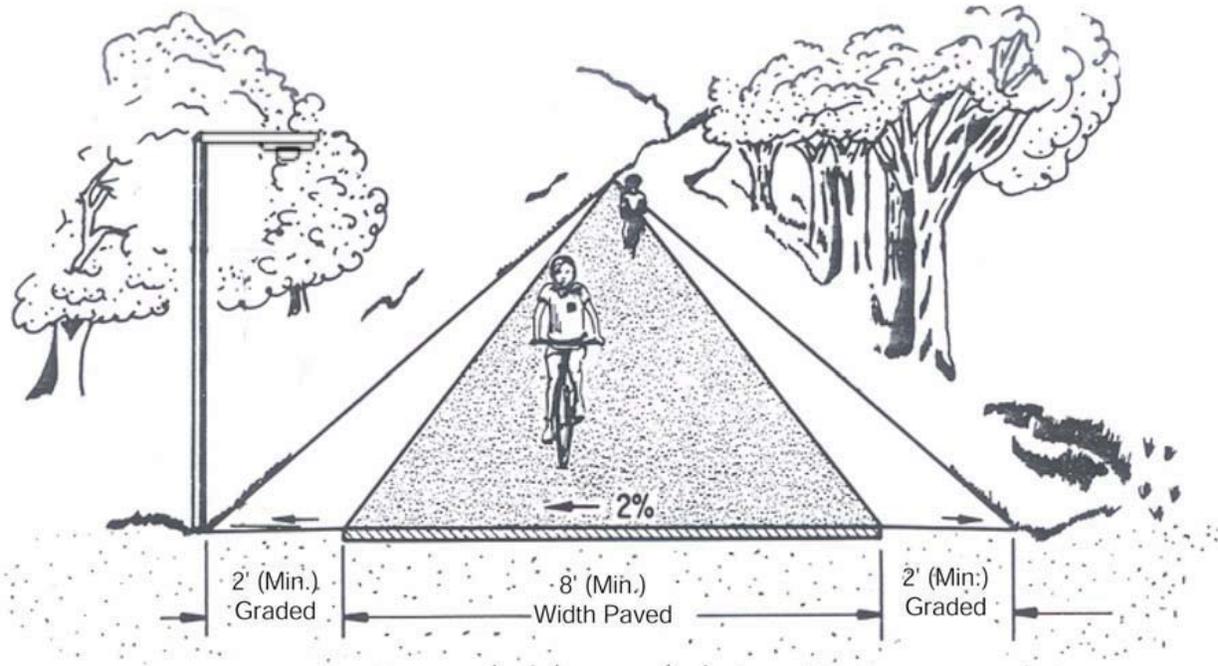
The Regional Bicycle Plan and the individual plans for each community were developed using a five-step approach:

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

Following Section VIII, the remainder of the document (Section IX) is divided into five sections, one for each of the jurisdictions; Kings County, Hanford, Lemoore, Corcoran and Avenal. 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" plan.

Section II

Design



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

II. DESIGN STANDARDS

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 *California Manual of Uniform Traffic Control Devices* (CA-MUTCD) is commonly used for bikeway signing and striping standards. If selected, local agencies may develop additional bikeway standards. The Regional Bicycle Plan cannot recommend any bicycle facility design that is not specified in the Highway Design Manual and any jurisdiction that develops any other facility design must accept the liability based on that design. Kings County, Hanford, Corcoran, and Avenal have not adopted local bikeway standards, but follow the recommendations of the above listed documents. The City of Lemoore has adopted a Bikeway Plan that is also guided by chapter 1000 of the *Caltrans Highway Design Manual* to ensure the safety and consistency of the bikeways within Lemoore.

A. Bikeway Facilities

The Caltrans Highway Design Manual, 6th Edition (August 2011) includes the following types of bicycle facilities:

Class I Bikeway (Bike Path): The Bike Path “provides a completely separated right of way for the exclusive use of bicycles and pedestrians with cross flow by motorists minimized.” For application and placement of signs, see the California Manual on Uniform Traffic Control Devices (California MUTCD), Section 9B.01. For pavement marking guidance, see the California MUTCD, Section 9C.03.

Class II Bikeway (Bike Lane): The Bike Lane “provides a striped lane for one-way bike travel on a street or highway.” Class II bikeways are established within the paved area of highways for preferential use by bicycles. Details for signing and pavement marking of Class II bikeways are found in the California MUTCD, Section 9C.04.

Class III Bikeway (Bike Route): The Bike Route “Provides for shared use with pedestrian or motor vehicle traffic.” Class III Bikeways are intended to provide continuity of the bikeway system. Class III facilities are established by placing Bike Route signs along roadways.

The final facility types are:

Touring: This facility designation is used for streets, county roads, and state highways which cannot be given a formal designation (i.e. Class I, II, or III) because of cost or liability concerns but are used as a primary cycling route by more experienced (and typically long-distance) cyclists. These roads are often narrow, without shoulders, or carry high speed traffic and/or heavy traffic volumes. These streets do not provide the level of protection or comfort necessary for the casual, less experienced cyclists. Therefore, a touring roadway is one on which only experienced cyclists should ride.

Shared Sidewalk: Sidewalk bikeways are wide sidewalks (approximately 10 feet wide) which are intended to be shared by both bicyclists and pedestrians. Sidewalk bikeways should be provided on both sides of streets (to reduce the occurrence of "wrong-way" driving by bicyclists). Although this facility is recognized, due to the high incidence of bicycle-pedestrian collisions, for safety reasons the Highway Design Manual states that "the use of sidewalks as Class III bikeways is strongly discouraged."

B. 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.

1. Class I - High Security

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

2. Class II - Medium Security

These parking facilities are stands or racks that allow a user to secure a bicycle 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.

3. Class III - Low Security

Class III parking facilities are traditional stands which 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 bicycle wheels which make theft easy if the frame is not secured to the parking facility. For these reasons, existing Class III stands should be phased out and replaced with Class II racks.

C. Regional Connectivity

Connectivity with the bordering counties of Fresno, Tulare, Kern, and San Luis Obispo is accomplished primarily through the state route system and county roads. While not under our control in general, these roads are frequently traveled by cars and trucks traveling at high speeds. Bicycle travel may be unsafe without some complete separation of facilities on these routes. According to the California Vehicle Code 21960 section A, "The Department of Transportation and local authorities, by order, ordinance, or resolution, with respect to freeways, expressways, or designated portions thereof under their respective jurisdictions, to which vehicle access is completely or partially controlled, may prohibit or

restrict the use of the freeways, expressways, or any portion thereof by pedestrians, bicycles, or other nonmotorized traffic...". Therefore, within Kings County, all state routes are open to bicycle travel as shared right-of-way except for closed freeway segments of SR 198 and SR 41.

In recent years, increased attention has been given to exclusive bicycle highways in larger metropolitan areas. These dedicated bicycle highways resemble carpool lanes with a large concrete divider separating cyclists from cars. As these types of facilities grow in popularity, KCAG would be interested in evaluating the feasibility of such projects in our high commuter corridors.

Section III

Goals and Policies



III. GOALS AND POLICIES

Goal 1: Provide a well-developed, safe and convenient, interregionally connected system of bikeways complete with support facilities.

Policies:

- 1.1 Design bikeways with adequate width to safely accommodate bicycles by conforming to the Caltrans *Highway Design Manual*, the *California Manual on Uniform Traffic Control Devices (MUTCD)*, and the *Federal MUTCD*.
- 1.2 Exploit all available federal, state, local, and grant funding sources to develop and enhance bikeways. Some of the fund sources are listed in Section VI of this plan and include, but are not limited to; (Federal) STP, CMAQ, STIP-TE, HBP, HSIP, SRTS, (State) BTA, RIP, EEM, SR2S, (Local) TDA, Developer Fees and city/county general funds
- 1.3 Ensure that the bikeway system is consistent with the availability of funds to construct, operate, and maintain. Also identify responsibility for each of these functions.
- 1.4 Identify, where possible, desirable alternative routes to those with high traffic volumes and high accidents as well as to take measures to make high traffic volume routes safer.
- 1.5 Design bikeways to ensure safe passage of cyclists (lighting, removal or trimming of foliage adjacent to the bikeway, etc.).
- 1.6 Define and prioritize logical project limits for bicycle routes which ensure continuity between routes, especially across jurisdictional boundaries within the County and encourage links with other counties.
- 1.7 Identify key areas for the placement of bicycle racks and support facilities

Goal 2: Future public and private development should support and facilitate the expansion, improvement, connectivity, and maintenance of the bikeway system.

Policies:

- 2.1 Bikeways should be planned as part of new developments and be consistent with the comprehensive regional bicycle system. Cul-de-sacs, if allowed, should be of the “open cul-de-sac” design (i.e. with a pedestrian or bike opening to allow pedestrian and bike access to adjacent neighborhoods and/or to major arterials/public transit connections). Gated communities may also include one or more passages to adjoining neighborhoods and/or to major arterials (resident keyed locked gates will remain for gated communities).
- 2.2 When warranted and possible, identify and preserve right-of-way for identified future bikeways at the earliest possible date.
- 2.3 Encourage land use planning that will promote bicycling and other alternative modes of transportation. This may include shopping centers within walking/bicycling distance of homes and offices, schools situated so that children do not need to cross major roads, parks near homes, higher density residential development near commercial areas and transit hubs, parking lots with bicycle parking included, pedestrian and bicycle bridges over major streets and highways, and reduced setbacks to promote pedestrian travel.

Goal 3: Encourage on-going bicycle safety education and information programs.

Policies:

- 3.1 Collaborate with law enforcement, school officials, and private organizations to encourage school and/or public bicycle safety programs.
- 3.2 When opportunities are provided, present public service announcements on local TV/Cable that promote safe bicycle travel.
- 3.3 Encourage bicycle safety programs in local schools; both public and private.
- 3.4 Seek funding sources/grant programs to enhance local bicycle safety programs.
- 3.5 As resources are available, create a web-based and or hard copy pamphlet which shows bicycle routes for distribution in bicycle shops, schools, transit centers, libraries, local government offices, and tourist information packets.

Goal 4: Bikeways should connect educational facilities, major employers, residential neighborhoods, and recreational areas.

Policies:

- 4.1 Encourage bicycle routes between residences and schools. These routes should avoid major streets, heavy traffic flow, and poor pavement whenever possible.
- 4.2 Encourage safe and convenient bikeways linking residential areas to employment areas where bicycle demand can be reasonably expected. Cul-de-sacs – if allowed, should be of the “open cul-de-sac” design (i.e. with a pedestrian or bike opening to allow pedestrian and bike access to adjacent neighborhoods and/or to major arterials/public transit connections). Gated communities should also include one or more passages to adjoining neighborhoods and/or to major arterials (resident keyed locked gates are acceptable).
- 4.3 When the opportunity and funding are provided, identify canals that may be covered and establish bikeways on the existing right-of-way.
- 4.4 Encourage the development of bikeways to and between recreational areas.

Goal 5: Encourage partnerships between private, non-profit, governmental, and citizen's groups.

Policies:

- 5.1 When the opportunity is provided inform employers of options that will increase bicycle usage by employees and potential benefits to their business.
- 5.2 Encourage local jurisdictions to adopt the *Complete Streets* standards as outlined in AB 1358, integrating multimodal transportation network policies balanced with community goals into their circulation elements; including bicycle facilities where appropriate to the function and context of the roadway.
- 5.3 Encourage private organizations to assist in the maintenance and patrol of bicycle facilities.
- 5.4 Encourage Caltrans to add “Share-the-Road” signs on all open state highways in the county, particularly in roadway sections with narrow or absent shoulders.

Goal 6: Encourage the use of bicycles to enhance air quality and improve the health of the rider.

Policies:

- 6.1 Encourage participation in local health fairs and the County Fair, to promote bicycling (including providing information on routes, etc.).
- 6.2 As resources and opportunities become available, work with the appropriate agencies to establish a public-relation campaign which explains the benefits of bicycling, including potential air quality and health benefits.
- 6.3 Continue to encourage communications with the transit providers in Kings County to move toward the placement of bicycle racks on buses as well as continuing to purchase and install bicycle racks at transit stops to facilitate bicycle parking.

Other Suggestions and/or comments

For the “Best Practices” in the development of bicycle parking facilities, agencies and builders may refer to the APBP (Association of Pedestrian and Bicycle Professionals) Bike Parking Guidelines available at www.apbp.org.

Section IV

Transportation Control Measures



IV. TRANSPORTATION CONTROL MEASURES

Kings County is designated as a serious nonattainment area for meeting federal and state ozone and particulate matter less than 10 microns in diameter (PM-10). For these designated areas, the 1990 Federal Clean Air Act Amendments (FCAAA) 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 standards. 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.

Counties must provide for the expeditious implementation of TCMs included in the State Implementation Plan (SIP). Opportunities to support federal and statewide goals concerning air quality in transportation plans must be identified. To implement strategies to improve the air quality through transportation control measures, KCAG has prepared the "Kings County Regional Bicycle Plan."

The objective of the Regional Bicycle Plan is to accommodate the use of bicycles as an alternative to the automobile. Bicycle commuting is an attractive transportation alternative to vehicular travel and becomes more appealing to a wider segment of the population - particularly when fuel prices rise. More commuters will consider bicycling a feasible alternative to driving provided there are convenient and safe travel routes and storage facilities are available.

Bicycle use can be promoted for commuter and recreational travel. The primary benefits will be reducing traffic congestion and providing a non-polluting transportation mode. As previously mentioned, bicycle planning has become increasingly important as planners evaluate ways to address sustainability in transportation planning.

Measures to encourage the use of bicycle and pedestrian walk modes to increase transit ridership mutually assist each other, as the modes are often complimentary. Implemented successfully in other areas, a possibility in the future is the integration of bicycles with other transportation modes, accomplished by providing bicycle racks on transit buses. Bicycle racks have been provided on transit buses throughout Kings County to encourage the integration of bicycles with other transportation modes. This integration will continue to promote greater air quality benefits.

Section V

Safety and Education Programs



V. SAFETY AND EDUCATIONAL PROGRAMS

A. Existing Programs

A 2004 telephone survey of local schools showed that 72% of elementary schools have some form of a bicycle safety or education program. The survey also showed 44% local junior highs and high schools do not currently have an existing program(s). Those existing elementary school based programs occur annually and are typically presented by law enforcement officials. Additionally, the Optimists have an on-going local bicycle safety program). School officials feel that these programs are effective and should be continued. Listed below are sources of information which may be considered for a local bicycle safety program:

- Safe bicycling pamphlets available for distribution to area schools;
- League of American Bicyclists courses for adults and children;
- Legislation requiring bicycle helmets for children under 18 years old;
- Kings County Bikeway Maps which list the rules of the road, preferred bicycle routes, and safety tips;
- Stop-on-a-Dime programs presented by the Hanford Police Department;
- Corcoran Optimists presentation of a bicycle safety/educational program.

Although education programs are provided through these sources for the school aged population, since the prevalence of adult bicycle rider collisions is much higher than school aged riders, there is a need for adult education programs as well.

B. Future Programs

The existing schools that provide bicycle safety or education programs should continue their programs. In schools where there is not a current program established, one should be established (particularly for younger children). There are several agencies at the state and national levels that are available to help organize a program. The bicycle safety or education program should include one or more of the following:

- Annual or bi-annual bicycle safety presentations and discussions.
- Explanations of existing laws including: riding with the direction of traffic and stopping at traffic stop signs and traffic signals, and requiring children to wearing a helmet.
- An annual bicycle rodeo to be held at schools and/or shopping centers. This event might include:
 - A basic skills course
 - Safety instructions
 - A maintenance clinic
 - Bicycle registration

- Distribution of information through the medium of public service announcements, local TV commercials, and newspaper articles should be targeted toward bicycle safety for Kings County youth.
- Distribution of the Kings County Bikeways Maps to the community that contains a summary of the bicycle section of the California Vehicle Code, bicycle safety tips, bicycle routes within the County, and phone numbers to get more information about local bikeways.

Bicycle related accidents in Kings County have increased by 0.2% since the “2005 Kings County Regional Bicycle Plan” was created. There were a reported total of 62 bicycle accidents causing injury in Kings County from the time periods of 2006 to 2008 as compared to the period 2002 to 2004. Efforts should be made to enhance and strengthen bicycle safety and education awareness, with the goal of reducing the number of bicycle accidents in the future. While there are some costs involved in starting a bicycle safety and education programs and establishing and maintaining bicycle lanes and routes, the benefits are worth the cost if accidents can be prevented and lives saved.

Section VI

Funding



VI. FUNDING

Funding for bicycle facilities and education programs are available through various federal, state, and local fund sources. The following presents a general description of some of these funding sources. Funding programs change in both federal and state legislation and this list should be regarded as a reference only and not as the only potential funding for bicycle facilities. For additional information and updates on funding for bicycle and pedestrian facilities, please contact KCAG.

Most funding for bicycle related improvements is tied to the commuter bicycle routes. The definition of a commuter bicycle facility includes preferred routes to work centers, schools, and other activity centers. However, there are some programs that provide funding for recreational bicycle facilities.

A. Federal Sources

The federal transportation legislation, Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), provides funding through several different programs. It is expected that these programs will be continued with the enactment of the next federal transportation bill. Unless otherwise noted, all federal programs require a local match requirement of 11.47%.

- Surface Transportation Program (STP) - This program is the most flexible of the transportation fund programs. The program contains provisions for several set-aside sub-programs. Non-recreational bicycle and pedestrian facilities are eligible projects under the STP and its sub-program; Transportation Enhancements (TE), Kings County's estimated annual apportionment of STP funds is \$1.4 million, which is exchanged for state funds and transferred directly to the local agencies.
- Congestion Mitigation and Air Quality (CMAQ) - This program provides funding for projects that help achieve air quality standards under the 1990 Clean Air Act. Bicycle facility projects that can show an air quality benefit are eligible for these funds. Kings County's estimated annual apportionment of CMAQ funds is \$1.4 million. The locally provided match for this program varies based on the type of project submitted and ranges from 0% (safety projects) to 20% (transit projects).
- Transportation Enhancement (TE) - This program is a sub-program of the STP. TE funds may be used for on-road bicycle and pedestrian facilities and the preservation of abandoned railway corridors for conversion to bikeway/pedestrian trails. Since 2004, TE funds have been included in the State Transportation Improvement Program (STIP). Due to the small annual apportionments Kings County would receive, TE funds are usually programmed by combining several years of funds in one programming year.
- Highway Bridge Program - This program provides funds for preventive maintenance, seismic retrofit, repair, or replacement of bridges and bridge decks. Bridge projects

may include restoring existing or adding bicycle and pedestrian facilities to the bridge or its approaches. This program is administered through Caltrans and bridges are selected from a priority list. The local match requirement for this program is 20%.

- Highway Safety Improvement Program (HSIP) - The overall purpose of this program is to achieve a significant reduction in traffic fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements. Pedestrian and bicycle facilities that provide improved sight distance, raised medians, refuge places, and striping and signage are eligible projects for this program. The required local match for this program is 0% to 10% on a sliding scale.
- National Highway Safety Act Funds (Section 402) - This program was developed to reduce motor vehicle fatalities and injuries through a national highway safety program. Bicycle/pedestrian safety education programs are eligible for funding, but it is not considered a priority program.
- Federal Transit Act (FTA) - This act provides funds to urbanized (5307) and non-urbanized areas (5311) for various transit operating and capital assistance projects. Eligible projects include those that provide access for bicycles to mass transit facilities, or to install racks or other equipment for transporting bicycles on mass transit. Local agencies are required to provide 10% of the total project cost.
- National Recreational Trails Fund - This program provides funds to the States to develop and maintain recreational trails and trail-related facilities for both motorized and non-motorized recreational trail uses. This is a competitive grant program administered by the California Department of Parks and Recreation.
- Safe Routes to Schools (SRTS) - In 1969, about half of all students walked or bicycled to school. Today, fewer than 15% arrive by walking or bicycling and more than 50% arrive by private vehicle. The SRTS Program empowers communities to make walking and bicycling to school a safe and routine activity once again. The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school. There is no required match for this competitive grant program.

B. State Sources

- Bicycle Transportation Account (BTA) – This program was originally known as the Bicycle Lane Transportation Account (BLTA) and was initiated by AB 1020 (1997). It became the BTA program after the sunset of the BLTA in 2004, and BTA has no sunset. This program provides state funds for city and county projects that improve safety and convenience for bicycle commuters. The program provides \$5 million per year on a competitive basis. To obtain funding through this source, jurisdictions must have a bicycle plan that is no more than four years old and has been certified by the Caltrans Bicycle Facilities Unit.

- Regional Improvement Program - Each County may program a portion of Regional Improvement Program funds available to them for capital projects, including bicycle facilities. Projects must be consistent with the Regional Transportation Plan (RTP) and be included in the Regional Transportation Improvement Program (RTIP) to be programmed in the State Transportation Improvement Program (STIP).
- Environmental Enhancement and Mitigation Program - This program provides between \$5 and \$10 million (subject to appropriations from the state budget) of competitive grant funds annually to fund projects that offset environmental impacts of existing or new public transportation facilities. The maximum amount of EEMP funds awarded to any single project is \$500,000.
- Habitat Conservation Fund Grant - This program provides \$2 million per year, administered through the California State Parks Department. It requires 50% matching funds and may be used for acquisition of wildlife habitats, which may include trails and programs that attract people to park and wildlife areas and educate citizens about the state's wildlife resources.
- Land and Water Conservation Fund Program - This program provides competitive grants to plan, acquire, and develop recreation parks and facilities including bikeway and pedestrian trails. The California Department of Parks and Recreation distributes the funds which require a 50% match in cash or in kind, with 40% going to northern California and 60% to southern California.
- Safe Routes to School (SR2S) – In 1999, AB 1475 was signed into law, which created a new traffic safety program in California. The goal of AB 1475 is to demonstrate and evaluate the effectiveness of a “Safe Routes to School” program. The Safe Routes to School program was made a permanent program in 2007 by AB 57. The maximum level of funding per project is \$500,000 with a 10% local match requirement. To obtain funding for the program, a pedestrian and/or bicycle problem must be identified for correction on a route to a public school and the project funds must be used to correct the condition.
- Office of Traffic Safety - Eligible governmental agencies may submit proposals for traffic safety projects as part of Caltrans' Highway Safety Plan. Comprehensive bicycle safety programs that involve enforcement, education, public health, driver education, transportation engineering and public communication are eligible project types.

C. Local Sources

- Local Transportation Fund (LTF) - This program allows one-quarter of a cent of the retail sales tax to be returned back to counties for improving transportation facilities including bikeways. This money can be used as matching funds for federal or State sources. Up to 2% of a county's LTF funds can be programmed for bicycle facilities. For Kings County, this amount is about \$408,000 annually.

- Development Fees - These fees are levied and administered by local jurisdictions and are used to provide improvements to accommodate new development.
- Mello-Roos Community Facilities District Act of 1982 - This program allows a sponsoring agency to issue a special tax bond for a community facilities district (CFD) to finance public facilities and services such as parks, recreation areas, parkways and open spaces. There are currently no CFD's in Kings County that would provide funding for bicycle facilities.
- Development Agreements - This program does not provide funding to the local agency; however, development agreements can stipulate that developers provide portions of bikeway facilities. The construction of these bicycle facilities becomes a function of the development.
- General Fund - This is the general operating fund for a local jurisdiction which may be allocated by the governing board (Kings County Board of Supervisors or City Councils) to provide funding for bikeway facilities.
- Other Local Programs - Local agencies may implement programs to provide bikeways and bicycle facilities including "adopt-a-trail," symbolic shares in trail right-of-way and memorials. These programs require that private individuals or groups donate money, property, or time for the design, acquisition and/or construction of bikeway facilities. Volunteer programs may reduce the cost of implementing some off-street routes.
- REMOVE II Program – This program, sponsored by the San Joaquin Valley Air Pollution Control District (SJVAPCD), will provide funding to promote the use of bicycling as a viable transportation option based on the ARB calculations for emission reductions to assist with the development or expansion of Class I and Class II bicycle networks. A class I bicycle path/trail project can receive up to \$150,000 and a class II bicycle lane may receive up to \$100,000.

The cost of the bikeway system may appear high, but compared with other transportation (roadway) expenditures, the cost is relatively low. From a public health, congestion, and air quality perspective, the cost per reduced vehicle trip is substantially lower than other alternatives, including transit. More importantly, it is critical to provide the necessary infrastructure to encourage increased bicycling within our communities. Improved multimodal infrastructure will improve public safety, which will work to increase bicycle ridership in our area. Kings County and each of the four cities should continually seek new funding sources and encourage public support to improve the bikeway system to achieve increased community sustainability.

Section VII

Selection Criteria

Type 1



Type II



VII. SELECTION CRITERIA

The American Institute of Architects (AIA) *Communities by Design's* 10 Principles for Livable Communities provides a comprehensive evaluation of how local planners can improve quality of life through planning efforts (<http://www.aia.org/about/initiatives/AIAS075369>). In addition to this, Caltrans released a planning document, *Smart Mobility 2010* that includes a framework for context-sensitive planning solutions for rural communities. The selection criteria for projects were retooled with these principles in mind. Below is a list detailing the ranking process for projects found within the Kings County Regional Bicycle Plan:

- Safety
- Educational programs created or expanded
- Completion of regional links
- Connections with other transportation modes
- Connections with public spaces, population centers and employment centers
- Revitalization of Downtown
- Use of other funds
- Public support
- Project consistency
- Time and cost effectiveness
- Design consistency with Complete Streets Act
- Promotes sustainability
- Open Space Preservation

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 the 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, airports, etc.)
2. Is the project in a transit-oriented development?

D. Connections with Public Spaces, Population and Employment Centers

1. Does the project provide connections with at least one activity center?
2. Does the project link housing with urban cores?
3. Does the project provide connectivity to a community center, public space, or park?

E. Revitalization of Downtowns

1. Does the project encourage bicycling in and to downtown centers?

F. Funding

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

G. Local 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?

I. Project Consistency

Is the project consistent with the following guidelines:

1. Applicable Bicycle Plan and
2. Regional Transportation Plan and General Plan
3. The Kings County Locally Preferred Blueprint Scenario
4. Caltrans' Smart Mobility 2010
5. Does the project meet KCAG and Caltrans' standards for proposed facilities?

J. 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?

K. Design consistency with Complete Streets Act

1. Does the project maintain design consistency with the Complete Streets Act?
2. Does the design improve the aesthetic of an existing roadway?

L. Promotes Sustainability

1. Does the project encourage both recreational and commuter bicycling?
2. Is the project consistent with the Kings County Locally-Preferred Blueprint Scenario?

Section VIII

Liability



VIII. LIABILITY

The bikeways planned for Kings County and each of the four 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. The city becomes liable only if the facility is improperly designed, constructed, or maintained.

A maintenance program should be adopted by each jurisdiction to ensure that the bikeways are being adequately maintained. KCAG will explore available resources to help facilitate these maintenance programs for the local agencies. However, improper maintenance due to funding shortfalls generally does not put the city at risk.

The open segments of the state highways running through Kings County are considered as an integral part of the bicycle transportation network while Caltrans retains the liability for these facilities.

The key liability issues that need to be addressed by each jurisdiction are:

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
- “California Manual on Uniform Traffic Control Devices (CA MUTCD)”, (for signage, striping, and traffic control devices)
- If not covered within the CA MUTCD the National Edition of the “Manual on Uniform Traffic Control Devices (MUTCD)” may be used (for signage, striping, and traffic control devices).

Operational Liability:

Deteriorating conditions that develop over time represent potential liability concerns. A regular maintenance and monitoring program will help reduce this 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. The pavement management program (PMP) that is initiated in 2011 will assess the condition of the roadways in Kings County and assign a pavement condition for use in prioritizing pavement maintenance. All four cities and the County are participating in the PMP. 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.



Bicycle Plan
for the
City of Avenal

CITY OF AVENAL BICYCLE PLAN

A. City of Avenal 2005 General Plan

The City of Avenal General Plan states:

The City of Avenal's Goal as "To design and maintain a fully integrated local network that provides for safe and convenient circulation using a variety of transportation modes." In the effort to accomplish this goal the city has established four Objectives and four Policies and Standards. The following are the objectives and policies and standards that apply to bicycles and pedestrians.

Objective B Enhance the availability and accessibility of alternative modes of transportation, such as walking, bicycling, carpools, buses and rail."

Objective D Design streets that promote safe and pleasant conditions for residents, pedestrians, bicyclists and motorists on neighborhood streets, while preserving access for emergency vehicles, buses and other users.

Policies and Standards

6.1 General Circulation and Street System

2. Incorporate features such as bus shelters, bicycle storage, bicycle racks and park and ride lots into the design of public and private development projects.
3. Designate a network of bicycle routes providing safe passage throughout the City; establish linkages between schools, parks and designated bikeways.
4. Require bicycle storage facilities as a condition of approval for multi-family residential development projects containing 10 or more units and for all commercial and public development proposals.
14. Design the street network with multiple connections and relatively direct routes for motorists, as well as pedestrians and bicyclists.
15. Residential streets shall be designed with sidewalks on both sides. Sidewalks shall be a minimum width of 4.5 feet to provide enough room for two pedestrians to walk side by side. Sidewalks and bike lanes shall be shaded by trees for pedestrian comfort.

6.3 Pedestrian and Bicycle Modes

1. In existing developed areas where sidewalks do not exist, the City shall continue to support existing programs and pursue new programs for sidewalk construction. Bicycle accidents shall continue to be monitored and bicycle paths and lanes shall be established upon need.
2. Provide safe, aesthetic and pleasant space for pedestrians.

3. Widen sidewalks above the minimum established Improvement Standards where intensive commercial, recreation or institutional activity is present and where residential densities are high.
4. Partially or wholly close certain streets which are not required for traffic so that they can be used for pedestrian circulation and open space use.
5. Ensure convenient and safe pedestrian crossings.
6. Pedestrian and bicycle access shall be provided on Local streets and Minor Collectors to enable pedestrians to have access through a neighborhood, to shopping areas, to transit stops, schools and other such facilities.
7. Locate sidewalks, pedestrian paths, and appropriate crosswalks to facilitate access to all schools and other areas with significant pedestrian traffic. Whenever feasible, pedestrian paths shall be developed to allow for unobstructed pedestrian flow from within a neighborhood.
8. Promote safe, convenient, and accessible pedestrian access ways within the community except where there is no demonstrated need, such as industrial and rural residential areas.
9. Encourage the inclusion of green belts and common open space for pedestrian use within the residential development areas.
10. Require that Collector streets which are identified to function as links for the bicycle transportation system be provided with Class II bikeways (bike lanes) or show an alternative route. Arterial streets shall provide for a Class II bike route. In such cases, the City shall accommodate cyclists on these identified streets by widening the street or eliminating on-street parking wherever possible.
11. Design bicycle and pedestrian paths so that interaction with vehicular traffic is minimized.
12. Require the provision for safe bicycle circulation in all new developments, including bicycle parking facilities and internal bicycle and pedestrian routes.
13. Provide for the safe and convenient use of the bicycle as a means of transportation and recreation.
14. Prevent bicycle accidents through promoting bicycle safety education and improved traffic enforcement related to bicycle use.
15. Encourage adequate and secure bicycle storage facilities at all governmental, commercial and parks locations throughout the City.

B. Existing Bikeways

The City of Avenal has made a positive effort toward promoting safe bicycle use through the development of many bikeways identified in the 1998 and 2005 Regional Bicycle Plans. Bicycle riding may occur on existing streets as “shared-use” facilities. New development and demand for bicycle facilities will stimulate additional designated routes throughout the city.

C. Existing Bicycle Ridership

Avenal is a small community that facilitates bicycle riding. In spite of the city's small size, less than 1% of existing workers commute via bicycle. As is typical of most communities, most bicycle riding within the city occurs by school-age children riding to schools, parks and shopping centers. The greatest bicycle usage occurs on residential and collector streets.

D. Bicycle-Related Activity Centers

Within the City of Avenal, the following locations generate the most bicycle-related travel:

- Avenal Elementary School
- Tamarack Elementary School
- Reef Middle School
- Avenal High School
- The downtown commercial/civic area
- The Little League fields (on Monterey/Park)
- Avenal State Prison

These locations are graphically depicted in Figure 5.

E. Accident History

Accident data from the Statewide Integrated Traffic Records System (SWITRS) showed a total of three bicycle related accidents in the period of 1996 – 1999, five accidents from 2000-2004, and an improvement to only one accident in the 2005 – 2008 period.

F. Facility Selection

Potential bicycle routes were suggested by the BAC, based on initial considerations of current bicycle travel, location of activity centers, and compatibility with current road characteristics. Field work was conducted on those and other suggested routes to determine the suitability and desirability of each route and then evaluated using the following criteria:

- Pavement width
- Surface condition
- Major constraints (i.e. bridge widening)
- Amount and type of parking
- Surrounding land use (commercial, residential, etc.)
- Potential demand (location relative to activity centers)

An evaluation sheet was developed for existing and potential bike routes (Appendix E) which describes the characteristics of each route by segment. Each sheet shows the following information:

- A general description of the route
- Approximate traffic volume on the street
- Width of the curb lane
- Speed of traffic on the road
- Relative cost to accommodate a bikeway
- Potential bicycle-related demand of the facility

From an evaluation of the above criteria and characteristics of each potential bicycle route, a list of proposed bicycle improvements was developed. The list included Class II, Class III, and Class III (with Stripe) bicycle facilities. When prioritizing the bicycle routes in Avenal, efforts were made to serve both the east-west trips across town as well as the north-south trips across Skyline Boulevard.

G. Facility Funding

The cost for bikeway facilities will be identified as the projects approach development. The improvements were prioritized based on system continuity and the goals and policies identified by the BAC.

Many of the proposed bicycle routes included on the list are considered to be commuter oriented and therefore eligible for funding available from federal and state sources. Routes to schools are included in the definition of a commuter route. Only those routes designated as part of the federal-aid system are eligible for STP and RIP funds. Projects proposed for funding in these programs would need to be included in the required federal, state, and regional programming documents.

H. Support Facilities and Programs

Parking

Other than bicycle racks at the schools, there are no existing bicycle support facilities in Avenal. Bicycle parking facilities should be provided at all recreational and employment destinations. In addition, bicycle ridership among employees would be enhanced if employers provided showers and bicycle lockers. Since transit service is provided in Avenal, opportunities for bicycle/transit interface should be implemented. Bicycle parking facilities should be provided at any new park-and-ride lots. KART has installed benches that can be used as bicycle racks.

Educational and Safety Programs

Historically educational and safety programs were presented by the California Highway Patrol and the Kings County Sheriff Department. The program was presented to the students of the elementary and middle schools at least once a year. The program stressed helmet usage and rules of the road. An increase in awareness, knowledge, and improved bicycle habits may reduce bicycle related accidents over the next four year period.

I. Vehicular Trip Reduction

Many bicycle trips in the City of Avenal are destination based (persons riding to reach schools, shopping center, parks, etc.) and Avenal's small size facilitates easy bicycle usage. Therefore, if a better bikeway system results in a greater usage of bicycles, then it will result in a corresponding reduction in vehicular trips. A study prepared for the FHWA and FTA show that if more than 35% of the arterial and collector streets have bikeways, bicycle trips within the area will double. Assuming that 1-2% of the VMT could be transferred to bicycle trips, it is estimated that 1000 pounds of pollutants per year can be reduced through the implementation of the bicycle routes.

Table A1
City of Avenal – Tier I Improvement List

Priority	Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
1	Park Ave.	Monterey St.	San Joaquin St.		Class III with stripe
2	Third Ave.	Alpine St.	Orange St.	4,845	Class III with stripe
3	Union Ave.	Skyline St.	Kern St.		Class II

Table A2
City of Avenal – Tier II Improvement List

Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
SR 33	San Joaquin St.	Avenal Prison	8,670	Multi-use path
SR 269	Avenal Cutoff Rd.	San Joaquin St.	26,400	Touring

City of Avenal: Planned and Existing Bikeways

Legend

- Existing Bikeway
- Planned Bikeway
- Touring Bikeway
- Corner Store
- School
- Parks
- City Limits





Bicycle Plan
for the
City of Corcoran

CITY OF CORCORAN BICYCLE PLAN

A. 2007 City of Corcoran General Plan

The City of Corcoran General Plan states:

The purpose of the Circulation Element is to provide a safe, efficient, and adequate circulation system addressing all facets of circulation including streets and highways, transportation corridors, public transit, railroads, bicycle and pedestrian facilities, and commercial, general, and military airports for the City. The plan also states that the use of other modes of transportation such as transit, walking, and bicycling is promoted to reduce the demand for transportation system improvements and to improve air quality. The pedestrian and bicycling systems will also be used to connect the various activities centers identified in the Land Use Element and promote a pedestrian/bicycle friendly community.

Circulation Element:

General Circulation and Street System

- Policy 2.2* Incorporate features such as bus shelters, bicycle storage, bicycle racks and park and ride lots into the design of public and private development projects.
- Policy 2.3* Designate a network of bicycle routes providing safe passage throughout the City; establish linkages between schools, parks and the designated bikeway.
- Policy 2.4* Encourage bicycle storage facilities as a condition of approval for multi-family residential development projects containing 10 or more units and for all commercial and public development proposals.
- Policy 2.14* Residential streets shall be designed with sidewalks on both sides. Sidewalks shall be a minimum width of six feet to provide enough room for two pedestrians to walk side by side. Sidewalks and bike lanes shall be shaded by trees for pedestrian comfort.
- Policy 2.15* Provide pedestrians and bicyclists with shortcuts and alternatives to travel along high volume streets by designing pedestrian and bicycle pass-through pathways at cul-de-sac bulbs adjacent to Arterial roadways.
- Policy 2.20* Connectivity shall be encouraged and provided which permits vehicular and non-vehicular circulation within a neighborhood without exclusive reliance on perimeter Collectors and Arterials.

Local Streets:

- Policy 2.48g* Pedestrian accessibility from adjacent residential neighborhoods shall be provided by the usage of through-block connections or other accessibility methods. These street linkages may include access roads, open ended cul de sacs, pedestrian paths, or other such facilities for pedestrian and bike

access, and emergency access, where necessary. Such a linkage shall be made to abutting Collector or Arterials no less frequently than every 600 feet.

Pedestrian and Bicycle Modes:

Policy 2.55 In existing developed areas where sidewalks do not exist, the City shall continue to support existing programs and pursue new programs for sidewalk construction. Bicycle accidents shall continue to be monitored and bicycle paths and lanes shall be established upon need.

Policy 2.56 Provide safe, aesthetic, and pleasant space for pedestrians.

Policy 2.57 Widen sidewalks above the minimum established Improvement Standards where intensive commercial, recreation, or institutional activity is present and where residential densities are high.

Policy 2.58 Partially or wholly close certain streets which are not required for traffic so that they can be used for pedestrian circulation, and open space use.

Policy 2.59 Ensure convenient and safe pedestrian crossings.

Policy 2.60 Pedestrian and bicycle access shall be provided on Local streets and Minor Collectors to enable pedestrians to have access through a neighborhood, to shopping areas, to transit stops, schools and other such facilities.

Policy 2.61 Locate sidewalks, pedestrian paths, and appropriate crosswalks to facilitate access to all schools and other areas with significant pedestrian traffic. Whenever feasible, pedestrian paths shall be developed to allow for unobstructed pedestrian flow from within a neighborhood.

Policy 2.62 Require, where security walls or fences are proposed for residential developments along Arterial or Collector streets, that pedestrian access be provided between the Arterial or Collector and the subdivision to allow access to transit vehicles operating on an Arterial or Collector Street.

Policy 2.63 Promote safe, convenient, and accessible pedestrian access ways within the community, except where there is no demonstrated need, such as industrial and rural residential areas.

Policy 2.64 Encourage the inclusion of green belts and common open space for pedestrian use within residential development areas.

Policy 2.65 Require that Collector streets which are identified to function as links for the bicycle transportation system be provided with Class II bikeways (bike lanes) or show an alternative route. Arterial streets shall provide for a Class I or Class II bike routes. In such cases, the City shall accommodate cyclists on these identified streets by widening the street or eliminating on-street parking wherever possible.

Policy 2.66 Design bicycle and pedestrian paths so that interaction with vehicular traffic is minimized.

- Policy 2.67* Require the provision for safe bicycle circulation in all new developments, including bicycle parking facilities and internal bicycle and pedestrian routes.
- Policy 2.68* Provide for the safe and convenient use of the bicycle as a means of transportation and recreation.
- Policy 2.69* Eliminate hazards on designated bikeways.
- Policy 2.70* Prevent bicycle accidents through promoting bicycle safety education and improved traffic enforcement related to bicycle use.
- Policy 2.71* Provide adequate and secure bicycle storage facilities at all governmental, commercial, parks, and residential locations throughout the City.

Air Quality Element:

- Policy 6.4* The City shall encourage transportation alternatives to motor vehicles by developing infrastructure amenable to such alternatives by doing the following:
- a. Right-of-way requirements for bike lanes in the planning of new arterial and collector streets and in street improvement projects, pedestrian connectivity to cul-de-sacs from collectors and arterials;
 - b. Require that new development be designed to promote pedestrian and bicycle access and circulation in conformance with the United States Green Building Council LEED – Neighborhood Development Guidelines;
 - c. Provide safe and secure bicycle parking facilities at major activity centers, such as public facilities, employment sites, and shopping and office centers.

B. Existing Bikeways

There have been major improvements with respect to the development of bikeways in the City of Corcoran since the 2001 Regional Bicycle Plan. The City of Corcoran will continue to develop its bikeways as growth and demand dictate and as funding becomes available.

C. Existing Bicycle Ridership

Corcoran is a small community that facilitates bicycle riding. However, an examination of the 2000 census data indicates that very few employment-related trips are made by bicycle (less than 1%). Most bicycle riding within the community, as is typical of most communities, occurs by school-age children riding to schools, parks and shopping centers. The greatest bicycle usage occurs on residential and collector streets.

D. Bicycle-Related Activity Centers

Within the City of Corcoran, the following locations generate the most bicycle-related travel:

- Elementary Schools
- John Muir Junior High School
- High Schools
- The downtown commercial/civic area
- YMCA/Senior Center
- Corcoran State Prison
- Rite Aid

E. Accident History

Accident data from the Statewide Integrated Traffic Records System (SWITRS) showed a total of eight bicycle related accidents in the period of 1996 – 1999, eight accidents from 2000-2004, and an improvement to no bicycle related accidents in the 2005 – 2008 period.

F. Facility Selection

The BAC suggested potential bicycle routes within the City of Corcoran. Based on their suggestions, City Staff conducted a study to determine the suitability and desirability of each route, which was then, evaluated using the following criteria:

- Pavement width
- Surface condition
- Major constraints (i.e. bridge widening)
- Amount and type of parking
- Surrounding land use (commercial, residential, etc.)
- Potential demand (location relative to activity centers)

An evaluation sheet was developed for existing and potential bike routes, which describes the characteristics of each route by segments. Each sheet shows the following information:

- A general description of the route
- Approximate traffic volume on the street
- Width of the curb lane
- Speed of traffic on the road
- Relative cost to accommodate a bikeway
- Potential bicycle-related demand of the facility

From the evaluation of the above criteria and characteristics for each potential bicycle route, a list of proposed bicycle improvements was developed as shown in Table 7.

G. Facility Funding

The cost for each bikeway facility will be determined as the project approaches development. The improvements were prioritized based on system continuity and the goals and policies identified by the BAC. Potential funding source(s) for each project are also identified.

Most of the proposed bicycle routes are oriented towards commuters. Commuter routes also include routes to schools and are eligible for most of the funding available from federal and state sources. Only those routes designated as part of the federal-aid system are eligible for STP and CMAQ funds, which need to be included in the necessary regional, state, and federal programming documentation.

H. Support Facilities and Programs

Parking Facilities

Bicycle parking facilities are provided at most educational and recreational centers including the YMCA/Senior Center. Bicycle parking facilities should be provided at the AMTRAK multimodal facility, recreational, and employment destinations (Corcoran State Prison, City Hall, etc.). In addition, bicycle ridership among employees would be enhanced if employers provided showers and bicycle lockers. Bicycle parking facilities should also be provided at any future park-and-ride lots. Bicycle racks should continue to be added to any future buses.

Educational and Safety Programs

Historically education and safety programs have been presented by the Corcoran Police Department and the local Optimists Club. The program was presented to elementary school students in the form of a bicycle rodeo at least once a year. The program stressed helmet usage and rules of the road. An increase in awareness, knowledge, and improved bicycling habits, may reduce bicycle related accidents over the next four year period.

I. Vehicular Trip Reduction

Many bicycle trips in the City of Corcoran are destination based (persons riding to reach schools, shopping center, parks, etc.) and Corcoran's small size facilitates easy bicycle usage. Therefore, if a better bikeway system results in a greater usage of bicycles, then it will result in a corresponding reduction in vehicular trips. A study prepared for the FHWA and FTA show that if more that 35% of the arterial and collector streets have bikeways, bicycle trips within the area will double. Assuming that 1-2% of the VMT could be transferred to bicycle trips, it is estimated that 1000 pounds of pollutants per year can be reduced through the implementation of the bicycle routes.

Table C1
City of Corcoran – Tier I Improvement List

Priority	Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
1	North Ave.	6 1/2 Ave.	Otis Ave.	5,300	III
2	Whitley Ave.	6 1/2 Ave.	Corcoran Airport	2,640	III
3	King Ave.	Bainum Ave.	Corcoran Prison	12,800	III

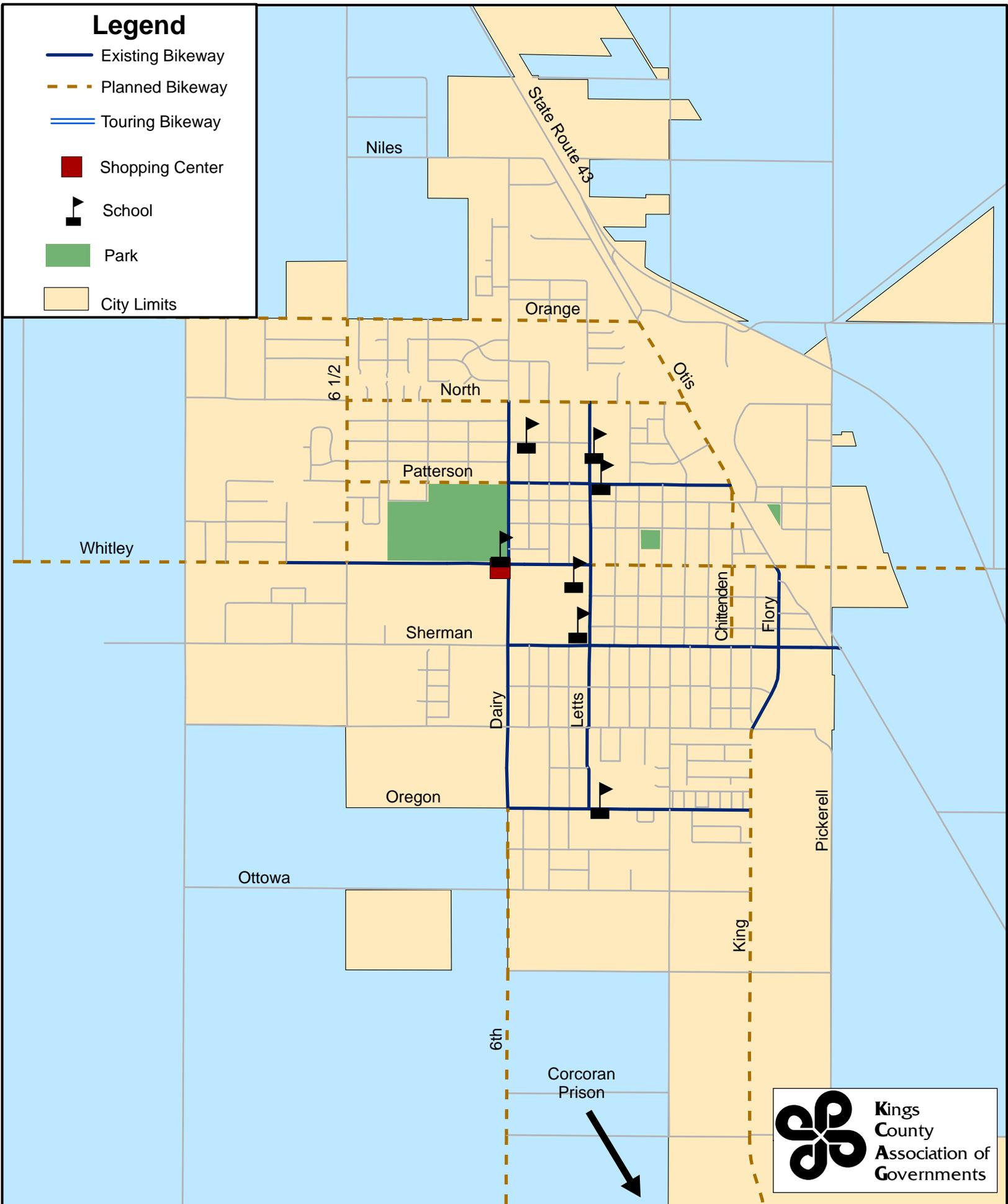
Table C2
City of Corcoran – Tier II Improvement List

Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
Dairy/6th Ave.	Oregon Ave.	Paris Ave.		III
Chittenden Ave.	Sherman Ave.	Brokaw Ave.		III
Otis Ave.	Brokaw Ave.	Orange Ave.		III
Patterson Ave.	6 1/2 Ave.	Dairy Ave.		III
Whitley Ave.	Letts Ave.	Hwy 43		III
Whitley Ave.	Hwy 43	10th Ave.		III
6 1/2 Ave.	Whitley Ave.	Orange Ave.		III

City of Corcoran: Planned and Existing Bikeways

Legend

- Existing Bikeway
- Planned Bikeway
- Touring Bikeway
- Shopping Center
- School
- Park
- City Limits





Bicycle Plan
for the
City of Hanford

CITY OF HANFORD BICYCLE PLAN

A. City of Hanford 2002 General Plan Update

The Circulation Element of the City's General Plan states:

“Hanford has adopted a comprehensive bicycle plan as part of the County Regional Transportation Plan. On-street bike lanes often create significant vehicular/bicycle conflicts. The cost of retrofitting the existing urban area for bicycle lanes can be cost prohibitive, especially along older streets that will see increased motor vehicle traffic. The General Plan and the Bicycle Plan promote the establishment of a shared use roadway system, but encourages newly developing areas to provide for bicycle facilities along major roadways and off-road systems as part of open space and recreation amenities.”

Policy CI 8.4 States:

Bicycle lanes should be established where feasible along Major and Minor Collectors in newly developing areas. A bicycle route system should be identified which serves the existing developed City. This route system may not utilize Arterials or Collectors where travel ways are constrained, but rather parallel streets with less traffic. Where bicycle lanes are proposed they should be considered a shared facility with vehicular traffic on the street.

B. Existing Bikeways

The City of Hanford has completed nearly all of the named bicycle projects from the 2001 Regional Bicycle Plan as identified on the improvement list. In addition many of the projects on the master list have also been completed. Therefore, many of the collectors and arterials in the city limits have been designated as bikeways. The City of Hanford will continue to designate bikeways as the city grows.

C. Existing Bicycle Ridership

A review of the 2000 census-data showed that less than 1% (0.6%) of the existing workers commute via bicycle. Most bicycle riding within the city, as is typical of most communities, occurs by school-age children riding to schools, parks, and shopping centers. The greatest bicycle usage occurs on residential and collector streets.

D. Bicycle-Related Activity Centers

Within the City of Hanford, the following locations generate the most bicycle-related travel:

- Elementary Schools
- Junior High Schools

- Hanford Union High Schools
- Hanford Mall / Centennial Plaza / Market Place at Hanford
- YMCA
- Youth Athletic Complex (north of the Government Center)
- Adventure Park
- Local Parks
- Hanford Pool

E. Accident History

A review of bicycle related accidents can reveal important items that can assist in the planning of future bicycle improvements and safety education programs. Accident data obtained from the Statewide Integrated Traffic Records System (SWITRS) shows a tremendous improvement in the number of reported bicycle related accidents in the City of Hanford with a decrease from 111 reported accidents in the period of 2000-2004 to only 16 reported accidents in the period 2005 - 2008.

The majority of bicycle involved accidents are caused by the bicyclist riding on the wrong side of the street and occur on weekdays between 3 and 6 p.m.

F. Facility Selection

The BAC suggested potential bicycle routes within the City of Hanford. Based on their suggestions, field work was conducted to determine the suitability and desirability of each route, which was then, evaluated using the following criteria:

- Pavement width
- Surface conditions
- Major constraints (i.e. bridge widening)
- Amount and type of parking
- Surrounding land use (commercial, residential, etc.)
- Potential demand (location relative to activity centers)

An evaluation sheet was developed for existing and potential bike routes, which describes the characteristics of each route by segment. Each sheet shows the following information:

- A general description of the route
- Approximate traffic volume on the street
- Width of the curb lane
- Speed of traffic on the road
- Relative cost to accommodate a bikeway
- Potential bicycle-related demand of the facility

From an evaluation of the above criteria and characteristics for each potential bicycle route, a list of proposed bicycle improvements was developed as shown in Table H1 and H2.

G. Facility Funding

The costs for bikeway facilities in the City of Hanford requires not only the identification of the source and cost of construction, but also the source and cost of maintenance be identified. Improvements are prioritized based on system continuity and the goals and policies identified by the general plan. Potential funding source(s) for each project are identified in Section VI.

The highest priority routes are those which tie into the regional facilities and major streets which provide access throughout Hanford. Most of the listed routes are considered to be commuter oriented. These also include routes to schools and are eligible for funding from state and federal sources. Only those routes designated as part of the federal-aid system are eligible for STP and RIP funds that need to be programmed in the required federal and state documents.

H. Support Facilities and Programs

Parking Facilities

Bicycle parking facilities are provided at most educational and recreational centers in Hanford. In addition, bicycle racks are available at some commercial locations (i.e. Hanford Mall and Centennial Plaza). Bicycle parking facilities should be provided at all medical, government, and employment destinations. In addition, bicycle ridership among employees would be enhanced if major employers provided showers and bicycle lockers.

AMTRAK service is provided to the City of Hanford at the Santa Fe Depot (between Lacey Blvd. and 7th St.). This facility also serves as an Orange Belt station and the Kings Area Rural Transit (KART) transfer point. Because this is a regional, multi-modal transit hub and Amtrak trains accommodate bicycles, bicycle parking facilities should be provided at this location. Bicycle lockers are currently being considered for this location. Bicycle parking facilities should be provided at the park-and-ride lot at 10th Ave. and SR 43 and any future park-and-ride facilities. There are several intercity and intracity transit routes within the County that are provided by Kings Area Rural Transit (KART) that begin in Hanford. This provides an opportunity to integrate bicycles and transit as all of the buses have been equipped with front bicycle racks. KART also utilizes benches that can be used as bicycle racks.

Educational and Safety Programs

Current educational and safety programs are presented by the Hanford Police Department. The program, Stop on a Dime, is presented annually to the students of the elementary schools. The program stresses helmet usage and rules of the road. An increase in awareness, knowledge, and improved bicycling habits, may reduce bicycle-related accidents over the next four year period.

I. Vehicular Trip Reduction

Many bicycle trips in the City of Hanford are destination based (persons riding to reach schools, shopping centers, parks, etc.). These types of trips will occur regardless of the mode of transportation. Therefore, if a better bikeway system results in a greater usage of bicycles, it will result in a corresponding reduction in vehicular trips. A study prepared for the FHWA and FTA show that if more that 35% of the arterial and collector streets have bikeways, bicycle trips within the area will double. Assuming that 1-2% of the VMT could be transferred to bicycle trips, it is estimated that 1000 pounds of pollutants per year can be reduced through the implementation of the bicycle routes.

**Table H1
City of Hanford – Tier I Improvement List**

Priority	Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
1	11th Ave.	Elm St.	Mulberry Dr.	5,100	Class III
2	Elm St.	Greenfield Ave.	11th Ave.	750	Class III
3	Centennial Dr.	Grangeville Bl.	Berkshire Way	1,000	Class II
4	Cortner St.	Glacier St.	Douty St.	4,800	Class III

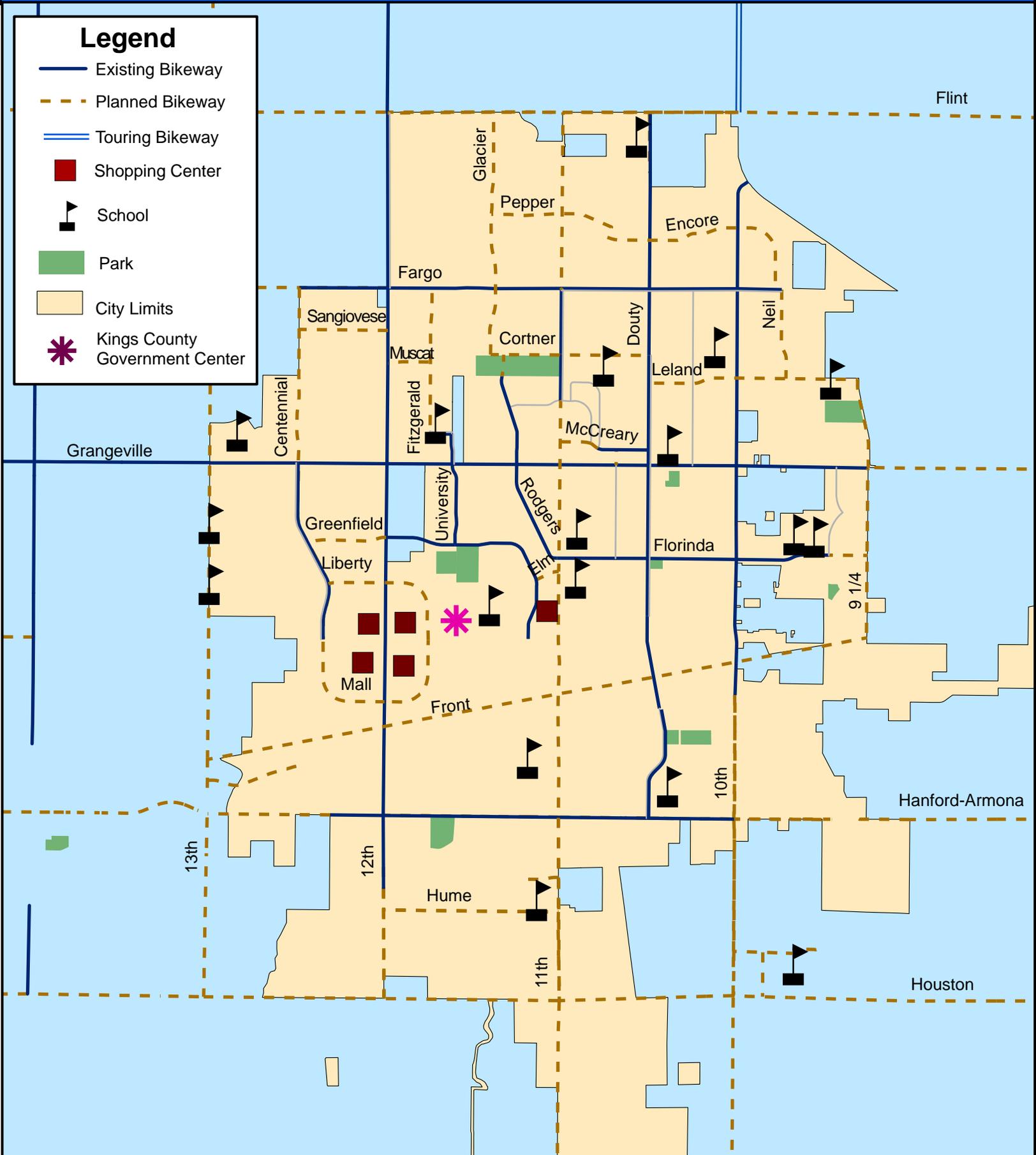
**Table H2
City of Hanford – Tier II Improvement List**

Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
11th Ave.	Houston Ave	Hanford-Armona Rd.	5,500	Class III
11th Ave.	Fargo Ave.	Flint Ave.	5,300	Class III
12th Ave.	Houston Ave.	No. of Hume Ave.	3,200	Class III
9 1/4 Ave.	Grangeville Ave.	Leland Way	2,700	Class III
Hume Ave.	11th Ave.	12th Ave.	5,300	Class III
Leland Way	Douty St.	9 1/4 Ave.	6,300	Class III
Mall Drive	12th Ave.	Lacey Blvd.	2,800	Class III
McCreary Ave.	Mulberry Dr.	11th Ave.	1,000	Class III

City of Hanford: Planned and Existing Bikeways

Legend

- Existing Bikeway
- Planned Bikeway
- Touring Bikeway
- Shopping Center
- School
- Park
- City Limits
- Kings County Government Center





Bicycle Plan
for the
City of Lemoore

CITY OF LEMOORE BICYCLE PLAN

A. City of Lemoore 2030 General Plan

The City of Lemoore General Plan states:

CIRCULATION ELEMENT

“Careful integration of the City’s traffic and circulation policies with its land use policies will ensure that there is sufficient roadway capacity to accommodate traffic generated by planned future development. The City is committed to designing a system of regional routes, local roads, public transit, and bicycle and pedestrian routes that will enhance the community and protect the environment.”

Citywide Street Design

The design objectives for street standards are as follows:

- To provide guidance for a system of public streets that will meet the City’s needs.
- To ensure that streets will fulfill their intended functions, consistent with the General Plan, and support multiple modes of travel.
- To provide adequate traffic-carrying capacity, while minimizing width, to create strong neighborhood character.
- To create a system of sidewalks and bikeways, which promote safe walking and bicycle riding for transportation and recreation.

Guiding Policies

Overall Circulation System Planning

Provide a wide variety of transportation alternatives and modes serving all residents and businesses to enhance the quality of life and increase pedestrian safety.

Implementing Actions

Overall Circulation System Planning

- C-I-3 Provide for greater street connectivity by requiring bicycle and pedestrian connections from cul-de-sacs to nearby public areas and main streets
- C-I-4 Develop a multi-modal transit system map integrating bicycle, public transportation, pedestrian, and vehicle linkages within the City to ensure circulation gaps are being met. Safe Routes to School and any necessary related improvements will also be shown on this map, and costs and priorities indicated based on need.

4.5 BICYCLES, TRAILS, AND PEDESTRIAN CIRCULATION

GUIDING POLICY

C-G-10 Promote bicycling and walking as alternatives to the automobile.

IMPLEMENTING ACTIONS

- C-I-27 Implement the Lemoore Bikeway Plan in coordination with the County's Regional Bicycle Plan, which is updated every four years.
- C-I-28 Establish bicycle lanes, bike routes, and bike paths consistent with the General Plan.
This would include establishing a new, more specific, Lemoore Bike Map.
- C-I-29 Increase bicycle safety by:
- Sweeping and repairing bicycle lanes and paths on a regular basis;
 - Ensuring that bikeways are delineated and signed in accordance with Caltrans' standards, and lighting is provided, where needed;
 - Providing bicycle paths or lanes on bridges and overpasses;
 - Ensuring that all new and improved streets have bicycle-safe drainage grates and are kept free of hazards such as uneven pavement, gravel, and other debris;
 - Providing adequate signage and markings warning vehicular traffic of the existence of merging or crossing bicycle traffic where bike routes and paths make transitions into or across roadways;
 - Working with the Lemoore Union School districts to promote classes on bicycle safety in the schools; and
 - Installing large sidewalks along arterial and median parkway streets so that children may ride safely away from traffic (e.g., Lemoore Avenue and Hanford-Armona Road).
- C-I-30 Amend the Zoning Ordinance to require bicycle parking facilities at large commercial and industrial employer sites, including racks and lockers that are integrated into the overall site and building design.
- C-I-31 Develop a series of continuous walkways within new office parks, commercial districts, and residential neighborhoods so they connect to one another.
- C-I-32 Provide for pedestrian-friendly zones in conjunction with the development, redevelopment, and design of mixed-use neighborhood core areas, the Downtown area, schools, parks, and other high use areas by:
- Providing intersection "bulb outs" to reduce walking distances across streets in the Downtown and other high use areas;
 - Providing pedestrian facilities at all signalized intersections;
 - Providing landscaping and shade that encourages pedestrian use;
 - Constructing adequately lit and safe access through subdivision sites; and
 - Providing mid-block electronic warning lights and signals, where warranted, to inform motorist of the presence of pedestrians at the crosswalk.

- C-I-33 Establish specific standards for pedestrian facilities to be accessible to physically disabled persons, and ensure that roadway improvement projects address mobility or accessibility for bicyclists or pedestrians.

The City will incorporate federal and State requirements of the Americans with Disabilities Act (ADA) into standards for circulation access and pedestrian facilities (such as provisions for ramp improvements, curb cuts, audible traffic signals, etc.)

- C-I-34 Amend the Zoning Ordinance to include standards in all new development for pedestrian circulation including: patterned concrete sidewalks across vehicular streets, crossing signalization, bulb-outs, bicycle parking and lockers integrated with parking areas, and street lighting.

City of Lemoore 1995 Bikeway Plan

The City of Lemoore prepared a Bikeway Plan that provides greater detail on the need and potential for bicycle facilities in the city.

The City of Lemoore Bikeway Plan states:

“The Lemoore Bikeway Plan was conceived to provide a continuous, safe, and pleasant bikeway system linking together all areas of the community. Ultimately, it is anticipated that development of bikeways in accordance to such a plan would significantly increase bicycle ridership, thereby, reducing citizens reliance on the automobile. The planned bikeways associated with related amenities would also enhance bicycling as a means of recreation and exercise.”

Three goals that are pointed out in the Lemoore Bikeway Plan are as follows:

- Develop a convenient and continuous bikeway system for Lemoore and its vicinity.
- Provide for a safe system of bikeways, interrelated with other modes of transportation throughout Lemoore and its vicinity.
- Ensure a continuous expansion of the bikeway system in future development within and around the City.

The Lemoore Bikeway Plan has identified phases of implementation in order to provide organization and direction in the development of the bikeway system. The phases emphasize development of the collector and arterial streets. The development of bikeways will expand outward from the downtown central area. This will ensure as many connecting and coherent bicycle routes as possible. Every effort will be made to create a complete bikeway system in the City of Lemoore.

The Lemoore Bikeway Plan identifies the criteria used to determine the priority of bikeway segments. These criteria include:

- Proximity to existing bikeways;
- Whether school, parks, or employment centers are located adjacent to or near a bikeway;

- Whether the bikeway closes gaps within the system;
- Safety of the route with and without a bikeway;
- Cost/ease of creating the bikeway.

During this current plan update, the City has stated that Class I and Class II bikeways should be predominately focused on collector and arterial streets.

B. Existing Bikeways

The City of Lemoore has been working towards an extensive system of bikeways over the last decade that consist of Class I bicycle paths, Class II bicycle lanes, and Class III bicycle routes. In the most recent years the emphasis has moved away from the signing and striping of local designated residential streets as bicycle lanes and bicycle routes. The city will instead focus its efforts and resources on collector and arterial designated streets, as local streets are less dangerous and do not need separation or striping.

C. Existing Bicycle Ridership

Lemoore is a small community that facilitates bicycle riding. However, a review of the 2000 Census data showed that less than 1% of the existing workforce commutes via bicycle. Most bicycle riding within the community, as is typical of most communities, occurs by school-age children riding to schools, parks, and shopping centers. The greatest bicycle usage occurs on residential or local and collector streets.

D. Bicycle-Related Activity Centers

Within the City of Lemoore the following locations have the greatest potential of generating the most bicycle-related travel:

- Elementary Schools
- Liberty Middle School
- The Teen Center
- Lemoore Union High School
- The Downtown Commercial/Civic Center
- Heritage, Lyon's and Lemoore City Parks
- Lemoore Sports Complex and Vierra Field
- West Hills College
- Savemart Shopping Center

E. Accident History

A review of bicycle related accidents can reveal important items that can assist in the planning of future bicycle improvements and safety education programs. The majority of bicycle involved accidents are caused by the bicyclist riding on the wrong side of the

street and occur on weekdays between 3 and 6 p.m. Accident data obtained from the Statewide Integrated Traffic Records System (SWITRS) shows a significant improvement in the number of reported bicycle related accidents in the City of Lemoore with a decrease from 25 reported accidents in the period of 2000-2004 to only 5 reported accidents in the period 2005 - 2008.

F. Facility Selection

Potential bicycle routes within the City of Lemoore were pulled from the 2030 General Plan and the local Safe Routes to School areas based on proximity to activity centers, such as schools, parks and major shopping areas, and compatibility with road characteristics. Newer Class I routes are being incorporated along high speed arterials through 10' wide shared pedestrian/bike sidewalks. Class II facilities were determined based on available pavement width now or planned width in the future. Class III areas were identified where connectivity was needed but street characteristics could not accommodate separate bike lanes.

G. Facility Funding

The cost of bikeway facilities will be identified as the projects approach development. The improvements were prioritized based on system continuity and the goals and policies identified in the Lemoore General Plan. Potential funding sources(s) for each project are identified in Section VI.

The highest priority routes are those which provide cross-town connectivity easily and generally include collector or arterial designated street segments or the cross-county bikeway. Most of the listed routes are considered commuter-oriented. These routes also include routes to schools and are eligible for most of the available funding from state and federal sources. Only those routes designated as part of the federal-aid system are eligible for Surface Transportation Program and Regional Improvement Programs funds and would need to be programmed in the appropriate regional, state, or federal documents.

H. Support Facilities and Programs

Parking Facilities

Most schools in Lemoore provide bicycle parking facilities to be utilized by students and staff. Bicycle parking facilities should be provided at all recreational and employment destinations. In addition, bicycle ridership among employees would be enhanced if employers provided showers and bicycle lockers. Bicycle parking facilities should also be provided at any future park-and-ride lots. With transit service provided in Lemoore, opportunities for bicycle/ transit interface should continue to be implemented.

Educational and Safety Programs

Current educational and safety programs are presented by “Perfection on Wheels” a bicycle stunt team. The program is presented to the students of the elementary schools once a year. The program stresses helmet usage and rules of the road. An increase in awareness, knowledge, and improved bicycling habits, may reduce bicycle-related accidents over the next four year period.

I. Vehicular Trip Reduction

Many bicycle trips in the City of Lemoore are destination based (persons riding to schools, shopping center, parks, work, etc.). These types of trips will occur regardless of the mode of transportation. Therefore, if a better bikeway system results in a greater usage of bicycles, it will result in a corresponding reduction in vehicular trips. A study prepared for the FHWA and FTA shows that if more that 35% of the arterial and collector streets have bikeways, bicycle trips within the area will double. Assuming that 1-2% of the VMT could be transferred to bicycle trips, it is estimated that 1000 pounds of pollutants per year can be reduced through the implementation of the bicycle routes.

**Table L1
City of Lemoore – Tier I Improvement List**

Priority	Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
1	W. Bush St. (south side)	State Route 41	College Dr.	2,500	Class I
2	E. Bush St. (both sides)	Lemoore Ave.	Barcelona St		Class III
3	E. Bush St. (East side)	Barcelona St.	E. D St.	200	Class II
4	Cinnamon Dr. (south side)	Lemoore Ave.	Hanford Armona Rd.	5,200	Class II
5	Cinnamon Dr. (south side)	Hill St.	Lemoore Ave.	2,400	Class II
6	Cedar Ln. (north side)	19 Ave.	Lum Dr.	1,200	Class II
7	Cedar Ln. (north side)	19½ Ave.	19th Ave.	2,600	Class II
8	19th Ave. (both sides)	Cherry Ln.	Atlantic Ave.	3,400	Class II
9	Silverado Dr. (south side)	19 1/2 Ave.	S. 19th Ave.	2,600	Class II
10	Hill St. (east side)	E St.	W. Bush St.	1,500	Class II
11	Follett St. (both sides)	Cinnamon Dr.	Railroad Tracks	2,400	Class II
12	Follett St. (both sides)	W. D St.	W. Bush St.	1,300	Class II
13	Follett St. (both sides)	Railroad Tracks	W. D St.		Class III

**Table L2
City of Lemoore – Tier II Improvement List**

Roadway	Starting Segment	Ending Segment	Feet	Class
19 1/2 Ave. (both sides)	E. Cinnamon Dr.	Silverado Dr.		Class II
19th Ave. (both sides)	Silverado Dr.	Iona Ave.		Class II
19th Ave. (east side)	E. Cinnamon Dr.	Fallenleaf alignment		Class I & II
19th Ave. (west side)	Fallenleaf alignment	W. Bush St.		Class II
Acacia Dr.	W. Bush St.	Cedar Ln.		Class III
Antelope Dr. (both sides)	Hanford-Armona Rd	Spruce Ave.	3,800	Class II
B St. (south side)	Olive St.	N. Lemoore Ave.		Class II
Barcelona Dr.	E. Bush St.	Lemoore Canal		Class II

2011 Kings County Regional Bicycle Plan

Roadway	Starting Segment	Ending Segment	Feet	Class
Belinda Dr. (both sides)	Hanford-Armona Rd	Meadow Ln.		Class III
Blake St.	Hanford-Armona Rd	Club Dr.		Class II
Burlwood Ln. (both sides)	Antelope Dr.	N. Lemoore Ave.	2,600	Class II
W. Bush St.	Marsh Dr.	Hwy 41		Class I & II
W. Bush St. (both sides)	Hwy 41	19th Ave.		Class I & II
C St.	Hill St.	N. Lemoore Ave.		Class III
C St. (both sides)	Olive St.	Hill St.		Class II
Cedar Ln.	Vine St.	S. Lemoore Ave.		Class II
W. Cinnamon Dr. (south side)	N. 19th Ave	Hill St.	2,800	Class II, c/g/s after canal undergrounded
Club Dr.	N. Lemoore Ave.	west of Blake St.		Class II & eliminate prkg
College Dr.	Railroad Tracks	South City Limits		Class II
W. D St. (both sides)	N. 19th Ave.	Olive Dr.	4,400	Class II
W. D St. (both sides)	W. Bush St.	N 19th Ave.		Class II
E. D St. (both sides)	Smith St.	Lemoore Canal		Class II
E. D St. (south side)	N. Lemoore Ave.	Texaco gas station		Class II
Daphne Ln.	E. D St.	Heritage Park		Class II
F St. (both sides)	Fox St.	N. Lemoore Ave.	3,600	Class II, needs paving/c/g/s on SS
Fallen Leaf Dr.	Liberty Dr.	N. 19th Ave.		Class II
Fallen Leaf Dr. (both sides)	Fox St.	Liberty Dr.	3,400	Class II
Fox St. (both sides)	Railroad Crossing	W. Bush St.		Class III
G St. (both sides)	Fox St.	N. Lemoore Ave.	3,600	Class II
Golf Links Dr. (north side)	Iona Ave.	S. Lemoore Ave.		Class II
Hanford-Armona Rd.(both sides)	Cinnamon Dr.	Lemoore Canal		Class II
Hanford-Armona Rd.(both sides)	Fox St.	N. Lemoore Ave.		Class I & II
Hanford-Armona Rd.(north side)	State Route 41	Liberty Dr.		Class I & II
Hazelwood Dr. (both sides)	N. Lemoore Ave.	Quandt Dr.	1,200	Class II
High Pressure gas line easement	W. Bush St.	Marsh Dr.		Class I

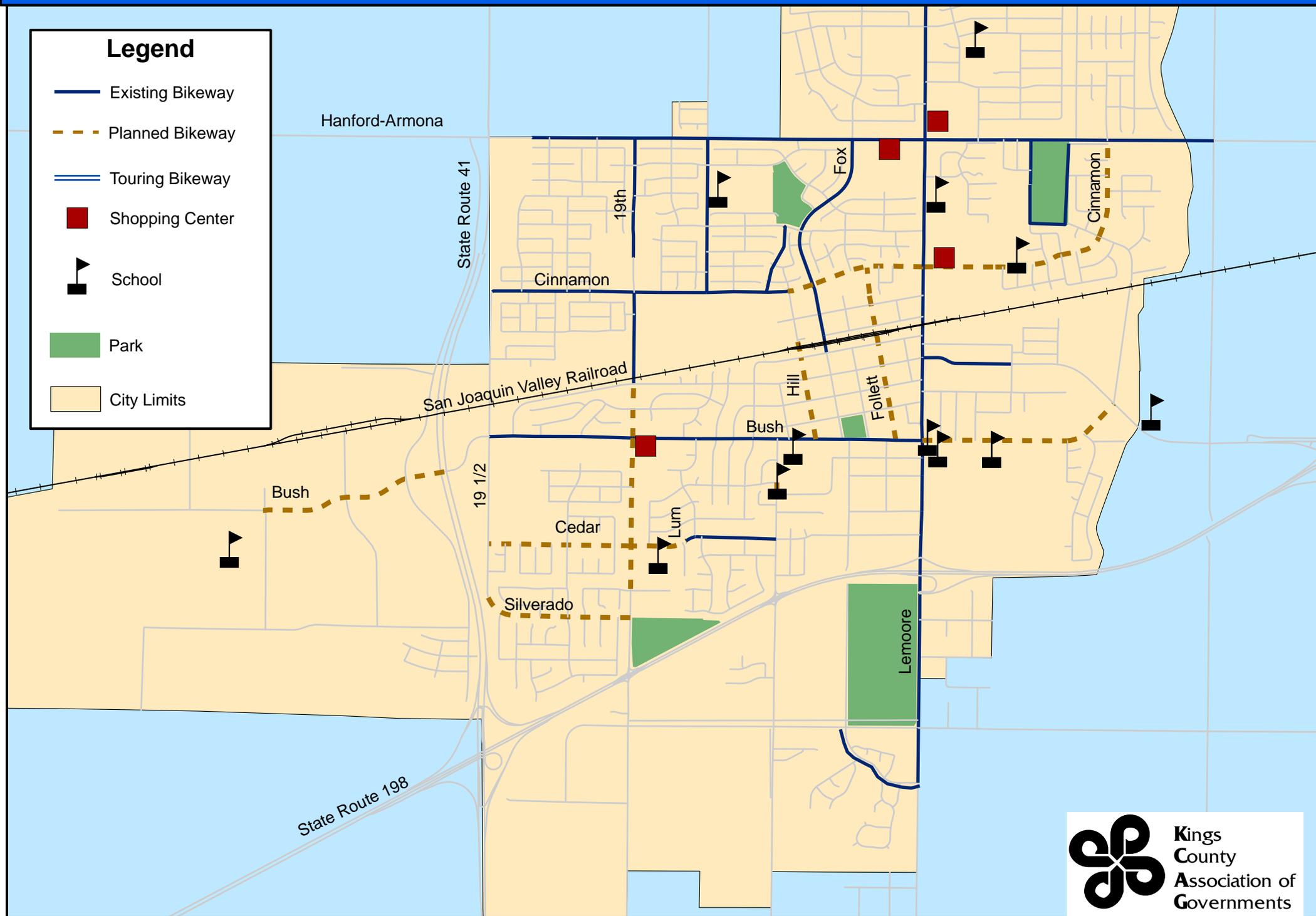
2011 Kings County Regional Bicycle Plan

Roadway	Starting Segment	Ending Segment	Feet	Class
Iona Ave.	S. 19th Ave	S. Lemoore Ave.		Class II
S. Lemoore Ave.	Golf Links Dr.	South City Limits		Class II
N. Lemoore Ave. (both sides)	Burlwood Ln.	Hanford-Armona Rd		Class II
Lemoore Canal	North City Limits	SR 198		Class I
Lemoore Canal	SR 198	between Iona/Idaho		Class I
LHS East & South Boundaries	S. Lemoore Ave.	E. Bush St.		Class II
Lions Park (west boundary)	Fallenleaf Dr.	Avalon Dr.		Class I
Marsh Dr.	W. Bush St.	SR 198		Class II
Meadow Ln. (both sides)	Quandt Dr.	Mission Dr.	6,800	Class II
Murphy Dr.	Club Dr.	W. Cinnamon Dr		Class II
Olive St. (both sides)	W. Bush St.	around E Street bend	3,400	Class II
Opal Ave.	Hanford-Armona Rd	Cinnamon Elementary		Class II
Pedersen Ave.	Marsh Dr.	Belle Haven Dr.		Class II
PG&E alignment	Bella Madre Ln.	Opal Dr.		Class I
Quandt Dr. (both sides)	Spruce Ave.	Hazelwood Dr.	2,200	Class II
Railroad right of way	Marsh Dr.	17th Ave.		Class I
Semas Dr.	W. Bush St.	South dead end		Class I & II
Spruce Ave. (both sides)	Antelope Dr.	Quandt Dr.	3,400	Class II
Tammy Ln.	N. 19th Ave	Vine St.		Class III
Vine St.	Iona Ave.	Hwy 198		Class II
Vine St. (both sides)	SR 198	Cedar Ln.	2,000	Class II
Vine St. (both sides)	Cedar Ln.	W. Bush St.		Class III

City of Lemoore: Planned and Existing Bikeways (Tier 1 Projects Only)

Legend

- Existing Bikeway
- Planned Bikeway
- Touring Bikeway
- Shopping Center
- School
- Park
- City Limits





Bicycle Plan
for the
County of Kings

COUNTY OF KINGS BICYCLE PLAN

A. Kings County 2035 General Plan

The Circulation Element of the Kings County General Plan on page C-46 states the following:

“With the onset of air quality attainment strategies and congestion management concerns, bicycling is considered an effective alternative mode of transportation. Bicycling can help improve air quality and reduce the number of vehicles traveling along congested facilities within cities and communities.”

Bikeways are generally developed at one of three levels, depending on budget constraints, available right-of-way, and need:

1. A Class I Bike Path is for the exclusive use of bicycles. It is separated from the road by space or a physical barrier. It may be on part of a road right-of-way or on a separate right-of-way.
2. A Class II Bike Lane is primarily for the use of bicycles on a road right-of-way. Travel within the lane by autos or pedestrians are excluded, although vehicle parking is permissible.
3. A Class III Bike Route shares its right-of-way with either moving autos or pedestrians.

Roads, which are designated as bikeways, are illustrated in the *Regional Transportation Plan (RTP)* and are included in this element by reference. These routes, shown as Class I, II, or III bikeways, are designed to connect populated areas to County parks. Their routes are over roads that are lightly traveled or have sufficient paved shoulder width to accommodate bicycle traffic.

The Circulation Element of the Kings County General Plan states the following objectives and policies regarding bicycles:

C OBJECTIVE B1.2 *Enhance pedestrian/bicycle access and safety through traffic calming street design measures and bicycle rack integration into new commercial structures.*

C Policy B1.2.1: Adopt traffic calming street design standards into the County's "Improvement Standards" to make available "Pedestrian Friendly" street design alternatives along Community District streets.

C Policy B1.2.2: Seek "Safe Routes to School" funding to implement traffic calming features at key intersections that Elementary School children use during the school year to reduce traffic speeds and increase safety.

C Policy B1.2.3: Integrate pedestrian infrastructure that includes sidewalks, tree lined streets, and traffic calming crossings to balance both car and

people use of neighborhood streets in new mixed use development.

C OBJECTIVE C1.4 *Integrate Non-Motorized transportation system alternatives into the layout of Community District plans to promote bicycling and walking as alternatives to the automobile, and interconnect those routes where practical into larger regional efforts with Cities.*

C Policy C1.4.1: Identify and plan for pedestrian and bicycle pathways in strategic locations within Community Districts to connect residents to commercial businesses, community gathering places, and educational facilities.

C Policy C1.4.2: Coordinate Community District bicycle and trail system planning with adjacent City non-motorized trail systems that will enhance the interconnectedness of residents to retail services and educational facilities.

C Policy C1.4.3: Integrate the Community Plan established bikeway routes into the Kings County Association of Government's Regional Bicycle Plan.

B. Existing Bikeways

Bicycle travel may occur by bicyclists sharing the existing roadways with vehicular travel. Prior to 1998 there were no signed bike routes within the unincorporated area of Kings County. The first Class III bike route with striping is located on Grangeville Blvd. between 12th Ave. and the Lemoore Naval Air Station which extends for 13 miles. A Class III route continues east into Hanford and ends at 9 1/4 Ave.

A Class III bicycle route has been completed on two adjacent segments of roadways within Kings County: the first segment located on 18th Avenue between Flint Avenue and Grangeville Boulevard with the second segment on Flint Avenue between 18th Avenue to Hickey Park (17 1/2 Avenue). These routes were funded with the Bicycle Transportation Account as well as a 10% price match from Kings County. Both projects were programmed in the Federal Transportation Improvement Program (FTIP) and the Regional Transportation Plan (RTP).

C. Conceptual Bicycle Facilities

SR 198 is a High Emphasis Focus Route on the Interregional Road System. A project to widen SR 198 to a 4-lane expressway from SR 99 to SR 43 in Kings and Tulare Counties is currently under construction and expected to be completed by September of 2012. This project was funded with a variety of sources, including Interregional Improvement Program (IIP) funds. In October of 2011, Caltrans notified Kings and Tulare Counties of the possible excess right of way (RW) to be vacated following the completion of the widening project. The Streets and Highways Code specifies that Caltrans and the California Transportation Commission shall offer to relinquish the RW to the local agency which may then determine whether the rights of way or parts thereof could be developed as nonmotorized transportation facilities. KCAG, Kings County, and other like agencies in

Tulare County will work with Caltrans in an effort to further study the concept of utilizing any relinquished RW for potential nonmotorized transportation facilities.

SR 198 functions as a commuter route and the SR 198 Corridor System Management Plan (CSMP) incorporates nonmotorized facilities as a function of the corridor. A potential Class I nonmotorized facility could be developed along the southern side of SR 198 on the relinquished property and could be used as an alternative commute mode to reduce on-road vehicle emissions. Funding sources to construct this potential nonmotorized facility could include the State's Transportation Enhancement (IIP-TE) program and the Bicycle Transportation Account (BTA).

D. Existing Bicycle Ridership

A review of the 2000 census-data showed that less than 1% of the existing workers commute via bicycle. Most bicycle riding within the unincorporated County area is done by experienced "touring" cyclists who travel long distances (10 to 20 miles). The most popular route used by these cyclists is the "Laton Loop". This route is comprised of SR 43, DeWoody, Fowler, 12 3/4, 12th Avenues and Hanford Armona Road. Another popular route used by both commuters and recreational bicyclists is the Class III route on Grangeville Blvd. connecting to the Lemoore NAS back gate. Additional routes include 12th, 14th, 18th, Flint Avenue, Hanford Armona Road and access to both Hickey and Burris Parks.

E. Bicycle-Related Activity Centers

Kings County is quite large and most activity centers are located within the incorporated cities. However, the following locations within the County generate regional bicycle-related traffic:

- Hickey Park
- Burris Park
- Laton-Kingston Park
- Home Garden
- Armona
- Corcoran State Prison
- Lemoore Naval Air Station
- Avenal State Prison
- College of the Sequoias (SR 198 & 13th Ave.)

F. Accident History

A review of the bicycle related accidents reported in the unincorporated area of Kings County reveals many facts that can aid in the planning of future bicycle improvements and safety educational programs. Accident data for the latest two-year period from 2005 to 2008, obtained from the Statewide Integrated Traffic Records System (SWITRS), shows only two reported bicycle related accidents.

The majority of bicycle accidents are caused by the bicyclist riding on the wrong side of the street and occur on weekdays between 3 and 6 p.m. A total of 23 bicycle-related accidents within the unincorporated area were reported.

G. Facility Selection

Potential bicycle routes were suggested by the BAC based on initial considerations of current bicycle travel, locations of activity centers, and compatibility with road characteristics. Field work was conducted on these potential routes to determine their suitability for bikeway designation. The routes were evaluated using the following criteria:

- Pavement width
- Surface condition
- Major constraints (i.e. bridge widening)
- Potential demand (location relative to activity centers)

An evaluation sheet was developed for existing and potential bike routes, which describes the characteristics of each route by segment. Each sheet shows the following information:

- A general description of the route
- Approximate traffic volume on the street
- Speed of traffic on the road
- Existing curb lane width of the potential route
- Stress levels, cost feasibility and demand
- Relative cost to accommodate a bikeway
- Potential bicycle-related demand of the facility

From the evaluation of the above criteria and characteristics for each potential bicycle route, a list of proposed bicycle improvements was developed. The list includes Class I, Class II, Class III, Class III with striping, and Touring routes.

H. Facility Funding

The cost for bikeway facilities will be identified as the projects approach development. The improvements were prioritized based on system continuity and the goals and policies identified by the BAC.

Many of the proposed bicycle routes included on the list are considered to be commuter oriented and therefore eligible for funding available from federal and state sources. Routes to schools are included in the definition of a commuter route. Only those routes designated as part of the federal-aid system are eligible for STP and RIP funds. Projects proposed for funding in these programs would need to be included in the required federal, state, and regional programming documents.

I. Support Facilities and Programs

Parking Facilities

There are very few existing support facilities at activity centers in the unincorporated Kings County area. Bicycle parking facilities should be provided at recreational and employment destinations (i.e. Hickey Park, Corcoran State Prison, Civic Centers, etc.). The Bicycle Transportation Account is a probable funding source for the purchase of bicycle racks and bicycle lockers within County of Kings. In addition, bicycle ridership among employees would be enhanced if major employers provided showers, bicycle racks, and lockers. Bicycle parking facilities should be considered for all park-and-ride lots.

KART has placed benches that function as bicycle racks and seating areas throughout their service area. Efforts should also continue to place bicycle racks on any future KART buses purchased. In the future bicycle lockers should be available for parking at the Transit Center.

Educational and Safety Programs

Historically bicycle education and safety programs have been presented by the Kings County Sheriff Department and local 4H organizations. The program was presented to the students of the elementary and middle schools once a year. The program stressed helmet usage, rules of the road, and provided a bicycle safety pamphlet to each student. For the time period of 2000-2004 bicycle accidents in Kings County have remained constant when compared to the previous three year period of 1997-1999.

The Kings County Bicyclists provide demonstrations and rallies geared at promoting the safety of bicyclists through free programs. The programs include a Christmas Light Ride that promotes safe cycling at night, Safe Cycling Rally between Hanford and Hickey Park, an annual criterium (bicycle race), and involvement in the Lemoore and Hanford parades to raise awareness of bicycle safety laws.

J. Vehicular Trip Reduction

The majority of the bicycle trips in the unincorporated area of Kings County are recreational. If better bikeway facilities are provided, the number of recreational bicycle trips will likely increase. However, since these trips are discretionary in nature it is not likely that a corresponding reduction in vehicle trips will occur.

The Class III bicycle route on Grangeville Blvd. is used by commuters between Hanford and the Lemoore NAS. Future bicycle routes to be connected with the Grangeville Blvd. route will increase bicycle use among commuters. A study prepared for the FHWA and FTA show that if more that 35% of the arterial and collector streets have bikeways, bicycle trips within the area will double. Assuming that 1-2% of the VMT could be transferred to bicycle trips, it is estimated that 1000 pounds of pollutants per year can be reduced through the implementation of the bicycle routes.

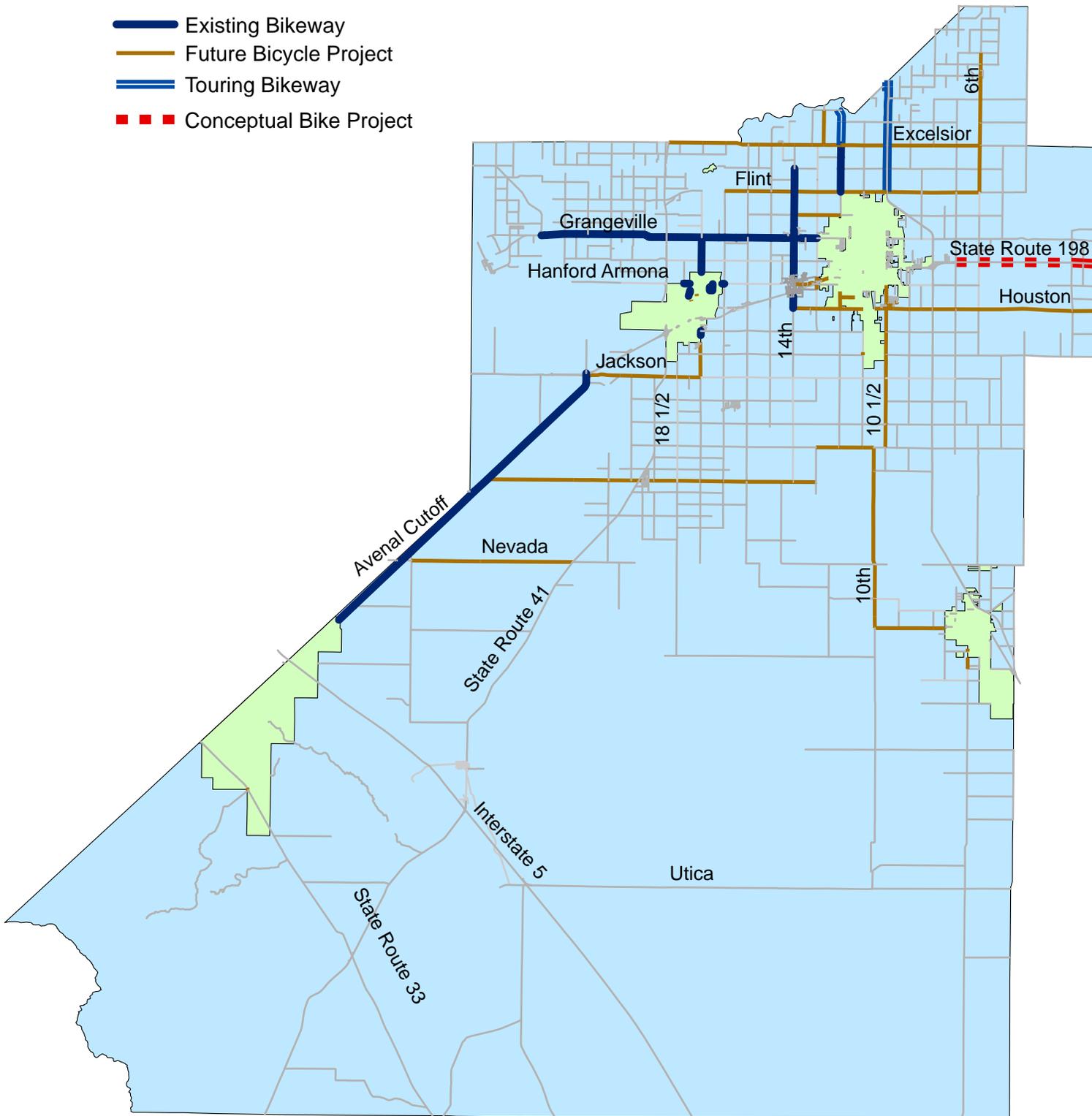
Table K1
County of Kings – Tier I Improvement List

Priority	Roadway	Start Segment	End Segment	Lineal Feet	Bikeway Classification
1	10th Ave.	Houston Ave.	Kansas Ave.	31,680	Class III with stripe
2	10th Ave.	Nevada Ave.	Whitley Ave.	14,520	Class III with stripe
3	10 1/2 Ave.	Kansas Ave.	Nevada Ave.	26,400	Class III with stripe
4	Whitley Ave.	10th Ave.	7th Ave.	16,000	Class III with stripe
5	18th Ave.	Jackson Ave.	Lemoore City Limit	10,600	Class II
6	Flint Ave.	Hickey Park	6th Ave.	58,000	Class III with stripe
7	Jackson Ave.	Avenal Cutoff	18th Ave.	27,000	Class III
8	Fargo Ave.	14th Ave.	B.N. Santa Fe RR	13,500	Class III with stripe
9	12 3/4 Ave.	Excelsior Ave.	Fresno Co. Line	9,500	Class III
10	Nevada Ave.	Avenal Cutoff	State Route 41	40,000	Class III
11	6th Ave.	Flint Ave.	Burris Park	33,000	Class III

County of Kings: Planned and Existing Bikeways

Legend

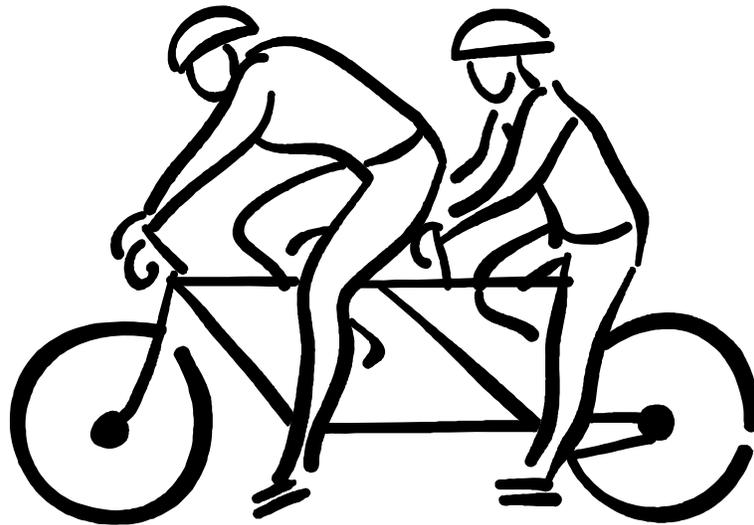
- Existing Bikeway
- Future Bicycle Project
- Touring Bikeway
- Conceptual Bike Project



Appendix A

The 2011 Regional Bicycle Plan

Bicycle Advisory Committee



News Release

“Kings County Association of Governments Announces Public Opportunity to participate in the update to the Regional Bicycle Transportation Plan”

Update of the Regional Bicycle Plan – February 24, 2011

MEDIA CONTACT

- **Bruce Abanathie**
Kings County Assoc. of Governments
339 W. D Street, Suite B
Lemoore, CA 93245
Phone: (559) 582-3211
Extension: 2584
Fax: (559) 924-5632

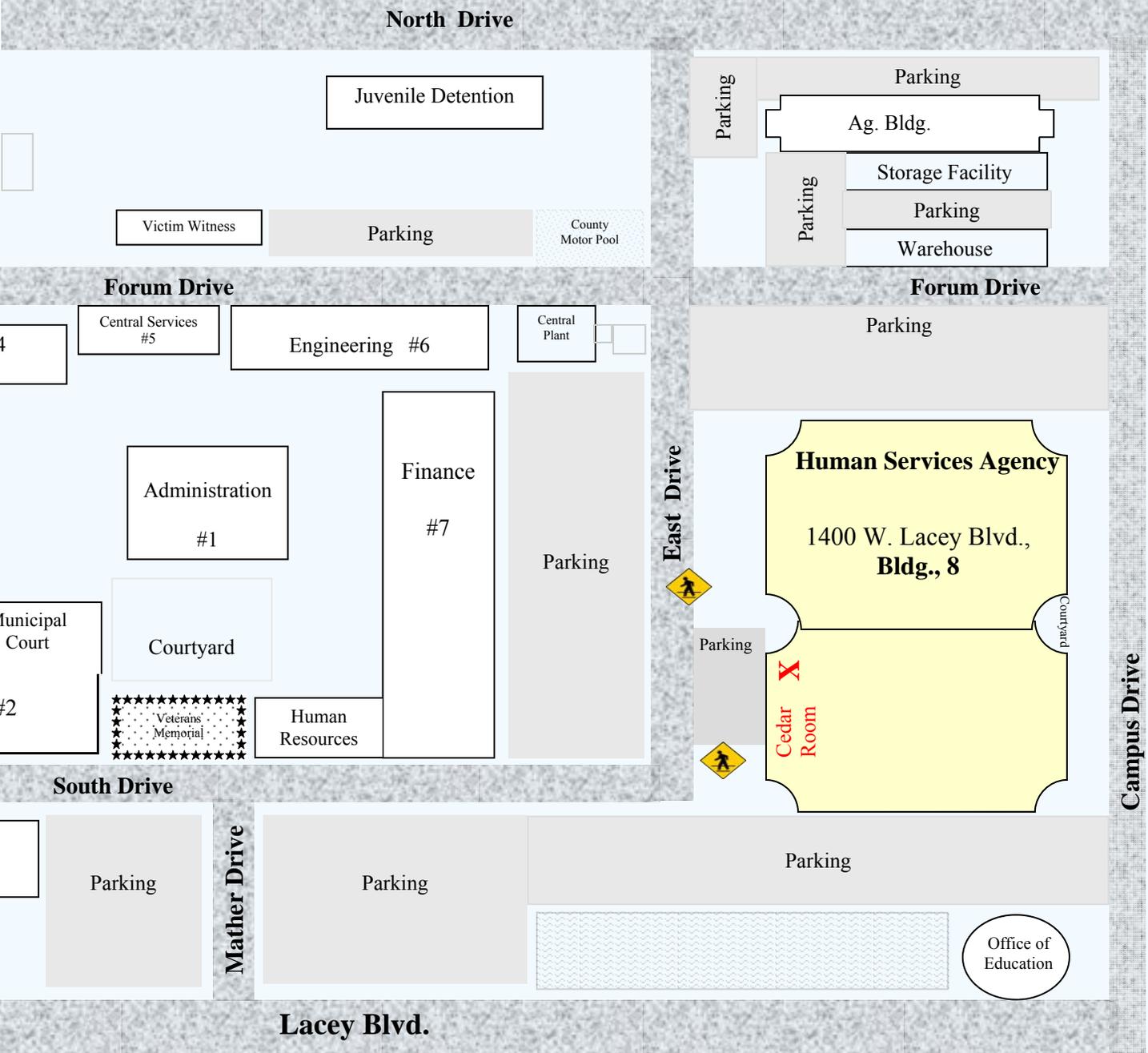
HANFORD – Terri King, Executive Director of the Kings County Association of Governments (KCAG), announced today that in preparation for updating the Kings County Regional Bicycle Transportation Plan, KCAG is inviting the public to participate in the first of three planned workshops to be held at the Kings County Government Center, Human Services Agency Building, Cedar Room, located at 1400 Lacey Blvd., at 4:00 p.m. on Thursday, February 24, 2011. The workshop will inform the public about the bicycle facilities in Kings County and the future plans for bicycling in Kings County. KCAG, the cities, and the county will distribute information and gather comments from the general public at this meeting. For further information and a map to the workshop, please see the KCAG Website at www.countyofkings.com/kcag.

Comments and questions may also be mailed to the KCAG office located at 339 W. D Street, Suite B, Lemoore, CA 93245 or by calling 582-3211 extension 2584.



Kings County Government Center

Branch Jail



Kings County Drive

West Drive

Clyde Dr.

Forum Drive

Forum Drive

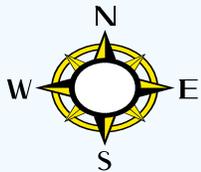
East Drive

Campus Drive

South Drive

Mather Drive

Lacey Blvd.



Sheriff's Office #9

Sheriff's

Law Bldg. #4

Central Services #5

Engineering #6

Central Plant

Parking

Superior Court #3

Administration #1

Finance #7

Parking

Municipal Court #2

Courtyard



Human Resources

Parking

Human Services Agency

1400 W. Lacey Blvd., Bldg., 8

Parking



Cedar Room

Parking

Office of Education

Parking

Juvenile Center

Probation

Parking

Victim Witness

Parking

County Motor Pool

Parking

Parking

Ag. Bldg.

Parking

Storage Facility

Parking

Warehouse

Parking

Superior Court

#2

Courtyard



Human Resources

Parking

Human Services Agency

1400 W. Lacey Blvd., Bldg., 8

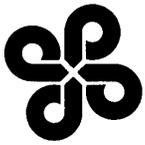
Parking



Cedar Room

Parking

Office of Education



Kings County Association of Governments

339 W. "D" Street, Suite B, Lemoore, California 93245
(559) 582-3211 extension 2654 ❖ FAX (559) 924-5632
www.countyofkings.com/kcag

Member Agencies: Cities of Avenal, Corcoran, Hanford and Lemoore, County of Kings

In compliance with the Americans with Disabilities Act, if, you need special assistance to participate in this meeting please contact the KCAG Office at (559) 582-3211, ext. 2654 by 4:00 on the Friday prior to this meeting. Agenda backup information and any public records provided to the Board after the posting of the agenda for this meeting will be available for public review at 339 West D Street, Suite B, Lemoore, CA. In addition most documents will be posted on www.countyofkings.com/kcag.

M E E T I N G

Place: Kings County Human Services Agency
1440 Lacey Blvd. Cedar Room
Hanford, CA

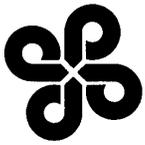
Time: 4:00 p.m., Thursday, February 24, 2011

Agency: KCAG Bicycle Advisory Committee

TOPIC

PRESENTER

- | | |
|--|------------------------------------|
| 1. INTRODUCTION | Bruce Abanathie, KCAG |
| 2. DEVELOPMENT OF THE 2005 REGIONAL BICYCLE PLAN | Chris Lehn, KCAG |
| 3. LOCAL AGENCY PRESENTATIONS | Agency Public Works/Planning |
| 4. BIKE FACILITIES AND SB 375 | Rachel Audino, KCAG |
| 5. LAWS AND SAFETY FOR BICYCLISTS | Local Police and CA Highway Patrol |
| 6. PUBLIC HEALTH AND BICYCLING | Lee Johnson, KC Public Health |
| 7. COMPLETE STREETS | Bruce Abanathie, KCAG |
| 8. WORK GROUPS | All |



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MEETING NOTES

BICYCLE ADVISORY COMMITTEE

The meeting was called to order by Bruce Abanathie, KCAG, at 4:00 p.m., on February 24, 2011 in the Cedar Room of the Human Service Administration Department at the Kings County Government Center, Hanford.

24 BAC Members were present, representing Caltrans; CHP; KCAG; Kings County Public Works, Planning, Sheriff's Office, Kings County Area Public Transit, and Public Health; the cities of Hanford, Lemoore, and Corcoran; Adventist Health; Kettleman CSD; Kings Bicyclists, and Momentum.

1. INTRODUCTION

Bruce Abanathie, KCAG, welcomed the participants and asked that everyone introduce themselves and their interest in bicycling in Kings County. Bruce then described the purpose of the meeting, the schedule for updating the Regional Bicycle Plan, and the process for updating the plan.

2. DEVELOPMENT OF THE 2005 REGIONAL BICYCLE PLAN

Chris Lehn, KCAG, described the development of the 2005 Regional Bicycle Plan and the content of the plan. Chris introduced BAC members from the 2005 committee and thanked them for returning to assist us in updating the plan.

3. LOCAL AGENCY PRESENTATIONS

Each of the cities and the Kings County Public Works and Planning representatives presented the status of bicycle facilities, bicycle policies, and the efforts to create and maintain bicycle facilities in their jurisdiction. The agencies provided maps to show the locations of existing and proposed bicycle facilities in their jurisdiction.

4. BIKE FACILITIES AND SB 375

Rachel Audino, KCAG, provided an explanation of SB 375 and the Sustainable Communities Strategy that must be included in the 2014 Regional Transportation Plan. Rachel also explained how increasing the use of bicycles for short trips and commuting is not only a healthy transportation choice, but could assist the region in meeting the Green House Gas (GHG) reductions that have been established by the California Air Resources Board (CARB).

5. PUBLIC HEALTH AND BICYCLING

Lee Johnson, of the Kings County Public Health Department, educated the group on the advancing problems of obesity and diabetes in the United States. Lee also explained the health advantages of bicycling as a transportation choice. NOTE: this presentation was moved from its agenda position because of the close relation to the previous presentation and the potentiating effect of pairing the presentations.

6. LAWS AND SAFETY FOR BICYCLISTS

Lt David Knoff, Public Information Officer for the Kings County area CA Highway Patrol, quizzed the group on safety for bicycle riders and explained California laws that relate to bicyclists when they are riding on public streets. Lt. Knoff responded to questions about bicycle access to state highways with the general recommendation that they should be avoided for the bicyclist's safety.

7. COMPLETE STREETS

Bruce Abanathie, K CAG, explained AB1358, The Complete Streets Legislation and what it means to the design characteristics of streets and roads. A key point is that a "complete street" may look different in different areas and under different circumstances – it is very specific to the geometrics and uses of the street in question.

8. WORK GROUPS

Each of the cities and the county provided the opportunity for the group to look at their bicycle facilities and policies and discuss with them the potential for the future of bicycling in their jurisdiction.

The meeting was adjourned at 6:00 p.m.

NOTICE * NOTICE * NOTICE *



2nd MEETING FOR THE

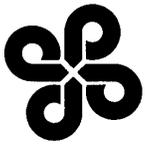
Regional Bicycle Plan

Update

Tuesday, March 22, 2011
Cooperative Extension (Agricultural
Building)
680 Campus Drive, Hanford, CA

4:00 – 6:00 p.m.

For Further Information: Call KCAG 559-582-3211 ext. 2584



Kings County Association of Governments

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M E E T I N G

Place: Kings County Cooperative Extension Agency
680 Campus Drive. Cooperative Extension Meeting Room
Hanford, CA

Time: 4:00 p.m., Tuesday, March 22, 2011

Agency: KCAG Bicycle Advisory Committee

TOPIC

PRESENTER

1. OPENING/REVIEW

Bruce Abanathie, KCAG

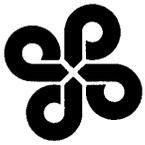
2. REVIEW OF GOALS AND POLICIES

Bruce Abanathie, KCAG

3. WORK GROUPS

All

Bicycle Facilities Recommendations



Kings County Association of Governments

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MEETING NOTES

BICYCLE ADVISORY COMMITTEE

The meeting was called to order by Bruce Abanathie, KCAG, at 4:00 p.m., on March 22, 2011, in the Kings County Cooperative Extension Agency, 680 Campus Drive Cooperative Extension Meeting Room at the Kings County Government Center, Hanford.

12 BAC Members were present, representing Caltrans; KCAG; Kings County Public Works, Planning, Kings County Area Public Transit, and Public Health; the cities of Hanford, Lemoore, Avenal, and Corcoran; and the Kings Bicyclists.

1. INTRODUCTION

Bruce Abanathie, KCAG, welcomed the participants, reviewed the activities and progress of the first meeting, described the purpose of the meeting, the schedule for updating the Regional Bicycle Plan, and the process for updating the plan.

2. REVIEW OF GOALS AND POLICIES

Bruce Abanathie moderated a discussion of the goals and objectives of the 2005 Regional Bicycle Plan and any recommendations for updates and changes. There were a number of clarifications and modifications to the goals and policies recommended by the participants. The most significant changes were in the level of requirements on the local agencies to create and maintain facilities that they do not have fund sources to support.

4. WORK GROUPS - BIKE FACILITIES

The attendance was small enough that the entire group was the work group for recommending updates to the current bicycle facilities lists. The local agencies committed to provide final facilities lists to KCAG for inclusion in the plan and mapping.

The meeting was adjourned at 5:40 p.m.

KCAG 2011 Regional Bicycle Advisory Committee

First Name	Last Name	Agency	Division
Terri	King	KCAG	Director
Chris	Lehn	KCAG	Planning
Rachel	Audino	KCAG	Planning
Bruce	Abanathie	KCAG	Planning
Brett	Bissell	Adventist Health	HR
Jeffrey	Dorn	Armona	PP Engineering
Steve	Sopp	AvevnaI	Planning
David	Madden	Caltrans Planning	
Jason	Elsome	CHP	Avenal
David	Knoff	CHP	Hanford
Tami	McVay	Corcoran	Planning
Steve	Kroeker	Corcoran	Public Works
Jeremy	Kinney	County	Planning
Lee	Johnson	County	Public Health
Charles Nunes		County	Public Works
Kevin	McAlister	County	Public Works
David	Robinson	County	Sheriff
Greg	Gatzka	County Planning	
Cathy	Cain	Hanford	Planning
Melody	Haigh	Hanford	Planning
Greg	Freiner	Hanford	Police Dept
Lou	Camara	Hanford	PW - Director
Lisa	Dock	Hanford	PW-City Engineer
Lorrie	Marti	Home Garden	CSD
Angie	Dow	KART	Transit
Terri	King	KCAG	Director
Chris	Lehn	KCAG	Planning
Rachel	Audino	KCAG	Planning
Netha	Ware	Kettleman CSD	
Alex	Dwiggins	Kings Bicyclists	
Bruce	Mackey	Kings Bicyclists	
Jon	Semas	Kings Bicyclists	
Ken	Brinkman	Kings Bicyclists	
Jeff	Laws	Lemoore	Lemoore P.D.
Joe	Simonson	Lemoore	Parks & Rec
Holly	Smyth	Lemoore	Planning
David	Wlaschin	Lemoore	Public Works
Anastacia	McCarney	Lemoore UESD	School Dist
Richard	Rayburn	Lemoore UESD	School Dist
David	Lemons	Momentum	
Roman	Benitez	NAS Lemoore	Planning
Kenny	Antonetti	CHP	Coalinga Area
John	CinatI	Caltrans - Ret	
Cindy Smith		YMCA-Hanford	
Beth	Gazarek	County	Public Health
Kings	County	Asthma	Coalition
Central	CA	Regional Obesity	
Alicia	Jacobo	Sen. Rubio's Off	

Appendix B

The 2011 Regional Bicycle Plan

Resources for Bicycle Projects



Resource List

1. California Highway Patrol
 - Informational posters, coloring books and other awareness supplies.
2. California State Automobile Association
 - Pamphlets available for members
 - Local Office 559-582-9071
3. All Helmet Manufacturers
 - Coupons for discounted helmets (try not to bypass local retailers)
 - Safety videos and other supplies
 - Bell Helmets 1-800-456-BELL (2355)
<http://www.bellsports.com/cycling/>
 - Giro Helmets 1-800-358-2239 (Customer Service);
http://www.giro.com/us_en/customer-service/contact-us/
 - Troxel Helmets 1-800-288-4280
4. Bicycle Helmet Safety Institute (BHSI), Arlington VA; (703) 486-0100
<http://bhsi.org/> or <http://www.helmets.org/>
 - Program planner, materials, selection methods
5. Local Bicycle Retailers
 - To concentrate on a joint effort for providing helmets, school displays, bicycle rodeos, donations and encourage price reductions for safety gear.
6. Sample Programs:
 - Santa Cruz Transportation Commission
(831) 460-3200
 - Sacramento County
(916) 874-6291
 - Caltrans Bicycle Facilities Unit
Penny Gray, Program Manager
(916) 653-2750
 - Transportation Agency for Monterey County
(408) 755-4836
7. Online Resources:
 - America Bikes.org Website:
www.americabikes.org
 - Pedestrian and Bicycle Information Center:
www.bicyclinginfo.org
 - Bikes Belong Website:
<http://www.bikesbelong.org/>
 - California Association of Bicycling Organizations:
<http://www.cabobike.org/>
 - League of American Bicyclists:
www.bikeleague.org/
 - California Bicycle Coalition:

<http://calbike.org/>

Family Life Education Center; Bike Helmets:

<http://life.familyeducation.com/safety-gear/child-care/48132.html?detoured=1>

Alta Planning and Design Consultants, Project Websites:

<http://www.altaplanning.com/project+websites.aspx>

Bay Area Bicycle Coalition:

<http://www.bayareabikes.org/>

CA Department of Transportation (Caltrans) Bicycle Related Sites:

<http://www.dot.ca.gov/hq/tpp/offices/bike/sites.html>

CA Department of State Parks

<http://www.parks.ca.gov/>

FHWA Pedestrian and Bicycle Related Research Reports:

http://www.fhwa.dot.gov/environment/bikeped/web_pub.htm

Federal Motor Carrier Safety Administration, Safety Tips for Bicycles:

<http://www.nozone.org/bicyclists/bicylistsSafety.asp>

Transportation Alternatives

<http://www.transalt.org/>

CA Highway Patrol Statewide Integrated Traffic Records System (SWITRS)

<http://www.chp.ca.gov/switrs/index.html>

8. Caltrans Manuals

- Highway Design Manual, Chapter 1000 Bikeway Planning and Design, 2010
 - California Manual on Uniform Traffic Control Devices, 2011
- Manuals are available online at <http://www.dot.ca.gov/manuals.htm>

9. Federal Highway Administration

- Manual on Uniform Traffic Control Devices, Federal Highway Administration, 2003
- Manual is available online at <http://mutcd.fhwa.dot.gov/pdfs/2003/pdf-index.htm>