

## CHAPTER 8

### NON-MOTORIZED FACILITIES

#### I. OVERVIEW

With the legislation continuation of SAFETEA-LU, non-motorized facilities have been elevated to greater importance as a necessary component of the overall transportation system. While the term "non-motorized" includes both pedestrian and equestrian modes, this chapter will primarily focus on the development of bicycle facilities in Kings County. Pedestrian facilities are most often the responsibility of local government and are implemented during the normal land use development process. Equestrian trails are generally considered in passive recreational areas.

Opportunities for the public to choose bicycling over the automobile for local commuting is a desirable end for local governments to work towards. 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 2005 Kings County Regional Bicycle Plan was adopted by the KCAG Transportation Policy Committee 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 needs 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.

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 and implement their individual bicycle plans. This Plan provides a blueprint for a bikeway system that will make bicycling safer, more convenient, and more enjoyable for all bicyclists.

#### 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 devices 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 bikes in this county, most riding by adults is done for recreational and health reasons. Without designated bicycle routes, such riders will utilize their own preferred circuits.
- 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. They 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. Bicycle riders who ride against traffic or violate other traffic laws should be cited.
- E. Secure bicycle parking is lacking throughout Kings County. Investment of 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 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. When public demands are made, carry out the recommendations of the Kings County Regional Bicycle Plan and the Lemoore Bikeways Plan.
2. On designated shared-use roads, provide adequate shoulder space, stripe the pavement, 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 should be developed primarily through the private sector (retailers, social service clubs, recreational clubs, etc.). Additional funds could be drawn from state traffic safety grants.
5. Local police departments should conduct regular campaigns to enforce traffic laws. They should ticket cyclists who ride against traffic, disregard traffic signals and signs, and those lacking working lights in the evening or early morning. Motorists who harass or fail to yield right-of-way to cyclists at intersections should be cited.
6. Each city police department 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 motorist aware of bicyclists' rights and responsibilities.
8. Seek all available state, federal, and private grant funds to install 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 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 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 provide 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 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.

**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 by 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. Class III with Stripe bikeways are delimited by a shoulder stripe, but do not include bicycle lane pavement markings. These facilities do include the "Bike Route" signage identical to a regular Class III facility. This type of bikeway is most appropriate when insufficient pavement width is available to provide a standard Class II facility, but it is desirable to designate a portion of the roadway for bicyclists. The added shoulder stripe provides an additional comfort level for the bicyclists that they are riding in a delimited shoulder area.
5. 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.
6. Sidewalk. This type of bikeway is basically a wide sidewalk that is intended to be shared by both 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 cyclist's 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 made available 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 bicycle 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 for each jurisdiction by the Kings County Regional Bicycle Plan.

a. Recent Projects

In recent years, local agencies have been successful in receiving State grant funds through the Bicycle Transportation Account (BTA) to develop bicycle facilities. In 2004 the City of Lemoore received \$500,000 for construction of a Class I bike path along the Union Pacific Railroad. Lemoore city officials with the assistance of local political representatives initiated several attempts to negotiate with the UP Railroad for right of way access. With UP Railroad unwilling to negotiate, Lemoore was left with no choice but to return the BTA grant funding. The City of Lemoore continues to evaluate new bicycle routes.

Kings County received BTA funds in 2002 to complete a class III bicycle route on segments of 18th Avenue between Flint Avenue and Grangeville Boulevard and on Flint Avenue between 18th Avenue and 17 ½ Avenue. The Kings County Area Public Transit Agency (KCAPTA) received BTA funds to purchase bicycle racks for placement on transit buses in 2001. To date, no other additional projects have been submitted for competitive BTA funding.

2. Pedestrian Facilities

The City of Lemoore has completed several sidewalks in recent years including specific routes where children frequently walk to school. New subdivisions are now required to provide 10' wide sidewalk connections through cul-de-sacs. Under this designation, new sidewalks have been installed along Hanford-Armona Road from 19th Avenue to Liberty Drive, down Liberty Drive from Hanford-Armona Road to Cinnamon, along Cinnamon Drive from Liberty Drive to 19th Avenue, and along a small segment of 19th Avenue south of Hanford-Armona Road. Funding has also been used to construct streetscaped sidewalks in various section of the city.

The City of Hanford in 2005 finished sidewalk improvements to 10th Avenue, improving the convenience of walking from residential neighborhoods to retail services for residents.

The City of Avenal proposes within its general plan to improve the Arroyo del Camino waterway to allow pedestrian and bicycle use as part of its open space, park, and recreational facilities planning efforts. This site is currently an unimproved water course that runs in a north-south direction through the eastern portion of the community.

3. Equestrian Facilities

The City of Avenal has addressed their need for equestrian facilities in its general plan by designating open space for nature preserves and passive recreational areas. These areas would include pedestrian and equestrian trail systems. One proposed site is a 277 acre area that currently contains the existing horse corrals and vacant hillsides and is generally located on the west side of Skyline Blvd. north of the high school.

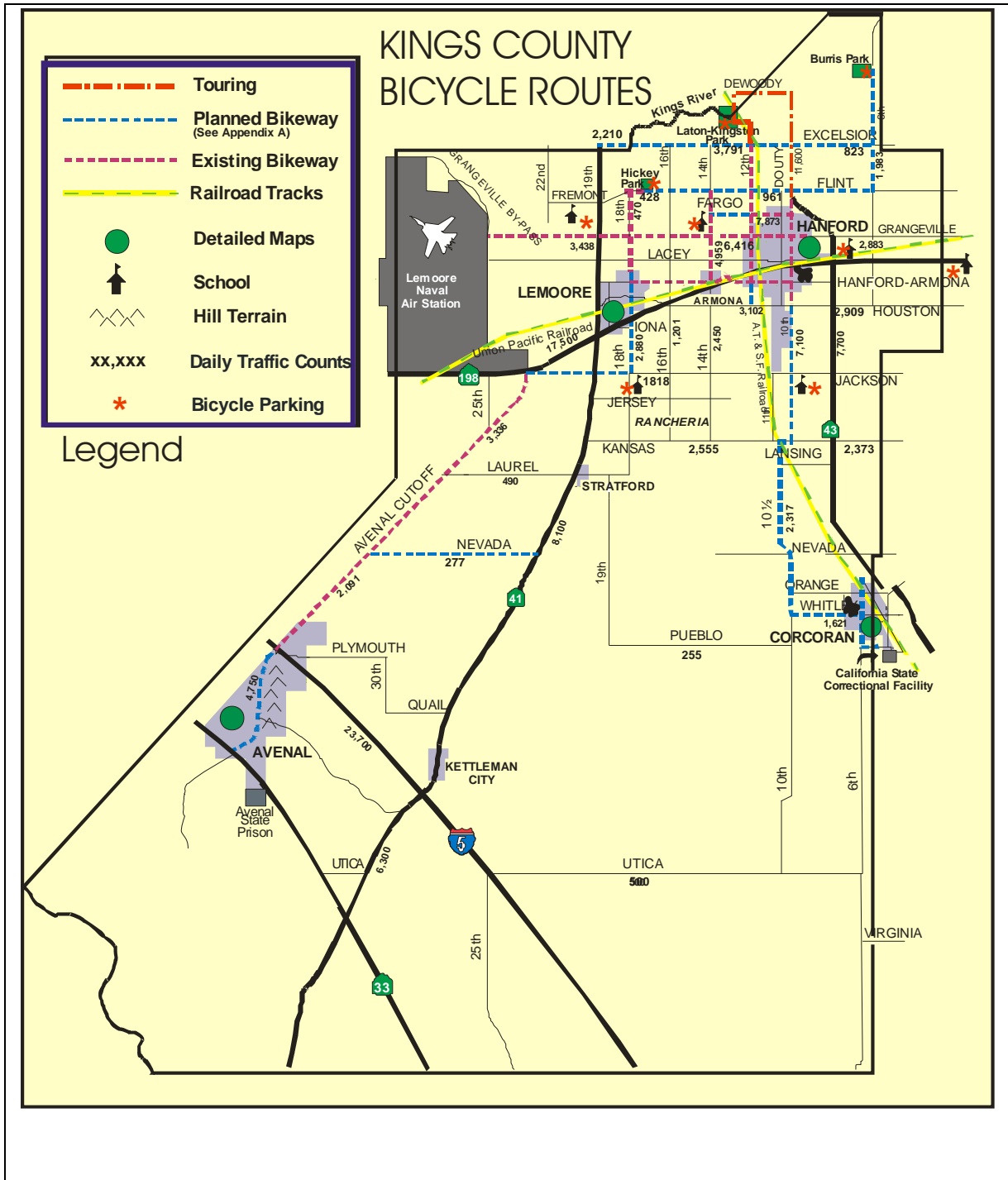
**FIGURE 8-1**

**Kings County  
Bicycle Project List**

Street	From	To	Facility Type	Cost
10th Ave.	Houston	Kansas	Class III with stripe	\$2,100,400
10 1/2 Ave.	Kansas	Nevada	Class III with stripe	\$1,700,800
10th Ave.	Nevada	Whitley	Class III with stripe	\$950,000
Whitley Ave.	10 1/2 Ave.	6 1/2 Ave.	Class III with stripe	\$1,000,00
18th Ave.	Jackson Ave.	Lemoore City Limit	Class II	\$2,650
Flint Ave.	Hickey Park	6th Ave.	Class III with stripe	\$27,500
Jackson Ave.	Avenal Cutoff	18th Ave.	Class III	\$26,150, 000
Fargo Ave.	14th Ave.	B.N. Santa Fe RR	Class III with stripe	\$550,000
12 3/4 Ave.	Excelsior Ave.	Fresno Co. Line	Class III	\$479,750
Nevade Ave.	Avenal Cutoff	State Route 41	Class III	\$2,000,000
6th Ave.	Flint Ave.	Burris Park	Class III	\$2,750

Source: 2005 Kings County Regional Bicycle Plan

FIGURE 8-2



Source: KCAG

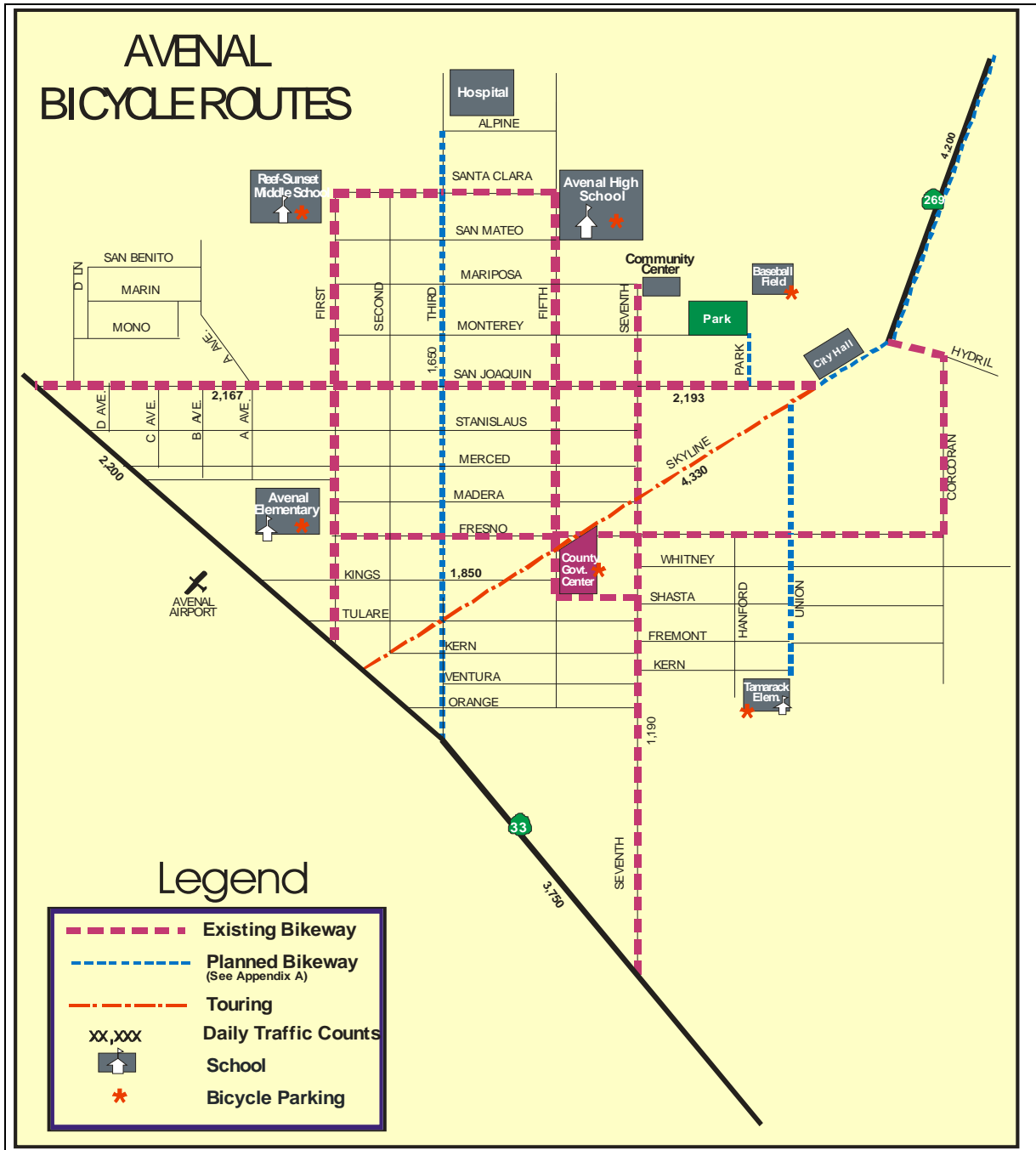
**FIGURE 8-3**

**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 with stripe	\$1,080
Third Ave.	Alpine St.	Orange St.	Class III with stripe	\$78,000
Union Ave.	Skyline St.	Kern St.	Class II	\$2,000
State Route 269	Avenal Cutoff	San Joaquin St.	Touring	N/A

Source: 2005 Kings County Regional Bicycle Plan

FIGURE 8-4



Source: KCAG

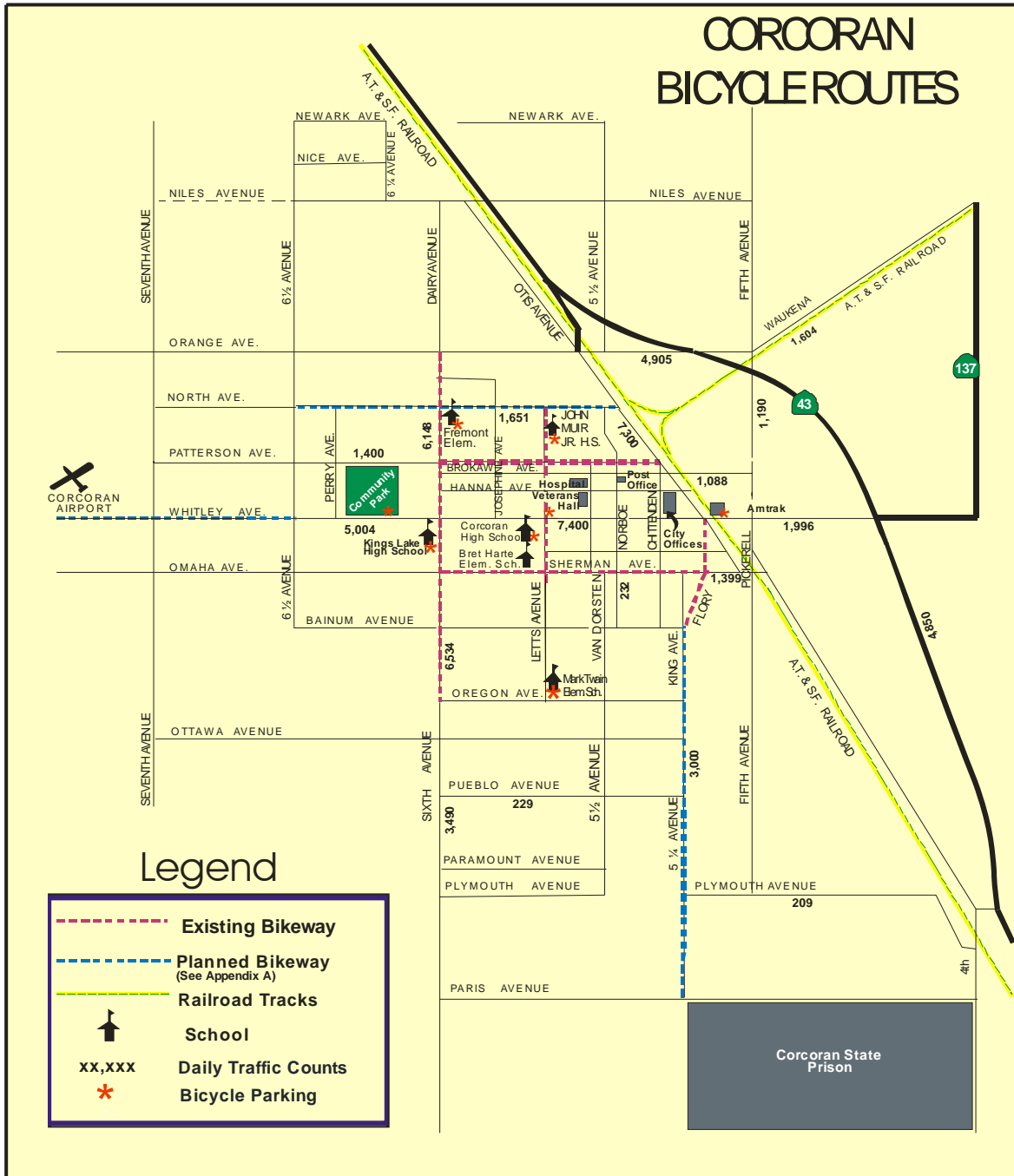
## FIGURE 8-5

### Corcoran Bicycle Project List

Street	From	To	Facility Type	Cost
North Ave.	6 1/2 Ave.	Otis Ave.	Class II	\$1,200
Whitley Ave.	6 1/2 Ave.	Corcoran Airport	Class III	\$800
King Ave.	Banium Ave.	Corcoran Prison	Class II	\$1,200

Source: 2005 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	\$600
Elm St.	Greenfield	11th Ave.	Class III	\$360
Centennial Dr.	Lacey	Berkshire	Class II	\$3,125
Cortner St.	11th Ave.	Kensington	Class III	\$1,875

Source: 2005 Kings County Regional Bicycle Plan



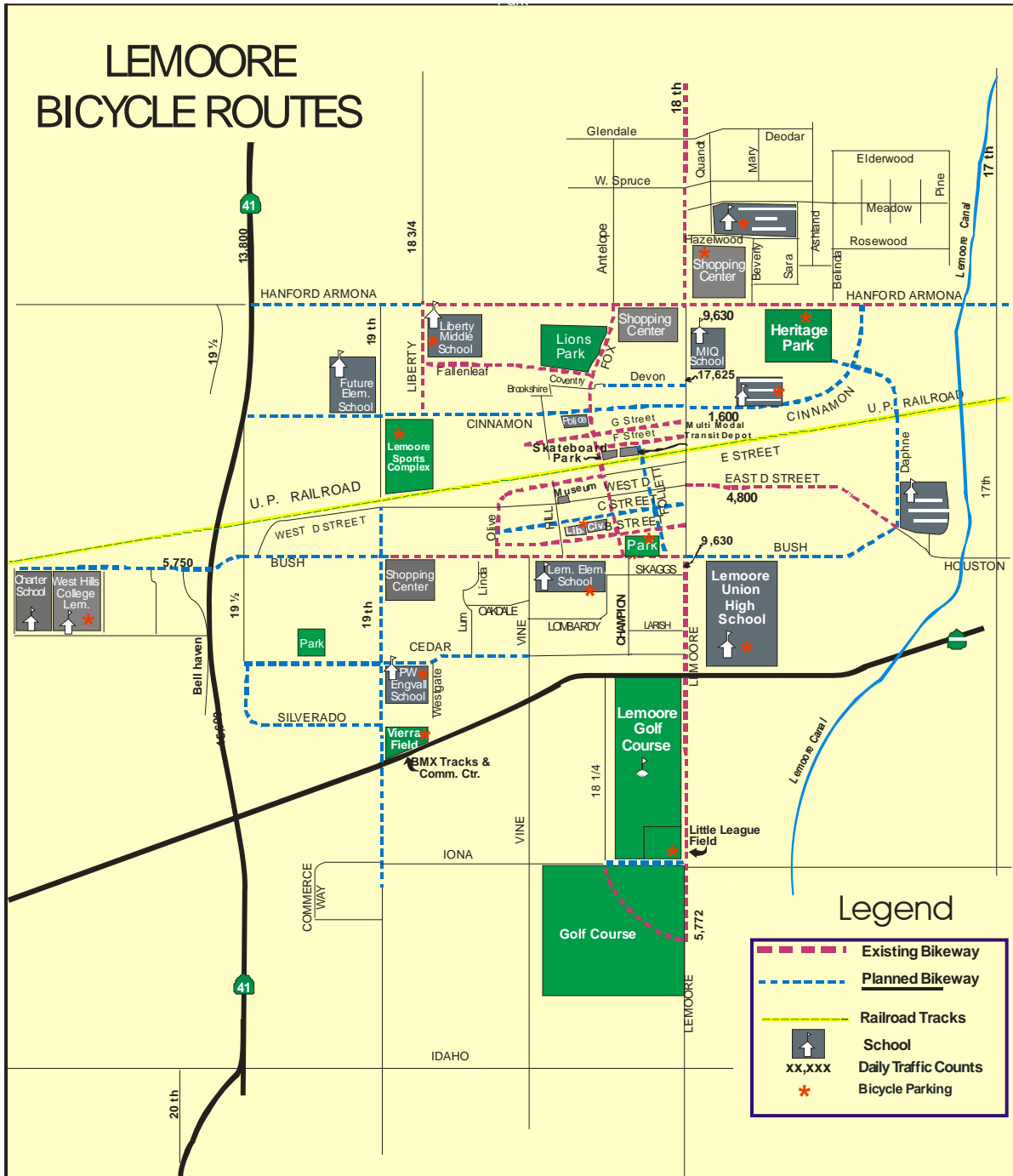
**FIGURE 8-9**

**Lemoore  
Bicycle Project List**

<b>Street</b>	<b>From</b>	<b>To</b>	<b>Facility Type</b>	<b>Cost</b>
Cinnamon Dr.	19 1/2 Ave.	Hanford Armona	Class II	\$175,000
19th Ave.	Railroad	State Route 198	Class II	\$2,100
Cedar Ln.	19 1/2 Ave.	Vine Street	Class II	\$3,000
C St.	Olive St.	Lemoore Ave.	Class II	\$1,750
Bush St.	State Route 41	West Hills College	Class II	\$600
Bush/ Daphne	Lemoore Ave.	UP Railroad	Class II	\$3,300
Follett St.	F St.	Bush St.	Class II	\$1,500
Hanford Armona Rd.	State Route 41	E. of Liberty Dr.	Sidewalk	\$280,000
Iona Ave.	Golf Links Ave.	Lemoore Ave.	Class II	\$600
Silverado Dr.	Cedar Ln.	19th Ave.	Class II	\$2,800

Source: 2005 Kings County Regional Bicycle Plan

FIGURE 8-10



Source: KCAG

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 nonconstruction 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 nonconstruction 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. Transportation Enhancement

The Transportation Enhancement (TE) program was established to fund transportation related projects that enhance quality of life, in or around transportation facilities. The construction of bicycle and pedestrian facilities and the preservation of abandoned railroad corridors for use as pedestrian or bicycle trails are examples of the eligible projects that can be funded through this program. The allocation of TE funds is accomplished through the Regional Transportation Improvement Program (RTIP) by selecting candidate projects for programming by KCAG following a project selection process.

4. Bridge Repair and Replacement Program

Often times a road designated as a shared-use route has sufficient shoulder width to accommodate bicycles, except at the location of bridges. This program provides funds for bridge repair or replacement, which includes existing and future bikeways.

5. National Highway Safety Act

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.

6. 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.

7. Recreational Trails Program

This program provides an appropriation of funds to California for development and maintenance of recreational trails and trail related facilities for both nonmotorized and motorized recreational trail uses. Recreation trails includes a thoroughfare used for recreational purposes such as bicycling, hiking, equestrian, and off-road motorized vehicle activities. The California Department of Parks and Recreation administers the program. Approximately \$5.5 million is available in California in 2007. Non-motorized projects receive 70% and motorized projects receive 30% of the funds on a competitive basis to cities, counties, districts, and nonprofit organizations with management responsibility over public lands.

B. STATE SOURCES

1. Bicycle Transportation Account

Bicycle Transportation Account (BTA) funds are allocated on a competitive basis to counties and cities for bikeways and related facilities that improve safety and convenience of bicycle commuters, including planning and education projects. No single agency may receive more than 25% of the amount deposited in the BTA in a single fiscal year. Grant funds cover up to 90 percent of a project's costs. In fiscal year 2007-2008 the BTA will provide \$5 million to city and county agencies for projects that improve the safety and convenience for bicycle commuters.

To be eligible for funding, a city or county must have an adopted bicycle plan that is consistent with the Regional Transportation Plan and the California Bikeways Act. The Kings County Regional Bicycle Plan and the Lemoore Bikeways Plan have both been certified by Caltrans. Therefore, local agencies are able to apply for these funds for projects that are included in the certified bike plans. To remain eligible for BTA funds, a local agency must have a current bicycle plan that is updated every four years.

2. 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.

3. 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.

4. 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 reapportionment.

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-com, 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.