

## CHAPTER 8

### NON-MOTORIZED FACILITIES

#### I. OVERVIEW

With an increased focus on green infrastructure at the state, local, and federal levels, non-motorized facilities have been elevated to greater importance as a necessary component of the overall transportation system. Although the current federal transportation authorization, Moving Ahead for Progress in the 21st Century (MAP-21), will be replaced by October 1, 2014, by the next federal authorization or will be extended, KCAG anticipates that the prioritization of green technology will remain a key component of the new legislation whenever it is enacted. While the term "non-motorized" includes pedestrian and equestrian modes, this chapter will primarily focus on the development of pedestrian and bicycle facilities in Kings County.

In addition to bicycle and pedestrian facilities, equestrian trails are generally considered as passive recreational areas. Opportunities for the public to choose bicycling over the automobile for local commuting are a desirable end for local governments to work towards.

Pedestrian facilities are most often the responsibility of local government and are implemented during the normal land use development process. Pedestrian facilities incorporate ADA components in their construction. Recent legislation highlights the role of walkable communities as a means of promoting public health and improving the environment. With these initiatives, pedestrian facilities have gained an increased importance as non-motorized facilities. KCAG appreciates the importance of promoting walkability in future planning endeavors. The development of bicycle and pedestrian programs and facilities provides an alternative to the automobile and results in many public benefits, including the following:

- lessens traffic congestion
- does not emit air pollutants
- is energy efficient as it uses no fuels
- does not lead to deterioration of roadways
- is virtually silent in its operation, reducing noise pollution
- reduces space needed for on-street parking and parking lots
- is an inexpensive form of transportation available to all able-bodied persons
- provides convenient, non-destructive, door-to-door transportation, and
- has health benefits for regular users.

#### II. RECENT PLANNING EFFORTS

The 2011 Kings County Regional Bicycle Plan was adopted by the KCAG Transportation Policy Committee on October 26, 2011, and has been certified by the Caltrans Bicycle Facilities Unit as being consistent with the Regional Transportation Plan and the California Bikeways Act. This Plan was prepared under the guidance of a Bicycle Advisory Committee. Membership of this committee is comprised of stakeholders with an understanding of the diverse needs of the various bicycling community in Kings County. In addition, the City of Lemoore prepares and adopts its own Lemoore Bikeways Plan that is also certified by Caltrans. For more detailed information, reference can be made to these bicycle plans on the KCAG and City of Lemoore websites.

The Kings County Regional Bicycle Plan provides a coordinated and comprehensive bicycle plan that integrates the facilities in the unincorporated county area with those in each of the four cities within the county. The Plan is also prepared to provide a “stand-alone” bicycle plan for each jurisdiction, which can be used by each agency to secure funding to implement their individual bicycle programs and projects. This Plan provides a blueprint for a bikeway system that will make bicycling safer, more convenient, and more enjoyable for all bicyclists.

Recent legislation in California such as Senate Bill 375 provide incentives for local governments to implement multi-modal transportation projects in their jurisdictions. The 2011 Regional Bicycle Plan has taken recent legislation into account and discussed its impacts on member agencies for future bicycle planning endeavors.

### III. ASSUMPTIONS

- A. The Kings County Regional Bicycle Plan and the Lemoore Bikeways Plan will be used as the basis for implementing future bicycle facilities within Kings County.
- B. The active participation of local interest groups to focus public support for bicycle improvements can assist local agencies in determining the need for bicycling facilities in the effort to implement the Kings County Regional Bicycle Plan and the Lemoore Bikeways Plan.
- C. The construction of an integrated system of safely and conveniently connected bike lanes, bike routes, and bicycle parking facilities will lead to greater use of the bicycle for local commuting.
- D. Bicycling should be promoted as a transportation control measure to reduce single-occupant vehicle commuting in an effort to reduce vehicle emissions.
- E. Most bicycle travel has and will continue to occur on roads in a shared-use fashion. Bicyclists are encouraged to use designated bicycle routes.
- F. Bicycle accidents are most effectively avoided by teaching cyclists and drivers to safely share roadways. Bicycle lanes and routes do not prevent bike-auto accidents.

### IV. SUMMARY OF NON-MOTORIZED ISSUES

- A. A great deal of bicycle commuting is done by children traveling to and from school. Children often ride in a haphazard manner and may not properly use bike lanes if they are provided. Young people who will properly use bike lanes have a small political voice. They depend on their parents and school officials to speak out for bicycle improvements.
- B. While a number of individuals now commute on bicycles in this county, most riding by adults is done for recreational and health reasons. Without designated bicycle routes, such riders will continue to use shared roadways and utilize their own preferred circuits. Generally, use of undesignated shared-use routes may present a greater safety risk.
- C. Local governments have been caught between rising road construction and maintenance costs and limited revenues for several years. Although there is funding for construction of bicycle and pedestrian facilities, there is no funding to maintain the facilities once constructed. Therefore, local agencies resist devoting scarce capital improvement dollars to construct bicycle facilities.

- D. Local police departments should continue to conduct bicycle training seminars at elementary schools and community centers to promote bicycle safety and reduce the number of bicycle riders who ride against traffic or violate other traffic laws should be cited.
- E. Secure bicycle parking is lacking throughout Kings County. Investment in bicycle parking facilities near shopping areas and other high-use destinations is needed.
- F. Pavement quality conditions need improvement throughout Kings County. Improvements such as the widening of shoulders and the repaving of rough areas will benefit both motorists and bicycle riders.
- G. Most federal, state, and regional funding sources available for non-motorized facilities are for commuter, rather than recreational, purposes.
- H. From a liability perspective, Class II and III bikeways are treated similar to roadways and sidewalks, meaning that the City becomes liable only if the facility is improperly designed, constructed, or maintained. Deteriorating conditions that develop over time represent potential liability concerns. A regular maintenance and monitoring program will help reduce this liability and should be adopted by each jurisdiction to ensure that the pedestrian facilities and bikeways are being adequately maintained. However, improper maintenance due to funding shortfalls generally does not put the City at risk.

V. ACTION ELEMENT

A. IMPLEMENTATION STRATEGIES

1. Carry out the recommendations of the Kings County Regional Bicycle Plan and the Lemoore Bikeways Plan until KCAG develops an Active Transportation Plan to access the Active Transportation Program funding.. For example, the City of Lemoore has revised its zoning ordinance so that large commercial and industrial employer sites are required to integrate bicycle racks and lockers into the overall site and building design.
2. On designated shared-use roads, provide adequate shoulder space, place bike route indicator signs, and maintain a good riding surface.
3. Ensure that public and private sectors provide adequate bicycle parking. This can be done by amending each jurisdiction's zoning ordinance. The ordinances could be written to allow installation of secure bicycle parking "in lieu" of a portion of automobile parking normally required.
4. Utilize existing private and public bicycle safety seminars. Seminars can be scheduled at schools, adult education programs, local retailing outlets, and public workshops. Funding opportunities should be explored in the private sector (retailers, social service clubs, recreational clubs, etc.) and in public/private partnerships. Additional funds could be drawn from state traffic safety grants.
5. Local police departments should conduct regular campaigns and enforce traffic laws regarding riding against traffic, disregarding traffic signals and signs, and the appropriate use of working bicycle lights in the evening or early morning as well as efforts to educate motorists concerning the rights of cyclists on the roadway.
6. Each city should have an active bicycle registration program.

7. KCAG should join with other counties to petition the State Department of Motor Vehicles to require knowledge of bicycle traffic laws in licensing tests. DMV should be held responsible for making motorists aware of bicyclists' rights and responsibilities.
8. Seek all available state, federal, and private grant funds to install and maintain bicycle facilities and to conduct educational programs.
9. Local agencies should consider bicycle issues in all phases of planning for transportation. This includes local land use, air quality, zoning and circulation elements of general plans, capital improvement plans, and recreational programs.
10. KCAG should consider bicycle issues in its Regional Transportation Plan, Federal Transportation Improvement Program, and Regional Transportation Improvement Plan. KCAG should also ensure that bicycle issues are represented at annual Local Transportation Fund (LTF) allocation discussions and public hearings.
11. Better coordination in developing and implementing bicycle plans can be achieved by:
  - a. Designating a single individual within each jurisdiction to ensure that bicycle issues are represented in that agency's various functions.
  - b. Encouraging bicycle advisory and support groups to work closely with local officials in identifying and seeking solutions to bicycle problems. These groups should assume the responsibility of keeping bicycle issues before decision-makers.
12. The rehabilitation of roads will benefit bicycle users. As roads are repaved, wider shoulders should be provided to upgrade the riding surface for bicyclists.
13. Bicycle parking facilities should be installed at transit stops, park-and-ride lots, and intermodal stations to effect the first-last mile connectivity concept, providing a seamless transition with other transportation modes. Transit buses should continue to be equipped with bicycle transporting racks.
14. Encourage newly developing areas to incorporate bicycle facilities along appropriate roadways and off-road systems as part of open space and recreational amenities.
15. Continue to develop and maintain a safe sidewalk system that facilitates pedestrian and ADA access to public transit for commuting, recreation, or other purposes.
16. The abandonment of rail lines provides an opportunity to establish trails for non-motorized, recreational, or open space uses. Converting abandoned rail corridors into trails also preserves the right-of-ways for any future transit use. However, abandoned rail lines through agricultural production property should not be utilized for general public recreational use, as farm security requirements and proximity to agricultural operation make this option infeasible.

**B. BIKE ROUTE DESIGNATIONS**

The Kings County Regional Bicycle Plan identifies several categories of street improvements classified as bicycle facilities that are described as:

1. Class I Bikeways (Bike Path) are separated from vehicular traffic and used exclusively by bicyclists and pedestrians.

2. Class II Bikeways (Bike Lane) are designated bike lanes adjacent to vehicular travel lanes. These can be installed on existing streets that are most heavily used by bicyclists. Bike lanes are usually four or six-foot wide rights-of-way assigned to bicycles, and are delineated by a six-inch painted stripe. A good riding surface should be provided.
3. Class III Bikeways (Bike Route) are designated routes on roadways that are shared with motorists. Only signage is provided and there are no pavement stripes or bicycle lane designation markers. This is a shared right-of-way along a commuter corridor that either links Class II bikeways or routes. A good riding surface should be provided.
4. Touring. This designation has been given to those routes that are often narrow, without adequate shoulders, or carry high speed traffic and/or heavy traffic volumes, but which are known to be used by the more experienced bicyclist. Touring routes are not for the casual, less experienced bicyclist.
5. Sidewalk. This type of bikeway is basically a wide sidewalk that is intended to be shared by both bicyclists and pedestrians. These are usually only found in tourist areas that host large numbers of bicyclists and pedestrians.
7. Shared-Use Roadway (No Bikeway Designation). KCAG recognizes that most bicycle travel occurs on roads that are not bikeways, even in communities where bikeways are provided. The shared-use designation shows recommended bicycle commuter routes. The development of a high-quality road and shoulder surface with a standard four-inch fog stripe in rural areas will enhance bicyclists' safety and will benefit motorists as well. Shared-use roadways can be considered for reclassification as a Class II or III bikeway, if warranted by bicycle usage.

C. BICYCLE PARKING FACILITIES

Bicycle parking facilities are often overlooked. The lack of adequate and theft-resistant parking will continue to be an obstacle to bicycling commuting. There are three types of bicycle parking facilities that could be considered to increase bicycle use.

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. Bike lockers are generally rented or reserved and require some type of management program.

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 bicycles for several hours or more with minimum supervision.

3. Class III - Low Security

These parking facilities are traditional stands that support the bicycle by the front wheel only. These stands do not support or secure the frame, and are difficult to use with high-security U-locks. Although common in use, this type of facility is not recommended, especially with the growing popularity of fat-tire mountain bikes which are incompatible with many Class III racks and quick-release 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.

D. PROJECTS

1. Bicycle Facilities

Figures 8-1 through 8-10 provide the list and maps of the bike routes recommended by each jurisdiction in the Kings County Regional Bicycle Plan.

a. Recent Projects

City of Corcoran (2012) received \$686,000 in Congestion Mitigation Air Quality funds to add shoulders with Class II Bicycle Lanes of recently annexed roadways.

City of Hanford (2013) received \$66,000 in Congestion Mitigation Air Quality funds to add Class II Bicycle Lanes and Pedestrian Facilities in various locations throughout Hanford.

2. Pedestrian Facilities

In recent years, our local agencies have been successful in receiving State and federal grant funds through the Safe Routes to Schools Programs.

In 2011, KCAG Staff collaborated with Kings County Staff in writing two proposals for Kettleman City (awarded \$453,600 federal funds) and Armona (awarded \$320,900 in state funds) for sidewalks, curbs, gutters, lighted crosswalks, and drainage.

Kings County also received a grant for Home Garden (awarded \$628,670 in state funds in 2010) for construction of pedestrian facilities.

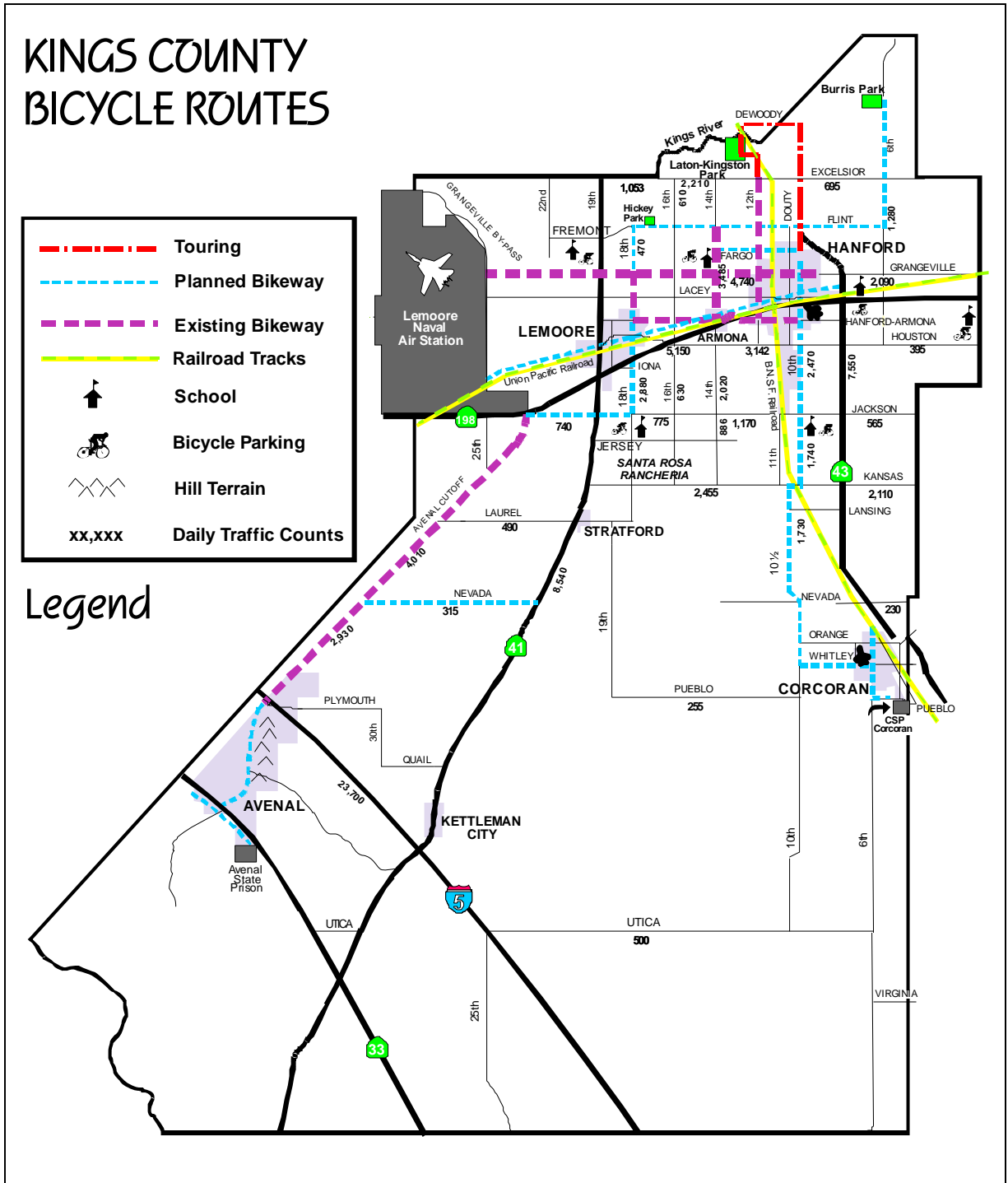
The City of Avenal received \$53,430 in state funds for in-pavement lighted crosswalks in 2011.

**FIGURE 8-1**  
**Kings County**  
**Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
10th Ave.	Houston Ave.	Kansas Ave.	Class III	\$19,598
10 1/2 Ave.	Kansas Ave.	Nevada Ave.	Class III	\$16,332
10th Ave.	Nevada Ave.	Whitley Ave.	Class III	\$8,982
Whitley Ave.	10th Ave.	7th Ave.	Class III	\$9,898
18th Ave.	Jackson Ave.	Lemoore City Limit	Class II	\$13,104
Flint Ave.	Hickey Park	6th Ave.	Class III	\$35,880
Jackson Ave.	Avenal Cutoff	18th Ave.	Class III	\$16,703
Fargo Ave.	14th Ave.	BNF. RR	Class III	\$8,351
12 3/4 Ave.	Excelsior Ave.	Fresno Co. Line	Class III	\$5,877
Nevada Ave.	Avenal Cutoff	State Route 41	Class III	\$24,745
6th Ave.	Flint Ave.	Burriss Park	Class III	\$20,415

Source: 2011 Kings County Regional Bicycle Plan

FIGURE 8-2



Source: KCAG



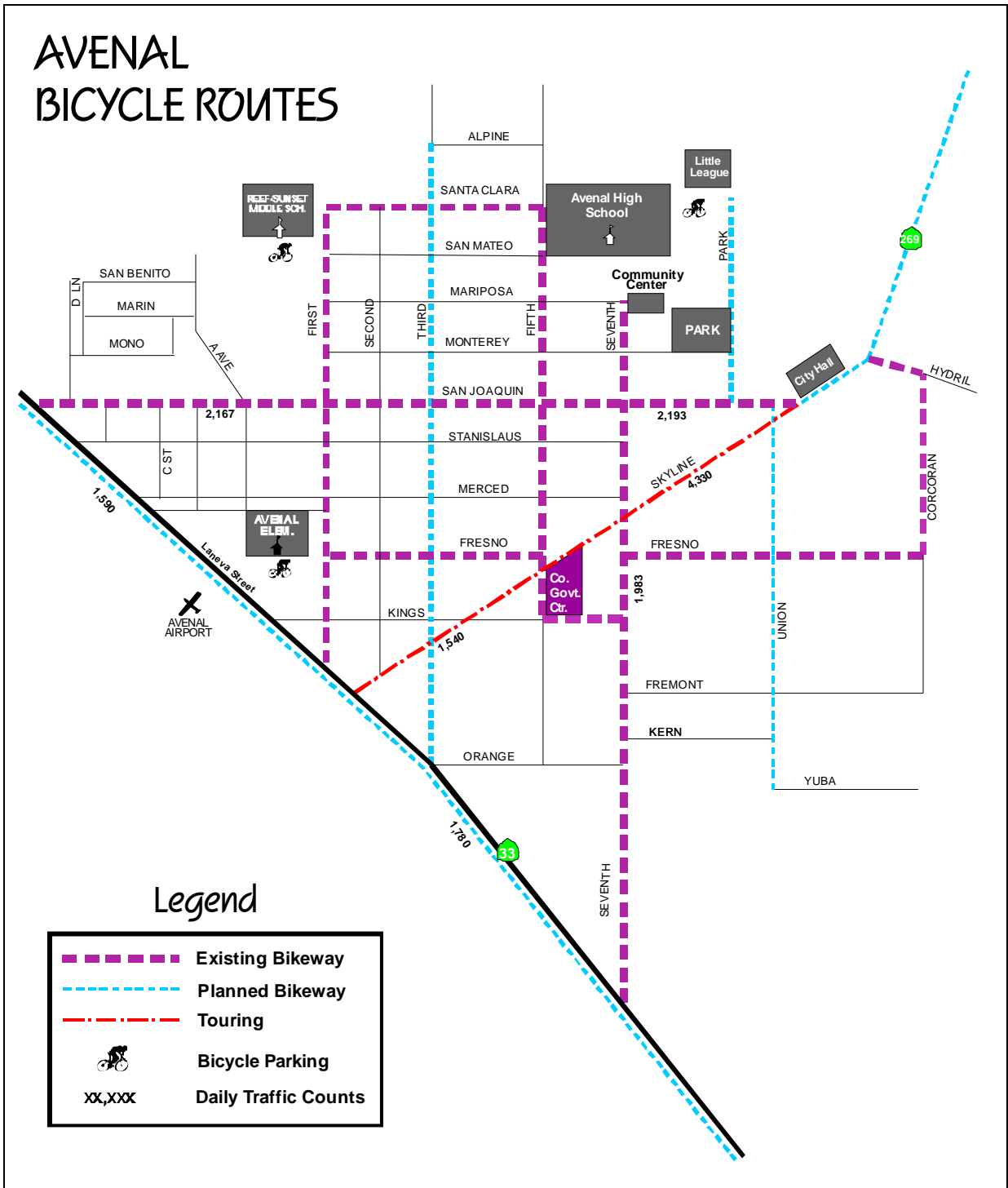
**FIGURE 8-3**

**Avenal  
Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
Park Ave.	Monterey St.	San Joaquin St.	Class III	\$2,080
Third Ave.	Alpine St.	Orange St.	Class III	\$2,997
Union Ave.	Skyline St.	Kern St.	Class II	\$9,000
State Route 269	Avenal Cutoff	San Joaquin St.	Touring	N/A

Source: 2011 Kings County Regional Bicycle Plan

FIGURE 8-4



Source: KCAG

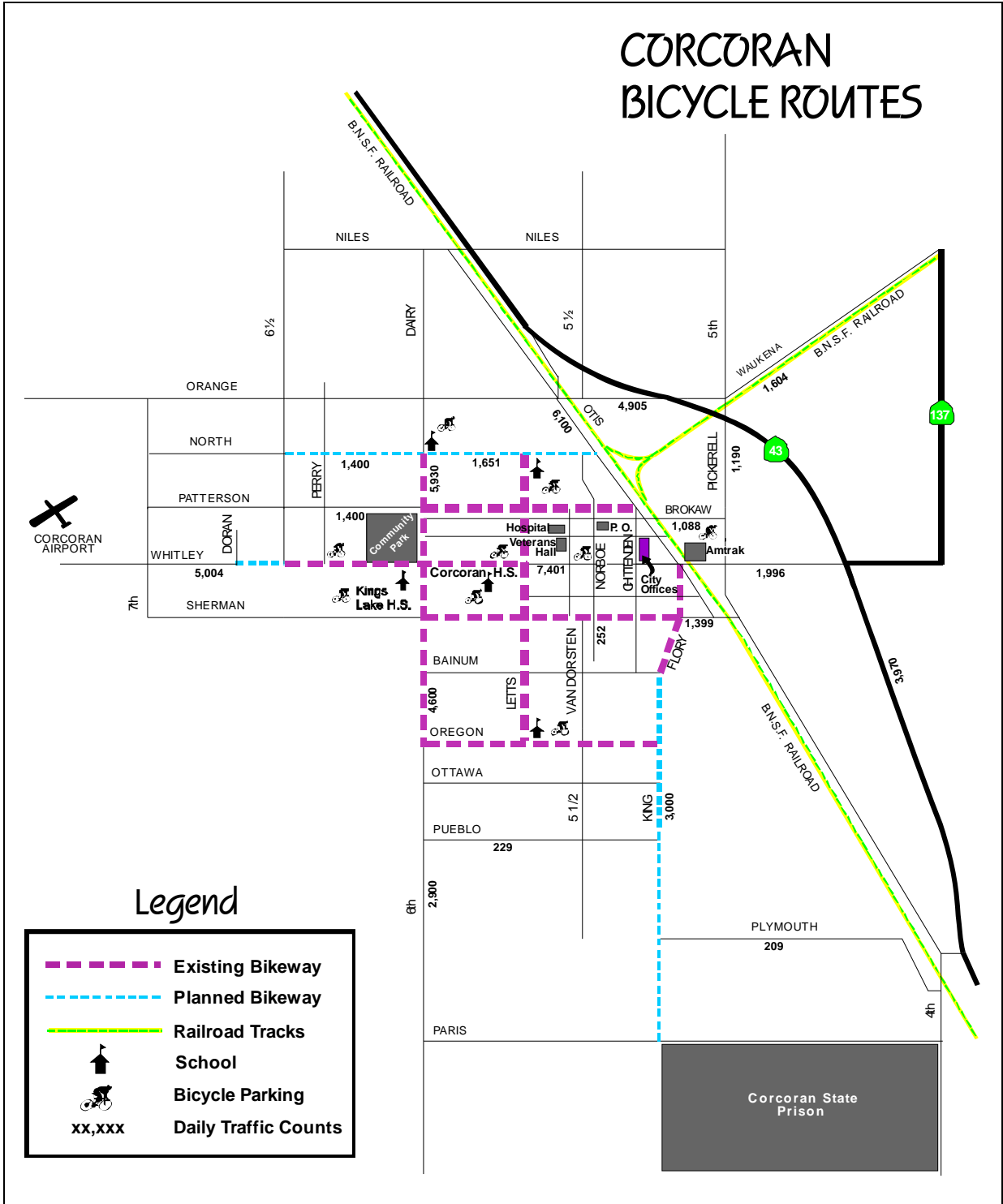
**FIGURE 8-5**

**Corcoran  
Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
North Ave.	6 1/2 Ave.	Otis Ave.	Class III	\$3,279
Whitley Ave.	6 1/2 Ave.	Corcoran Airport	Class III	\$800
King Ave.	Banium Ave.	Corcoran Prison	Class III	\$7,918

Source: 2011 Kings County Regional Bicycle Plan

FIGURE 8-6



Source: KCAG

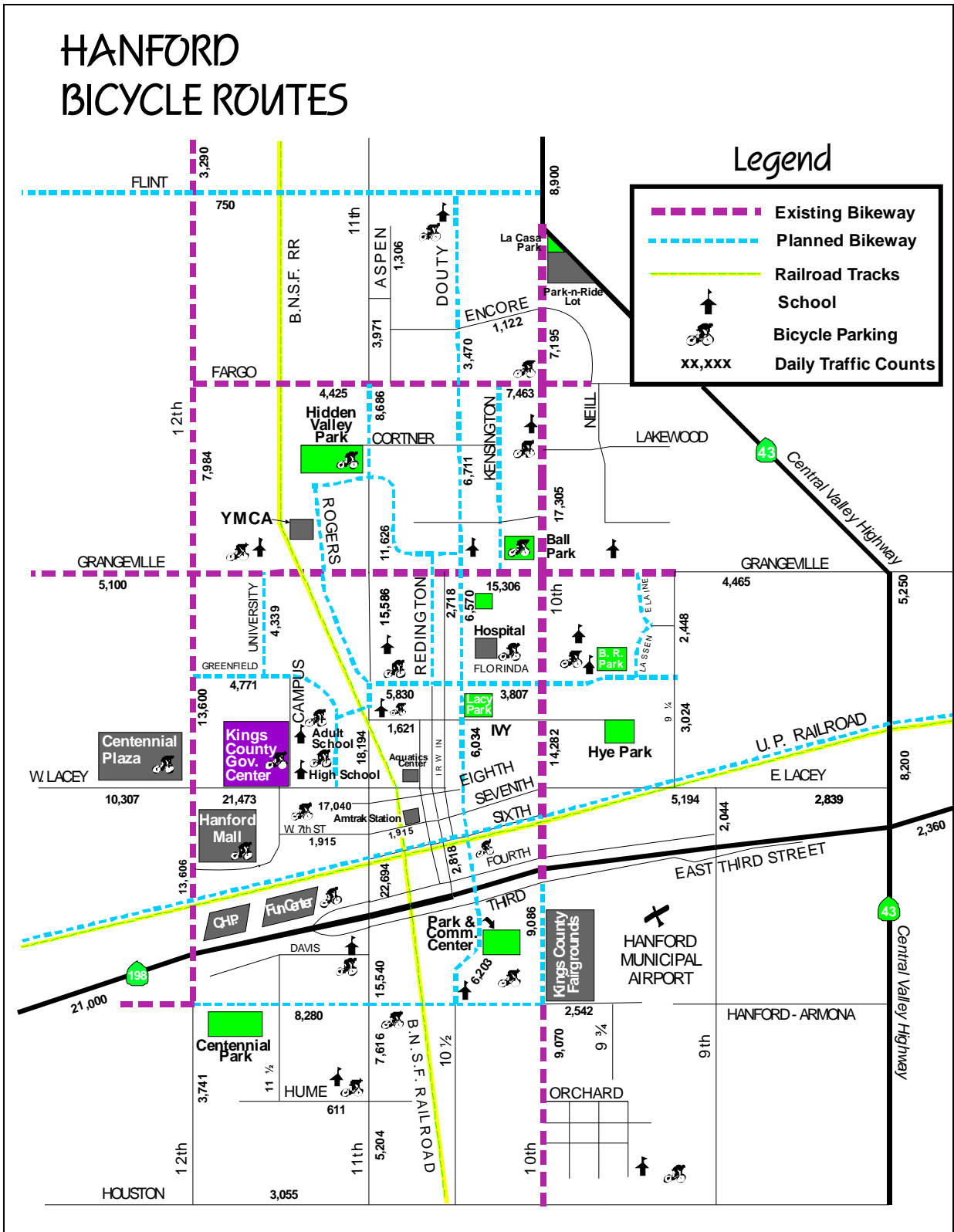
**FIGURE 8-7**

**Hanford  
Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
11th Ave.	Elm St.	Mulberry St.	Class III	\$3,155
Elm St.	Greenfield Ave.	11th Ave.	Class III	\$464
Centennial Dr.	Grangeville Bl.	Berkshire Ln.	Class II	\$1,237
Cortner St.	Glacial St..	Douty St.	Class III	\$2,696

Source: 2011 Kings County Regional Bicycle Plan

FIGURE 8-8



Source: KCAC

**FIGURE 8-9**

**Lemoore  
Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
W. Bush St. (south side)	SR 41	College Dr.	Class I	\$154,656
E. Bush St. (both sides)	Lemoore Ave.	Barcelona St	Class III	\$1,792
E. Bush St. (East side)	Barcelona St.	E. D St.	Class II	\$1,619
Cinnamon Dr. (south side)	Lemoore Ave.	Hanford Armona Rd.	Class II	\$3,217
Cinnamon Dr. (south side)	Hill St.	Lemoore Ave.	Class II	\$2,969
Cedar Ln. (north side)	19 Ave.	Lum Dr.	Class II	\$1,485
Cedar Ln. (north side)	19½ Ave.	19th Ave.	Class II	\$3,217
19th Ave. (both sides)	Cherry Ln.	Atlantic Ave.	Class II	\$8,413
Silverado Dr. (south side)	19 1/2 Ave.	S. 19th Ave.	Class II	\$3,217
Hill St. (east side)	E St.	W. Bush St.	Class II	\$1,856
Follett St. (both sides)	Cinnamon Dr.	Railroad Tracks	Class II	\$2,969
Follett St. (both sides)	W. D St.	W. Bush St.	Class II	\$1,608
Follett St. (both sides)	Railroad Tracks	W. D St.	Class III	\$1,619

Source: 2011 Kings County Regional Bicycle Plan





VI. FINANCIAL ELEMENT

A. FEDERAL SOURCES

1. Surface Transportation Program

This program provides funds that can be used for construction, rehabilitation, and operational improvements for highways and bridges. This would include projects that are necessary to accommodate other transportation modes and for bicycle transportation and pedestrian walkways principally for transportation, rather than recreation purposes, and for carrying out non-construction projects related to safe bicycle use. Funds are payable up to 80% of the total project cost. Project selection is made by local jurisdictions from their annual apportionments and programmed through the Federal Transportation Improvement Program (FTIP). RSTP funds that are exchanged can also be used for non-motorized projects.

2. Congestion Mitigation and Air Quality

This program provides funds for projects that help achieve air quality standards under the 1990 Clean Air Act. Like the Surface Transportation Program, these funds can be used for construction of pedestrian walkways, bicycle transportation facilities, and for carrying out non-construction projects related to safe bicycle use payable up to 80%. CMAQ projects are locally programmed by each jurisdiction through the Federal Transportation Improvement Program (FTIP).

3. Highway Safety Improvement Program (HSIP)

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

4. Federal Transit Act

This act provides funds to non-urbanized areas for various transit operating and capital assistance projects. Eligible projects include those that provide access to mass transit facilities or to install racks or other equipment for transporting bicycles on mass transit.

5. Transportation Alternatives Program (TAP)

The Transportation Enhancement (TE) program under ISTEA, TEA-21, and SAFETEA-LU was discontinued under MAP-21 and replaced by the Transportation Alternatives Program (TAP). The TAP absorbed the former federal Safe Routes to Schools (SRTS) and Recreational Trails (RTP). The TAP funds have been completely absorbed by the State Active Transportation Program (ATP) explained below. Under MAP-21, regions the size of Kings are to receive 10% of the state apportionment.

B. STATE SOURCES

1. Gas Tax

Funds from the State gas tax are based on the historical apportionments provided to Kings County jurisdictions. Projected increases are based on Caltrans' estimates of fuel consumption through 2040.

2. State Transportation Improvement Program (STIP)

STIP revenues are based on actual regional share dollars available to Kings County in the 2014 STIP Fund Estimate.

3. Active Transportation Program (ATP)

This is a competitive program. The program combines two federal programs (Transportation Alternatives Program and Highway Safety Improvement Program) and three state programs (Safe Routes to Schools, Bicycle Transportation Account, and Environmental Enhancement and Mitigation programs) into a competitive grant program. No funding is projected for this program.

4. Office of Traffic Safety

Comprehensive bicycle safety programs that involve enforcement, education, public health, driver education, transportation engineering, and public communication are eligible project types under this program. Communities from throughout the state are invited to submit annual applications for program grants.

5. Land and Water Conservation Fund Program

This program provides grants to plan, acquire, and develop recreation parks and facilities including bikeway and pedestrian trails. The California Parks and Recreation provides reimbursement grant funds of 50% of the total projects costs. Grants for local agencies are divided, with 40% of the total funding going to Northern California and 60% to Southern California.

6. Mello-Roos Community Facilities District Act of 1982

This program allows a sponsoring agency to issue a special tax bond for a community facilities district to finance public facilities and services such as parks, recreation areas, parkways, and open spaces. Bicycle and pedestrian projects could be included in any proposed public facility.

C. LOCAL SOURCES

1. Local Transportation Fund

Up to two percent of each county's Local Transportation Fund (LTF) can be claimed annually by local jurisdictions to be used for installing or maintaining bicycle and pedestrian facilities (Public Utilities Code, Section 99233.3). This amount would provide around \$70,000 each year for bicycle and pedestrian projects.

The RTPA may also reserve an amount so designated, up to 2% of the LTF, each year for later allocation to claimants for pedestrian and bicycle facilities or bicycle safety programs. If the RTPA finds that all or any portion of the amount reserved could be used more appropriately for other purposes, that amount can be added to the total apportionment available the following year.

Generally, local jurisdictions prefer to use LTF allocations claimed for street and road purposes for bicycle and pedestrian projects in order to minimize administrative costs. KCAG could apportion an amount of LTF to provide a bicycle facilities maintenance fund. If the funds are not needed for bicycle facility maintenance, the funds can be returned to the following fiscal year's estimated LTF for reappportionment.

2. REMOVE II PROGRAM

This program is sponsored by the San Joaquin Valley Air Pollution Control District (SJVAPCD) to fund vehicle emission reduction projects, such as the development of comprehensive bicycle networks through the expansion of bicycle transportation facilities. Funding for this competitive first-come, first-serve program is derived from a \$4 vehicle registration fee. Projects serving commuters, rather than recreational users, are given higher priority for funding. The maximum incentive for a Class I bicycle path and a Class II bicycle lane is \$150,000 and \$100,000.

3. General Fund

As with any public improvement, local general fund revenues can be used to build and maintain bicycle facilities, or to provide a match for State and Federal grants.

4. Private Money

Funds from private sources can be used to provide secure bicycle parking at high-use destinations. Such facilities can be required as part of the zoning review processes used by each of the local agencies.

5. Developer Fees

Development fees could be levied and administered by local jurisdictions to provide improvements to accommodate new development.

6. Development Agreements

Agreements can stipulate that developers provide portions of bikeway facilities where the construction becomes a part of the development.

7. Other Local Programs

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