

# CHAPTER 4

## THE REGIONAL HIGHWAY SYSTEM

### I. OVERVIEW

This chapter focuses on the most used, and therefore, the most critical component of Kings County's transportation system: the highway system. There are about 1,490 miles of surfaced roads in Kings County. This total is maintained by the State, the County of Kings, and by the four cities. Virtually all travel depends upon these roads, their bridges, overcrossings, interchanges, and traffic control devices. Because highway facilities are so vital to the social and economic well-being of this region, this chapter is presented as the focal point for this Regional Transportation Plan.

The purpose of this chapter is to recommend and justify improvements for the regional highway system based upon the following:

- Outlining assumptions guiding KCAG's highway planning efforts;
- Defining those roads which are of regional significance;
- Itemizing those issues affecting highway planning;
- Presenting projects needed to maintain and upgrade the regional system;
- Delegating responsibilities for project implementation; and
- Estimating project costs and assigning priorities.

**FIGURE 4-1**

**MAINTAINED ROAD MILEAGE IN KINGS COUNTY  
2010**

JURISDICTION	MAINTAINED MILEAGE	PERCENTAGE OF COUNTYWIDE TOTAL
Interstate	26.7	1.7%
State System	130.0	8.7%
Kings County*	944.09	63.4%
Avenal*	32.6	2.2%
Corcoran*	51.4	3.4%
Hanford*	215.81	14.5%
Lemoore*	86.05	5.8%
U.S.BIA	2.5	.17%
<b>TOTAL</b>	<b>1,489.15</b>	<b>100.0%</b>

\* Does not include state or interstate highway mileage.

This plan does not study all roads in Kings County. Instead, it identifies and examines the most-used routes which serve regional, rather than merely local, transportation demands. Local planning for circulation and parking belongs in city and county general plans and must be undertaken by local agencies. To provide the reader with a broad perspective on the highway system, this section is divided into two areas of study: the Countywide Regional System that includes the most heavily used county and state rural roads; and the Regionally Significant Roads in Urban Areas, which include busy roads that transect urban areas, yet are important because they also serve regional traffic.

A. FUNCTIONAL CLASSIFICATION SYSTEM

Caltrans and local agencies have practiced a method of classifying roads by their function for many years. The idea is to sort streets and highways by their expected level of service. This method furnishes an important link between transportation and land-use planning. A rational land development program cannot be realized if road designs and capacities are not related to the intensity of use they will serve. Every road has a unique role to play, and each must be calculated in its relationship with the larger network of roads.

There are three street and highway classes where through traffic predominates: Major Arterials, Minor Arterials, and Collectors. Major Arterials serve the high-volume corridors that connect the major traffic generators. Minor Arterials serve less concentrated traffic-generating areas, acting as boundaries to neighborhoods and collect traffic from Collector streets. Although the prime function of Minor Arterial streets is the movement of through traffic, they also provide direct access to residential areas and neighborhoods, collecting traffic from local access streets and distributing it to the arterial system. Minor Collector streets would serve less traffic than Major Collectors.

The map shown in Figure 4-2 is based on the functional classifications approved for the county by the Federal Highway Administration. The maps shown in Figures 4-3 through 4-6 are based on the general plans of each city.

B. THE COUNTYWIDE REGIONAL SYSTEM

The roads that make up the countywide regional network are known collectively as Routes of Regional Significance (see Figure 4-2). They comprise a system whose roles are to:

- serve inter-county and intra-county travel;
- link important population centers;
- join with other regional routes to form a comprehensive network; and
- provide access between agricultural areas and processing facilities and markets.

Included in this system are 156.7 miles of state-maintained regional routes (including Interstate 5). These are among the most important roads in this area because they serve most of the travel between Kings and surrounding counties, and they carry a very significant portion of intra-county traffic. Regionally significant, county maintained roads satisfies the majority of the remaining inter-county demand.

The following are considered in their role as "Routes of Regional Significance." (See Figure 4-2 for rural functional classification.)

Interstate and Other Principal Arterials

Interstate 5	(Kern Co. to Fresno Co.)
State Route 41	(Kern Co. to Fresno Co.)
State Route 43	(Excelsior Ave. to Houston Ave.)
State Route 137	(SR 43 to Tulare Co.)
State Route 198	(Fresno Co. to Tulare Co.)

Minor Arterials

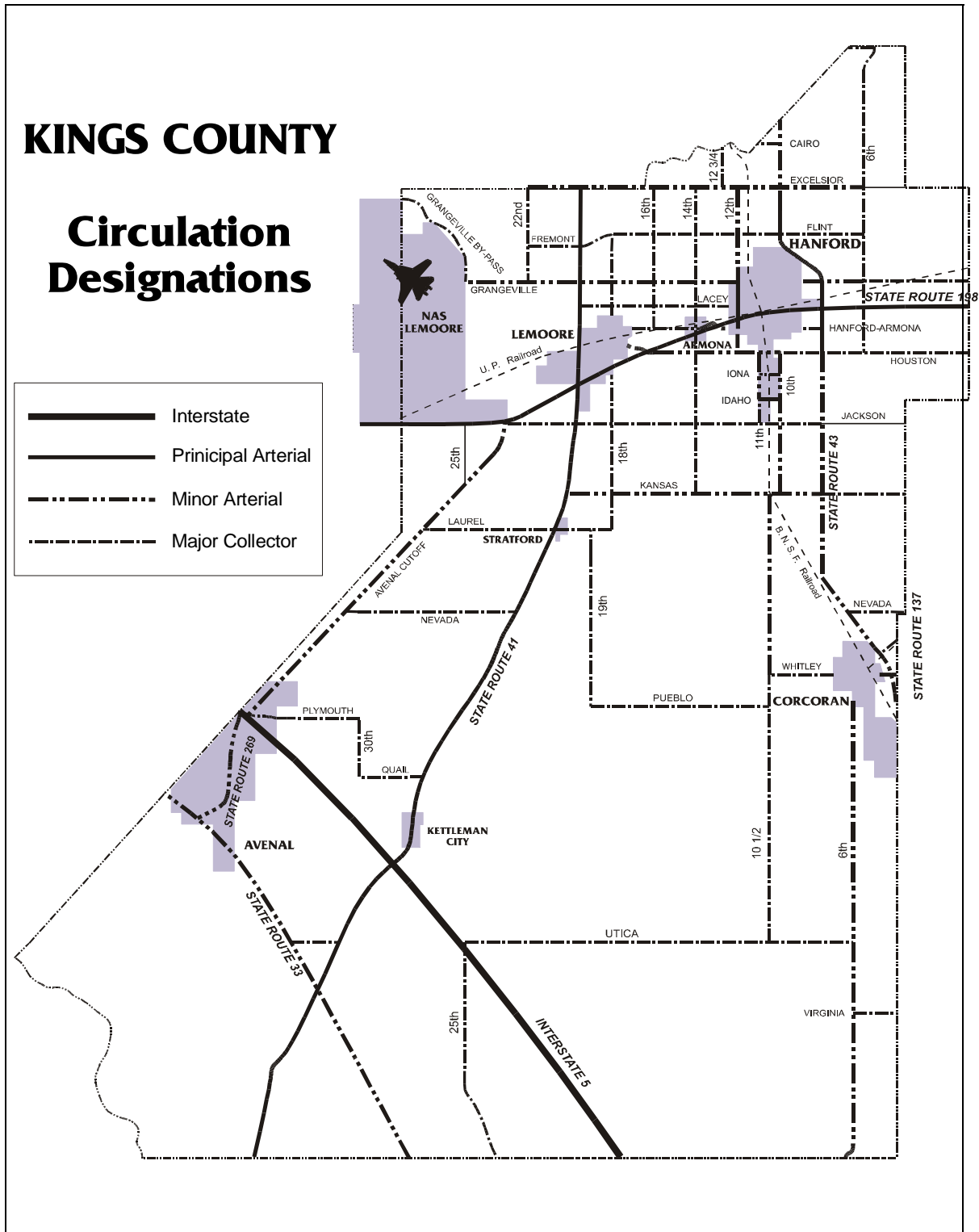
6th Avenue	(Ottawa Ave. to Kern Co.)
10th/10 ½ Avenue	(SR 43 to Whitley Ave.)

11th Avenue	(Idaho Ave. to City limits)
12th Avenue	(Excelsior Ave. to City limits and Houston Ave. to City limits)
Avenal Cutoff Road	(SR 198 to SR 33)
Excelsior Avenue	(6th Ave. to 22nd Ave.)
Grangeville Blvd.	(LNAS gate to City limits and 6th Ave to City Limits)
Houston Avenue	(City limits to 10th Ave.)
Idaho Avenue	(10th Ave. to 11th Ave.)
Kansas Avenue	(SR 43 to SR 41)
Whitley Avenue	(SR 43 to Sweets Canal)
State Route 33	(Kern Co. to Fresno Co.)
State Route 43	(Excelsior Ave. to Fresno Co. and Houston Ave. to Tulare Co.)

Major Collectors

5 ½ Avenue	(Benicia Ave. to Boston Ave.)
6th Avenue	(Houston Ave. to Fresno Co.)
10th Avenue	(Whitley Ave. to Utica Ave.)
11th Avenue	(Jackson Ave. to Idaho Ave.)
12 ¾ Avenue	(Excelsior Ave. to Fresno Co.)
14th Avenue	(Excelsior Ave. to Kansas Ave.)
16th Avenue	(Excelsior Ave. to Hanford Armona Rd.)
18th Avenue	(Flint to City limits and Laurel Ave. to City limits)
19th Avenue	(Laurel Ave. to Pueblo Ave.)
22nd Avenue	(Grangeville Blvd. to Excelsior Ave.)
25th Avenue	(I-5 to Kern Co.)
30th Avenue	(Plymouth Ave. to Quail Ave.)
Benecia Avenue	(5 ½ Ave. to 6th Ave.)
Boston Avenue	(5 ½ Ave. to Fresno Co.)
Cairo Avenue	(SR 43 to Fresno Co.)
Flint Avenue	(6th Ave. to 22nd Ave.)
Grangeville Bypass	(Grangeville Blvd. to Fresno Co.)
Grangeville Blvd.	(6th Ave. to Tulare Co.)
Hanford Armona Road	(City limits to SR 43 and City limits to City limits)
Houston Avenue	(10th Ave. to Tulare Co.)
Iona Avenue	(10th Ave. to 11th Ave.)
Jackson Avenue	(SR 43 to SR 198)
Kansas Avenue	(SR 43 to Tulare Co.)
Lacey Blvd.	(City limits to SR 41)
Laurel Avenue	(18th Ave. to Avenal Cutoff)
Nevada Avenue	(SR 43 to Tulare Co. and SR 41 to Avenal Cutoff)
Pueblo Avenue	(10 ½ Ave. to 19th Ave.)
Plymouth Avenue	(30th Ave. to Avenal Cutoff)
Quail Avenue	(30th Ave. to SR 41)
Utica Avenue	(6th Ave. to I-5 and SR 41 to SR 33)
Virginia Avenue	(Tulare Co. line to 6th Ave.)
Waukena	(SR 137 to SR 43)
Whitley Avenue	(City limits to 10 ½ Ave.)

FIGURE 4-2



Source: Kings County General Plan

1. Santa Rosa Rancheria

General. Established in 1934 on a 40-acre desolate farmland parcel of land, the Santa Rosa Rancheria is the Native American community of the Tachi Yokut Tribe. The Rancheria now includes 370 acres of trust land and 1,500 acres of fee land for roughly 2,300 acres. There are currently 233 housing units with an estimated total population of 993. The main source of revenue is the Palace Indian Gaming Center, which employs about 1,400 persons.

Growth Trends. An additional 100+ housing units are planned for construction within the next five years, which will double the Rancherias' population. Recent expansion plans of the Palace Indian Gaming Center included a 1,200 all-suite hotel with a conference center, ballroom, and spa facilities. A gas station/convenience store, fire station, and theater are also being studied.

A transportation planning study was conducted to identify the impacts of these developments on the Rancheria's road system, as well as the adjacent local road system, and to provide a list of improvements to meet the current and projected transportation needs.

Inventory of Routes. Indian Reservation Roads (IRR) include public roads that are located within or provide access to an Indian reservation, Indian trust land, or restricted Indian land that is not subject to fee title alienation without the approval of the federal government, or Indian communities in which Indian natives reside. Bureau of Indian Affairs (BIA) Roads System is included in the IRR system and includes those existing and proposed roads for which the BIA has or plans to obtain legal rights-of-way. This includes only roads for which the BIA has the primary responsibility to construct, improve, and maintain. Any additions or deletions to this system must be supported by resolution from the Tribes. Tribal Roads System includes those roads whose rights-of-way are under the jurisdiction of a Tribe.

There are 5.1 miles of public roads inventoried on the Santa Rosa Rancheria lands. These roads include 3.3 miles of Bureau of Indian Affairs (BIA) system roads and 1.8 miles of county roads. The transportation study has recommended changes to the BIA's Santa Rosa Rancheria road system. This study recommends adding 11.2 miles to the BIA/IRR system. The following is an inventory of existing and proposed BIA roads on the Santa Rosa Rancheria road system.

- Alkali Road
- Alkali Drive
- Atwell Court
- Baga Lane
- Baga Court
- Coyote Court / Monic Lane (Proposed)
- Davis Circle (Proposed)
- Jeff Road
- Jersey Avenue (Proposed future) (15th Ave. to 18th Ave.)
- Kansas Avenue (Proposed future) (16th Ave. to 18th Ave.)
- Kent Avenue (Proposed future) (15th Ave. to 18th Ave.)
- Kooty Court
- Saltgrass Road
- Saltgrass Court (Proposed)
- Santa Rosa Court
- Sisco Court

Slough Drive  
 Slough Court  
 Tachi Court (Proposed)  
 Thomas Road  
 Yokut Court (Proposed)  
 15th Avenue (Proposed future) (Jersey Ave. to Kent Ave.)  
 16th Avenue (Jersey Ave. to Proposed extension to Kansas Ave.)  
 17th Avenue (Jersey Ave. to Proposed extension to Kansas Ave.)

D. REGIONALLY SIGNIFICANT ROADS IN URBAN AREAS

1. Avenal

General. Incorporated in 1979, Avenal is a community with a Department of Finance estimated population of 14,225 located in extreme southwestern Kings County. With 19.5 square miles, Avenal has the largest land area of any city in the county, although only 2.5 square miles is urbanized. Historically, its economy had been based on the petroleum industry. In the 1970's, the California Aqueduct and Interstate 5 were completed which brought water and access and a shift from an oil-based economy to one based on agriculture.

Growth Trends. A state prison facility was constructed near Avenal in 1987. As of January 2013, the prison inmate population was 4,973, or roughly 35% of the total Avenal population. Nearly 1,200 jobs have been created to serve the prison population. Only about 8 percent of the prison employees live in Avenal, with many of the employees commuting from Coalinga, Lemoore, and Hanford. As a result, state and local roads serving Avenal have experienced higher levels of local and commuter traffic than that of the past.

Inventory of Regional Routes: See Figure 4-3 for rural functional classification and the Appendix for general information such as current road conditions and traffic factors.

Interstate and Other Principal Arterials

Interstate 5 (Within City Limits)

Arterials

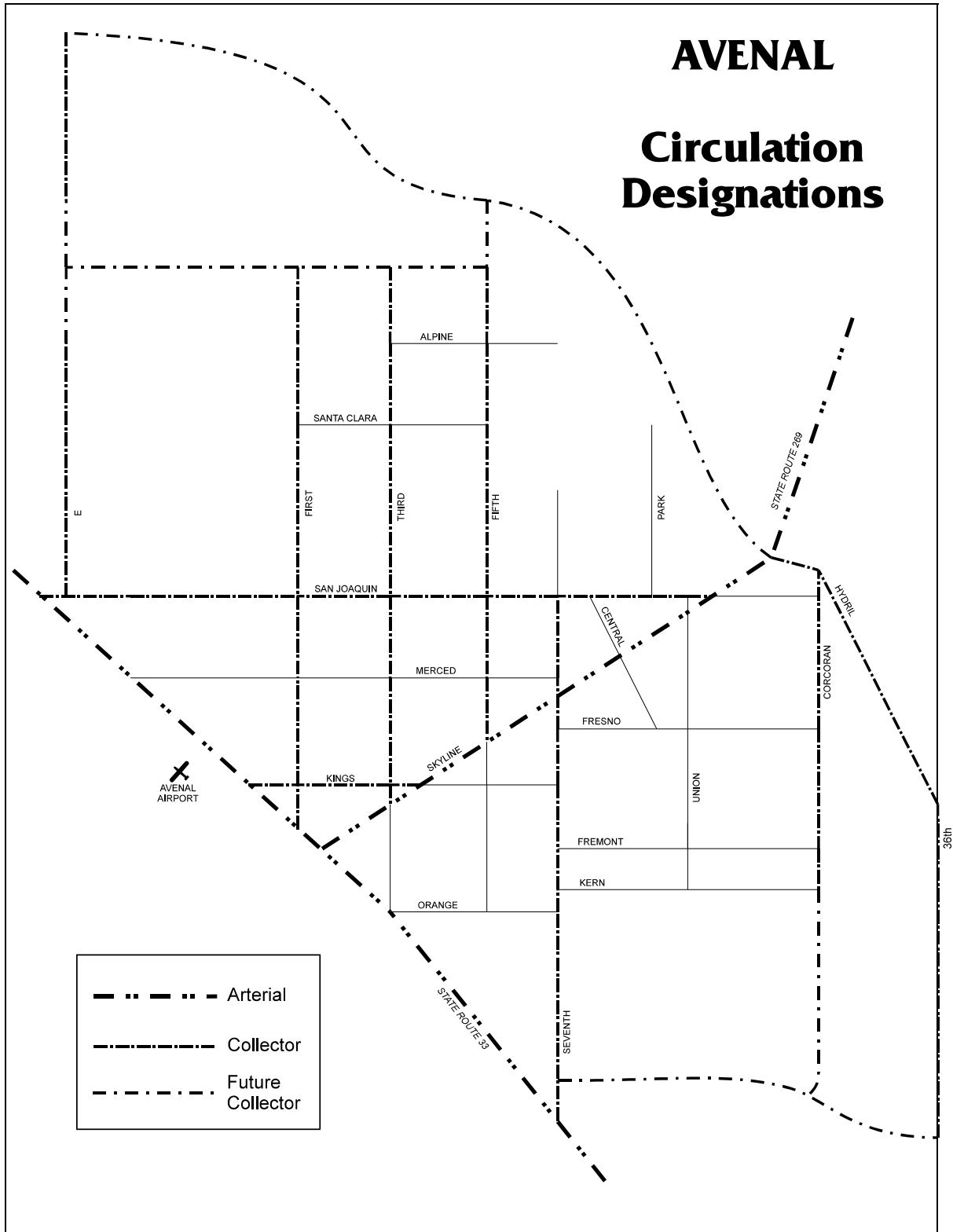
State Route 33 (Fresno Co. to 36th Ave.)  
 State Route 269 (I-5 to SR 33)  
 Avenal Cutoff Road (SR 269 to Avenal City Limits)

Collectors

Corcoran Avenue (Hydril Rd. to Future Street)  
 E Avenue (San Joaquin St. to Future Street)  
 Hydril Road (SR 269 to 36th Ave.)  
 Kings Street (SR 33 to Skyline Blvd.)  
 Plymouth Avenue (Avenal Cutoff to Avenal City Limits)  
 San Joaquin Street (Skyline Blvd. to SR 33)

First Avenue	(SR 33 to Future Street)
Third Avenue	(Skyline Blvd. to Future Street)
Fifth Avenue	(Skyline Blvd. to Future Street)
Seventh Avenue	(San Joaquin St. to SR 33)
36th Avenue	(Hydril Rd. to Future Street)
Future Street	(E Ave. to Skyline Blvd.)
Future Street	(Seventh Ave. to 36th Ave.)
Future Street	(E Ave. to Fifth Ave.)

FIGURE 4-3



Source: City of Avenal



2. Corcoran

General. Corcoran is located in southeastern Kings County, about 18 miles south of Hanford on SR 43. Corcoran considers itself as the “Farming Capital of the World”. It is the home of several major agricultural corporations that farm the Tulare Lake Basin. Cotton ginning, grain milling, and plant oil extraction dominate the city's industries. The estimated total population of the area for 2013 was approximately 23,154 persons.

Growth Trends. Because modern farming is highly mechanized, there exists only a limited demand for farm labor in Corcoran. Unless new job-producing industries can be attracted there, the area's population is expected to continue growing at its slow, yet sustained, rate. Such growth can be easily contained within the urban limits set by the city's general plan.

A state prison facility was constructed near Corcoran and opened in early 1988. The California Department of Corrections also constructed a substance abuse treatment center adjacent to the existing prison facility. It is estimated that employment of these facilities provides roughly 3,800 jobs, (depending on the occupancy rate of the facilities). During 2012-2013, the inmate population of both facilities combined was 10,182, which is approximately 44% of the city's total population. It has been estimated that about 15% of the approximately 1,600 prison employees live in Corcoran, 23% in Hanford, 6% in Lemoore and the remaining 51% outside Kings County.

Traffic volumes on regional routes can expect to increase due to additional commuters. The State Department of Corrections and the City of Corcoran have upgraded some intersections and streets in Corcoran leading to the prison to mitigate the traffic impacts. With the new facility, some adverse impacts on the circulation would be mitigated by the placement of traffic signals.

Inventory of Regional Routes: See Figure 4-4 for urban functional classification and the Appendix for general information such as current road conditions and traffic factors.

Interstate and Other Freeways or Expressways

State Route 43           (Niles Ave. to Sweets Canal)

Other Principal Arterials

None

Arterials

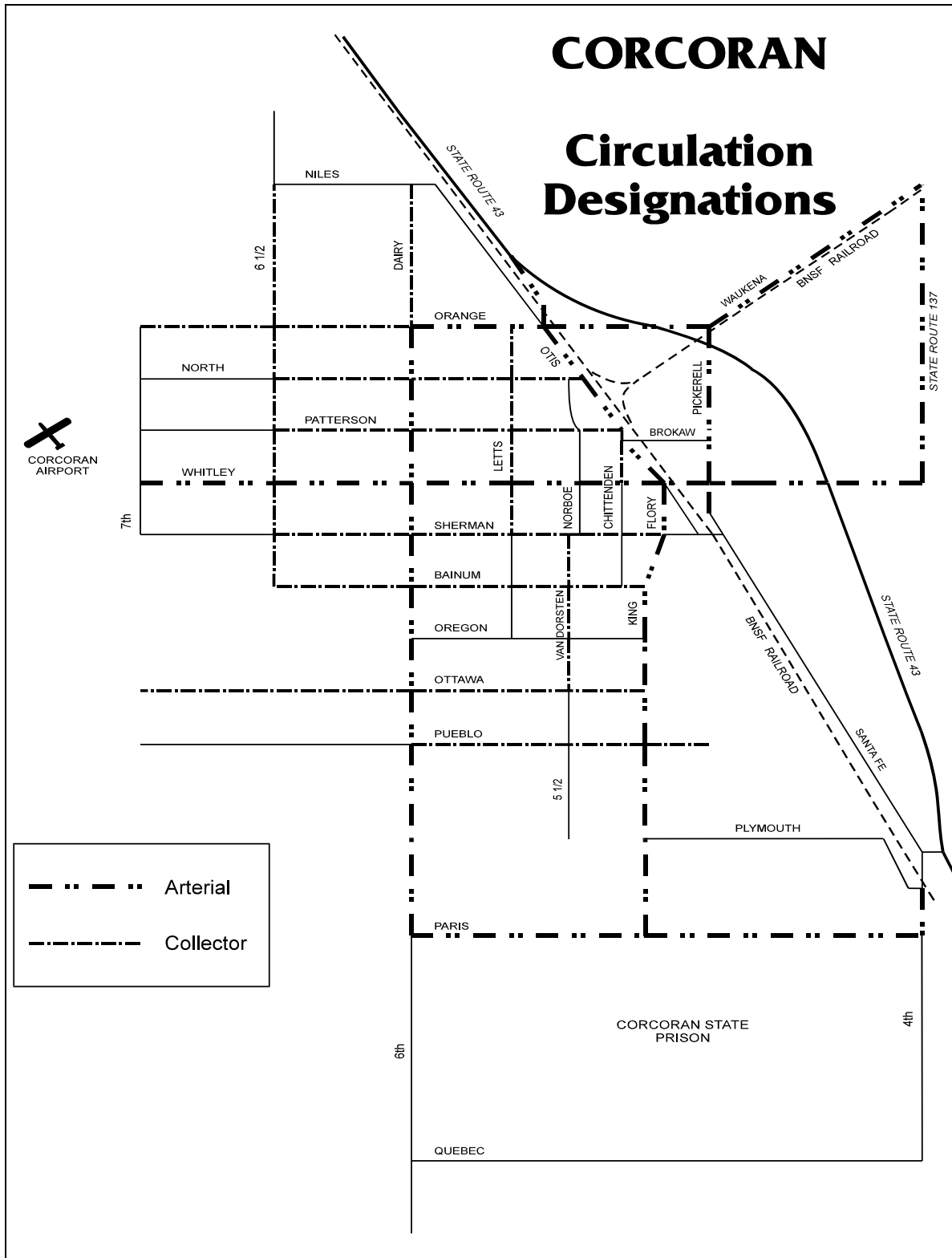
State Route 137  
Dairy (6th) Avenue   (Pueblo Ave. to Orange Ave.)  
Flory Avenue       (Whitley Ave. to King Ave.)  
King Avenue       (Bainum Ave. to Paris Ave.)  
Orange Avenue     (Dairy Ave. to Otis Ave.)  
Otis Avenue        (Orange Ave. to Whitley Ave.)  
Paris Avenue       (Dairy Ave. to 4th Ave.)

Pickerell (5th) Ave.	(Orange Ave. to Sherman Ave.)
Waukena Avenue	(SR 137 to Orange Ave.)
Whitley Avenue	(City limits to SR 43)
New Entryway	(SR 43 to Orange Ave.)
4th Avenue	(Paris Ave. to Santa Fe Ave.)

Collectors

6 ½ Avenue	(Sherman Ave. to Niles Ave.)
Bainum Avenue	(6 ½ Ave. to Flory Ave.)
Chittenden Avenue	(Otis Ave. to Whitley Ave.)
Dairy Avenue	(Niles Ave. to Orange Ave.)
Letts Avenue	(Orange Ave. to Sherman Ave.)
North Avenue	(Otis Ave. to 6 ½ Ave.)
Orange Avenue	(Dairy Ave. to 7th Ave.)
Ottawa Avenue	(King Ave. to 7th Ave.)
Patterson Avenue	(Otis Ave. to 6 ½ Ave.)
Pueblo Avenue	(Dairy Ave. to King Ave.)
Sherman Avenue	(Flory Ave. to 6 ½ Ave.)
Van Dorsten Avenue	(Ottawa Ave. to Sherman Ave.)

FIGURE 4-4



Source: City of Corcoran

3. Hanford

General. Hanford is the county seat of Kings County, as well as its largest city, with approximately 55,479 residents. The city itself is compacted into an area of about 6 square miles. Several rural residential concentrations are scattered throughout the territory surrounding the city. The community of Armona lies three miles to the west, adding to the total area 4,156 residents.

Growth Trends. Like most communities in the San Joaquin Valley, Hanford's economic livelihood is squarely based on farm-service enterprises. In recent years, other sectors of the city's economic community have flourished such as retail sales and professional service enterprises. Added with the many military residents, these factors have created more jobs and helped Hanford enjoy significant growth since 1970. In spite of the estimated local jobs, almost half of the employed persons residing in Hanford commute elsewhere for employment such as LNAS, Visalia and Fresno.

Generally, new residential growth is occurring north of Grangeville Boulevard, and in pockets east of 10th Avenue and west of 11th Avenue. Additional residential growth is planned to occur in the southwest corner of the city as well. Many retail establishments are compacted in the downtown core, although three major shopping centers, including a regional mall, are located in the area of 12th Ave. and Lacey Blvd. Industrial uses are located south of Houston Avenue, between 10th and 11th Avenues. City planners indicate that only modest extensions of the city's urban area will be needed to handle Hanford's growth needs for several years. The annual percent of population growth is anticipated to be 2.04%.

Inventory of Regional Routes: See Figure 4-5 for urban functional classification and the Appendix for general information such as current road conditions and traffic factors.

State Route 198 (SR 43 to ½ mile west of 12th Ave.)

Other Principal Arterials

None

Arterials

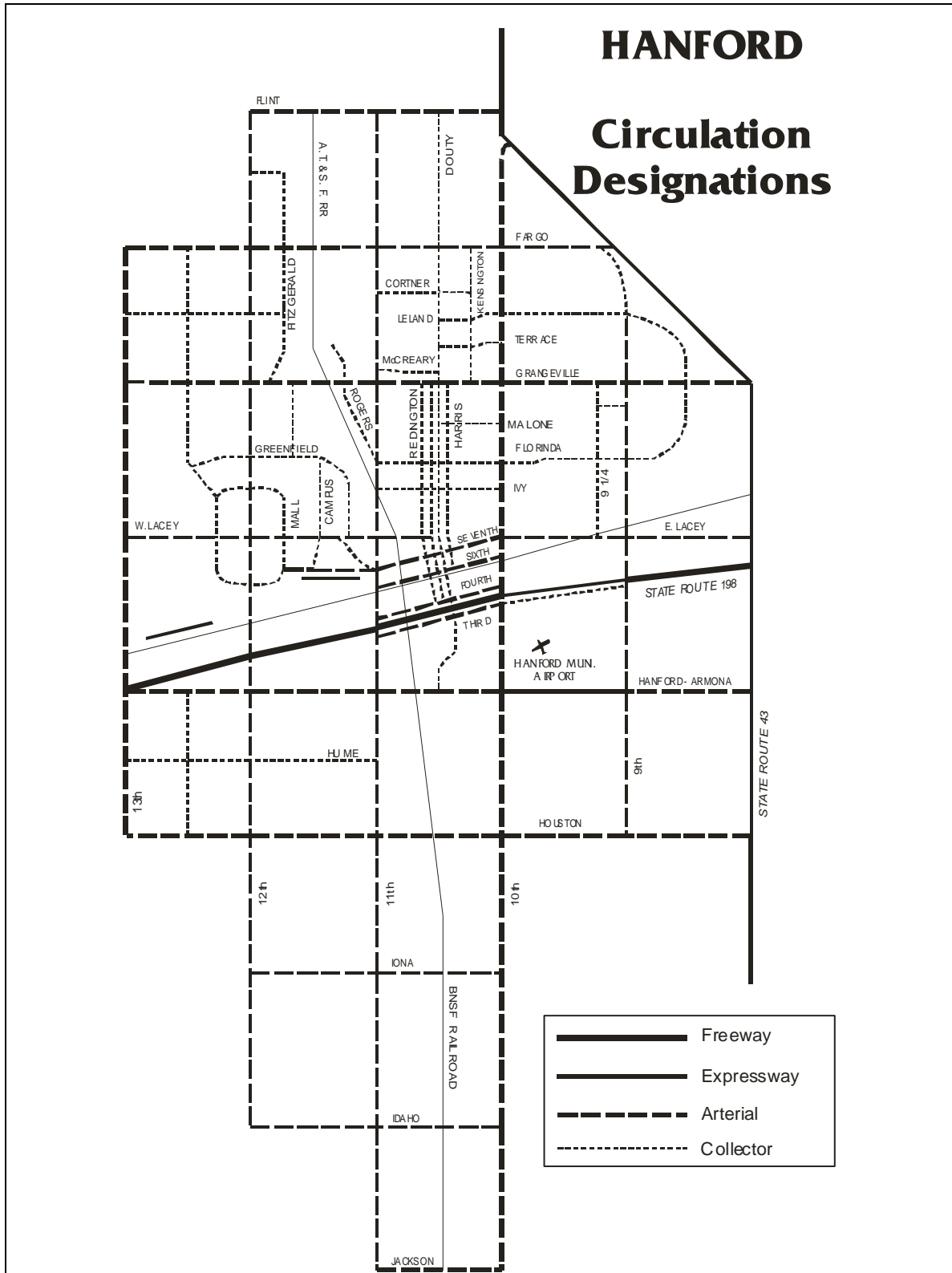
State Route 43	(10th Ave. to Houston Ave.)
Future 9th Avenue	(Houston Ave. to Fargo Ave.)
10th Avenue	(Jackson Ave. to SR 43)
11th Avenue	(Jackson Ave. to Flint Ave.)
12th Avenue	(Idaho Ave. to Flint Ave.)
13th Avenue	(Houston Ave. to Fargo Ave.)
Fargo Avenue	(13th Ave. to SR 43)
Flint Avenue	(12th Ave. to SR 43)
Grangeville Blvd.	(13th Ave. to SR 43)
Hanford-Armona Rd.	(13th Ave. to 10th Ave., 9th Ave. to SR 43)
Houston Avenue	(13th Ave. to SR 43)
Idaho Avenue	(10th Ave. to 12th Ave.)
Iona Avenue	(10th Ave. to 12th Ave.)
Jackson Avenue	(10th Ave. to 11th Ave.)
Lacey Blvd.	(SR 43 to 10th Ave. and 13th Ave. to Irwin St.)
Third Street	(10th Ave. to 11th Ave.)

Fourth Street (10th Ave. to 11th Ave.)  
Sixth Street (10th Ave. to 11th Ave.)  
Seventh Street (10th Ave. to Mall Dr.)

Collectors

Campus/University (Grangeville Blvd. to Sixth St.)  
Centennial Drive (Lacey Blvd. to Grangeville Blvd.)  
Cortner Street (Kensington Way to 11th Ave.)  
Douty Street (Flint Ave. to Hanford-Armona Rd.)  
Fitzgerald Lane (Grangeville Blvd. to ½ mile n/o Fargo Ave.)  
Florinda Avenue (11th Ave. to 9th Ave.)  
Garner Street (11th Ave. to Lacey Blvd.)  
Greenfield Avenue (Lacey Blvd. to 13th)  
Harris Street (Grangeville Blvd. to 6th St.)  
Hume Avenue (11th Ave. to 13th Ave.)  
Irwin Street (4th St. to Grangeville Blvd.)  
Ivy Street (10th Ave. to 11th Ave.)  
Kensington Way (Fargo Ave. to Grangeville Blvd.)  
Leland Way (9th Ave. to Douty St.)  
McCreary Avenue (Douty St. to 11th Ave.)  
E. Malone (10th Ave. to Douty St.)  
Mall Drive (Ring Road around Lacey Blvd. to 12th Ave.)  
9 ¼ Avenue (Grangeville Blvd. to Lacey Blvd.)  
Redington Street (Grangeville Blvd. to 4th St.)  
Rogers Road (11th Ave. to Mulberry Ave.)  
Terrace Drive (10th Ave. to Douty St.)  
Third Street (10th Ave. to 9th Ave.)  
Future Streets in South Hanford including:  
    11 ½ Avenue (Houston Ave. to n/o Hume Ave.)  
    12 ½ Avenue (Hanford-Armona Rd. to Houston Ave.)  
Future Streets in North Hanford including:  
    12 ½ Avenue (Greenfield Ave. to Fargo Ave.)  
    Florinda Street (9 ¼ Ave. to Fargo Ave.)  
    Leland Way (9 ¼ Ave. to 9th Ave.)  
    W. Seventh Street (Mall Dr. to 13th Ave.)

FIGURE 4-5



Source: City of Hanford

4. Lemoore

General. Lemoore is a city of approximately 25,262 persons situated in north-central Kings County, near the intersection of SR 41 and SR 198. Unlike most cities in this region, Lemoore's economy is not principally based upon agricultural services. Instead, it is the home of many military and civilian persons employed at the nearby Lemoore Naval Air Station. Accordingly, Lemoore is populated by many young single adults and new families.

Growth Trends. Lemoore's population has increased at a much faster pace than the rest of the county the past several years. Most of this is attributed to the increasing dominance of LNAS as a military training center. While Lemoore generally provides housing and services for LNAS personnel, employment opportunities do exist at a large dairy processing facility. Some of the Avenal and Corcoran Prison employees have made Lemoore their home.

NAS Lemoore is the mandated Base Realignment and Closure (BRAC) site for the relocation of Navy aircraft, personnel, and equipment from other NAS sites. It was projected that 5,000 people, military personnel and their dependents, would be moving to the NAS Lemoore region in 1999. Approximately a quarter of the incoming persons were expected to reside off-station in Lemoore.

As of its 2008 general plan, the City of Lemoore has been growing at a rate of 4% since 1992. In terms of traffic demands, the Lemoore area can expect elevated and sustained traffic loads on all regional and local roads serving their area.

Inventory of Regional Routes: See Figure 4-6 for urban functional classification and the Appendix for general information such as current road conditions and traffic factors.

Interstate and Other Freeways or Expressways

State Route 198 (18th Ave. to City limits and 19th Ave. to w/o SR 41)

Other Principal Arterials

State Route 41 (Hanford Armona Rd. to SR 198)

Arterials

Hanford Armona Rd. (Lemoore Canal to SR 41)  
D Street (17th Ave. to W. Bush St.)  
Bush Street (East D St. to SR 41)  
Idaho Avenue (19th Ave. to SR 41)  
18th Avenue (Lacey Blvd. to Indiana Ave.)  
19th Avenue (Hanford Armona Rd. to Idaho Ave.)

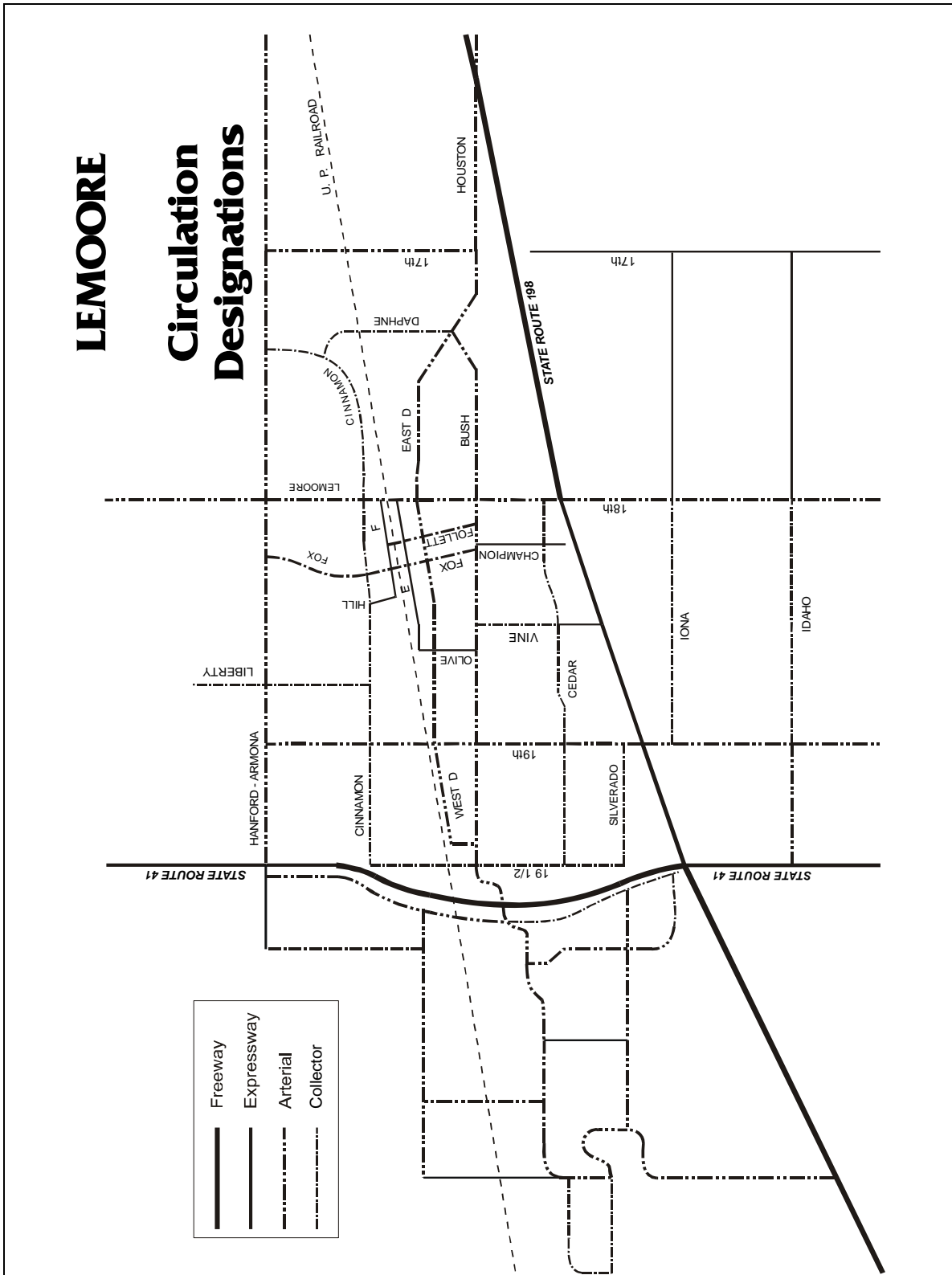
Collectors

Belle Haven Drive (Bush St. to Hanford Armona Rd.)  
Cedar Lane (18th Ave. to 19 ½ Ave.)  
Cinnamon Drive (Hanford Armona Rd. to 18th Ave. and 18th Ave. to 19 ½ Ave.)  
College Avenue (Bush St. to Pedersen Dr.)  
Follett Street (Cinnamon Dr. to Bush St.)

Fox Street	(Bush St. to Hanford Armona Rd.)
Liberty Drive	(Lacey Blvd. To Cinnamon Dr.)
Iona Avenue	(18th Ave. to 19th Ave.)
Silverado Drive	(19th Ave. to 19 ½ Ave.)
Vine Street	(Bush St. to Cedar Lane)
19 ½ Avenue	(Cinnamon Dr. to Silverado Dr.)



FIGURE 4-6



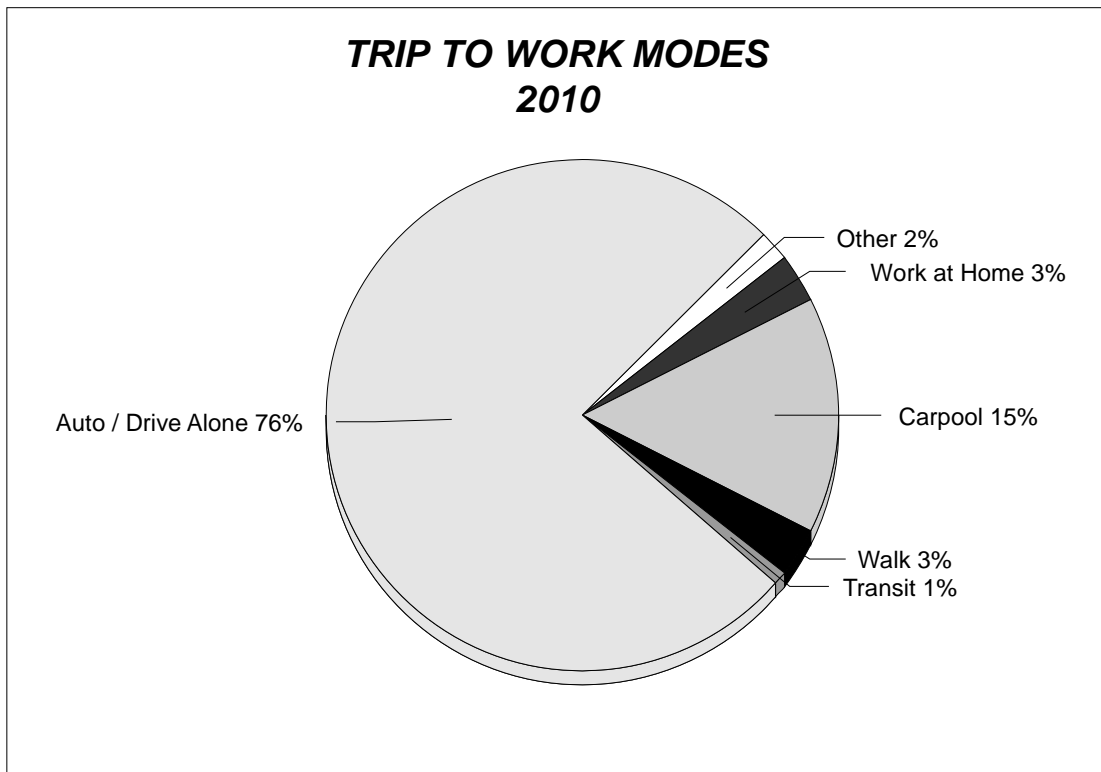
Source: City of Lemoore

II. ASSUMPTIONS AND INVENTORIES

A. HIGHWAY TRAVEL ASSUMPTIONS

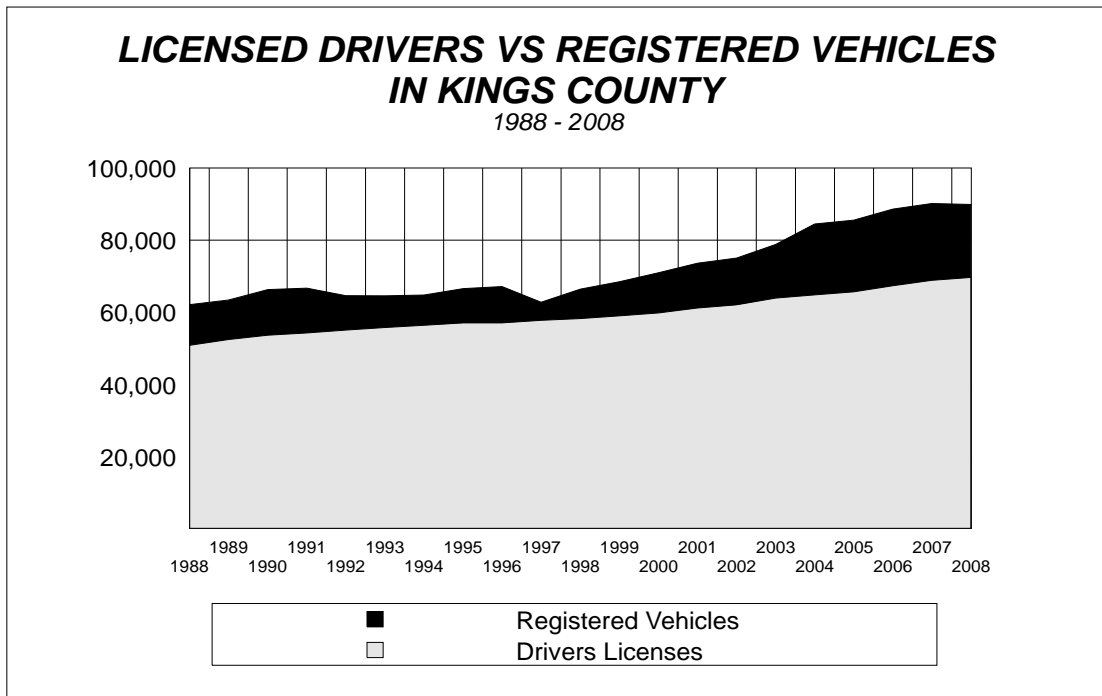
1. Automobiles and pickups will remain this county's preferred means of personal transportation. (See Figure 4-7)
2. The number of Kings County residents operating motor vehicles will continue to increase. (See Figure 4-8)
3. Existing mobile source emissions will be reduced through Transportation Control Measures to help meet air quality standards, resulting in these actions:
  - a. Ridesharing will increase.
  - b. More people will walk and commute by bicycle.
  - c. More people will use the Kings Area Rural Transit (KART) system, Amtrak trains, Orange Belt buses, CalVans, and other local transit services.
4. With continuing growth in the Fresno and Visalia metropolitan areas, and local growth attributed to LNAS, the Corcoran Prison and the Avenal Prison, traffic along the state highways and local regional routes will increase, and public demands will be made to upgrade these highways. (See Figure 4-9)
5. Because Kings County's population centers are widely dispersed, many county residents will commute long distances to work. (See Figures 4-10 through 4-13)

**FIGURE 4-7**



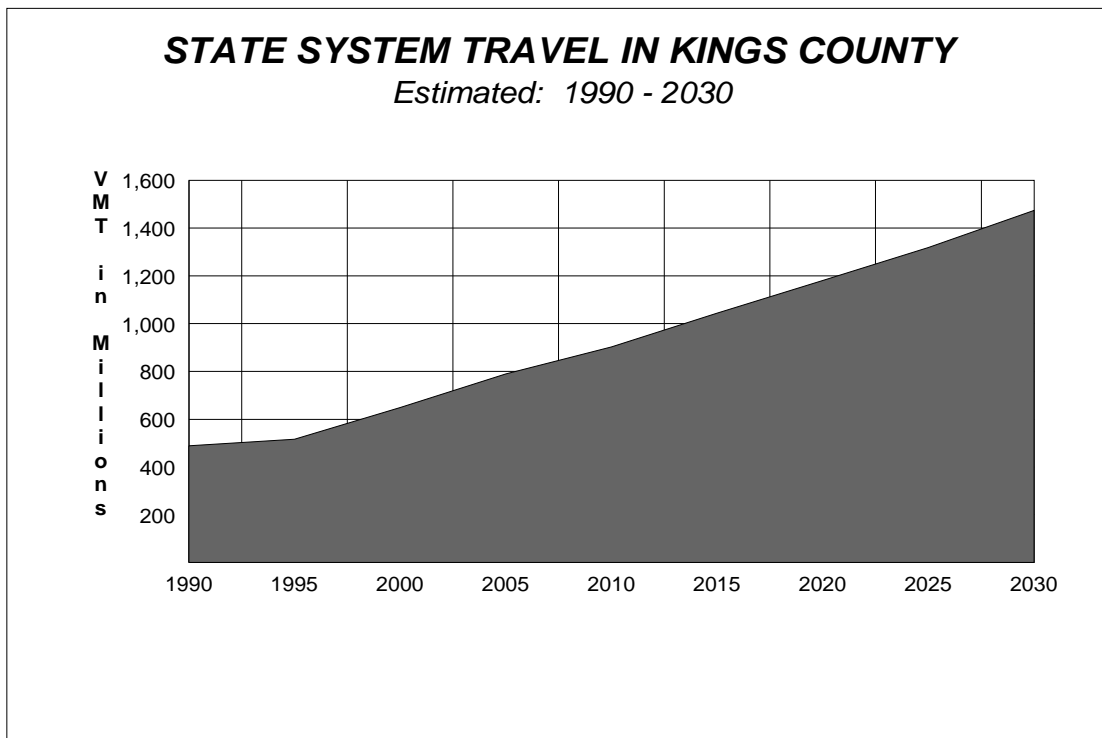
Source: 2008-2012 American Community Survey, 5-year estimate

**FIGURE 4-8**



Source: CHP <http://www.chp.ca.gov/switrs/>

**FIGURE 4-9**



Source: Caltrans <http://www.dot.ca.gov/hq/tsip/otfa/mtab/MVSTAFF/MVSTAFF05.pdf>

**FIGURE 4-10**

**INTRA-COUNTY TRAVEL ON STATE ROUTES IN KINGS COUNTY  
2000-2008-2035**

ROUTE	LOCATION	AVERAGE ANNUAL DAILY TRAVEL			PERCENT CHANGE	
		2000	2008	2035	2000-2008	2008-2035
<u>I-5</u>	Kern County Line to SR 41	27,500	32,500	48,660	15.38%	33.21%
	SR 41 to Fresno Co. Line	28,500	30,000	47,603	5.00%	36.98%
<u>SR 33</u>	Kern County Line to Avenal	1,950	1,350	4,636	-44.44%	70.88%
	North of Avenal to I-5	2,000	2,300	4,636	13.04%	50.39%
<u>SR 41</u>	Kern Co. Line to Excelsior	6,400	6,400	7,965	0.00%	19.65%
	Excelsior to Fresno Co. Line	9,000	16,000	26,793	43.75%	40.28%
<u>SR 43</u>	Tulare Co. Line	4,000	4,100	7,327	2.44%	44.04%
	Fresno Co. Line	8,900	10,300	17,764	13.59%	42.02%
<u>SR 137</u>	Jct. SR 43 N. of Jct Waukena	2,150	2,600	3,297	17.31%	21.14%
	Tulare Co. Line	2,750	3,200	7,193	14.06%	55.51%
<u>SR 198</u>	Fresno Co. Line to the LNAS Main Gate	7,000	7,000	11,293	0.00%	38.01%
	7th Ave. to Tulare Co. Line	13,600	19,000	30,147	28.42%	36.98%
<u>SR 269</u>	Jct. SR 33	4,200	2,500	3380	-68.00%	26.04%
	Fresno Co. Line	4,050	5,200	7,522	22.12%	30.87%

Source: <http://www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm>

**FIGURE 4-11**

**WORK LOCATIONS FOR ALL OF KINGS COUNTY  
2010**

WORK LOCATION	NO.	PERCENT OF WORKFORCE
In Kings County	43,298	79.5%
Outside Kings County	10,947	20.4%
Outside of California	217	0.2%
<b>TOTAL</b>	<b>54,462</b>	<b>100.0%</b>

Source: 2008-2012 American Community Survey, 5-year estimate

**FIGURE 4-12**

**WORK LOCATIONS FOR KINGS COUNTY CITIES  
2000**

WORK LOCATION	AVENAL		CORCORAN		HANFORD		LEMOORE	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Same City	1,196	23.4%	1,644	41.8%	9,174	45.5%	3,223	30.4%
Elsewhere in Kings County	3,913	76.6%	2,288	58.2%	10,989	54.4%	7,380	69.6%
<b>TOTAL</b>	<b>5,109</b>	<b>100.0%</b>	<b>3,932</b>	<b>100.0%</b>	<b>20,163</b>	<b>100.0%</b>	<b>10,603</b>	<b>100.0%</b>

Source: American Community Survey (5-year estimates)

**FIGURE 4-13**

**TRIP TO WORK TRAVEL TIMES FOR ALL OF KINGS COUNTY  
2012**

TRAVEL TIME IN MINUTES	PERCENT OF WORKFORCE
0-9	18.8%
10-19	36.2%
20-44	34.0%
45>	11.0%
<b>TOTAL</b>	<b>100%</b>

Source: Source: 2008-2012 American Community Survey, 5-year estimate

**FIGURE 4-14**

**TRIP TO WORK TRAVEL TIMES FOR KINGS COUNTY CITIES AND LNAS  
2009-2010**

TRAVEL TIME IN MINUTES	AVENAL	CORCORAN	HANFORD	LEMOORE	LNAS
	Percent	Percent	Percent	Percent	Percent
0-9	16.4%	30.1%	20.5%	14.8%	16.8%
10-19	18.8%	20.4%	34.6%	39.4%	62.7%
20-44	43.5%	39.0%	33.3%	34.8%	19.1%
45>	21.4%	10.5%	11.6%	11.1%	1.3%
<b>TOTAL</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Source: American Community Survey (5-year estimates)

**B. HIGHWAY SAFETY ASSUMPTIONS**

1. Dense "Tule Fog" will continue to impose severe transportation difficulties and safety problems in Fall and Winter. (See Figures 4-15 and 4-16)
2. Collisions involving other vehicles and fixed objects will remain the largest cause of vehicular fatalities and injuries in Kings County; many will be caused by unsafe or improper driving. In addition to strict enforcement of motor vehicle laws, more operational and safety improvements, including new facilities, are needed to help lower the probability of regional system accidents. (See Figures 4-16 through 4-17).

**FIGURE 4-15**

**OCCURRENCE OF FOG AT HANFORD MUNI AIRPORT  
2011**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
No. of Days with Fog Reducing Visibility to < ¼ mi.	18	12	6	1	0	0	0	0	0	6	17	16

Source: National Weather Service

**FIGURE 4-16****ACCIDENTS IN FOG vs. ALL ACCIDENTS IN KINGS COUNTY  
2011**

MONTH	ACCIDENTS IN FOG	TOTAL ACCIDENTS	PERCENT OF ACCIDENTS IN FOG
January	18	36	50%
February	2	31	6%
March	2	35	6%
April	1	39	3%
May	0	42	0%
June	0	48	0%
July	0	40	0%
August	0	44	0%
September	0	49	0%
October	0	56	0%
November	14	43	33%
December	3	51	6%
<b>TOTAL</b>	<b>40</b>	<b>514</b>	<b>8%</b>

Source: California Highway Patrol (SWITRS)

**FIGURE 4-17****MOTOR VEHICLE COLLISION TYPES IN KINGS COUNTY  
2011**

Motor Vehicle Involved With:	No.	% of All Accidents	Number Killed	% of Killed	Number Injured	% of Injured
Alcohol Involved	142	14.1%	8	30.8%	130	16.2%
Bicycle	53	5.3%	0	0.0%	50	6.2%
Pedestrian	71	7.1%	2	7.7%	69	8.6%
Motorcycle	57	5.7%	5	19.2%	52	6.5%
Not Stated	683	67.9%	11	42.3%	503	62.6%
<b>TOTAL</b>	<b>1,006</b>	<b>100%</b>	<b>26</b>	<b>100%</b>	<b>804</b>	<b>100%</b>

Source: California Highway Patrol

III. SUMMARY OF HIGHWAY ISSUES

A. LOCAL RESPONSES TO FAILING ROADS

As with any structure, roads require a long-term commitment of money to keep them in service. Theoretically, a well-constructed road can last about 15 years before needing extensive renovation. Preventive maintenance applied during this period will extend the life of the road and delay the need for reconstruction. Even with preventive maintenance, however, roads will eventually wear out.

Many factors cause roads to deteriorate:

1. Changing air temperature, low humidity, and ultra-violet radiation oxidize oils and make the pavement shrink and become brittle.
2. Winter rains and nuisance water washes sand out of road mixes, causing surface raveling.
3. More weight is being placed on trucks. In terms of road wear, one heavily loaded truck can be equated to 3,000 to 6,000 automobiles.
4. Because Kings County is a major cotton producer, cotton module movers must access local roads. In just a few seasons, these vehicles can cause extensive road damage.
5. As the natural ponding basin for the Kings, Kaweah, and Tule Rivers, Kings County occasionally experiences flooding. Extensive road damage has been caused by past flooding.

The level of funding for local roads has not kept pace with the number of lane miles of roads needing rehabilitation or reconstruction. In response to road needs and limited revenues, major changes were made to local road programs:

1. There was a change in emphasis from road reconstruction to maintenance with an increase in the use of asphalt concrete overlays for road improvements.
2. On badly deteriorated sections, heavier, longer-lasting seals have been used.
3. Reconstruction of major roads has been delayed as long as possible.

The effects of these cost-saving strategies have fully impacted all areas of Kings County. The surface of many roads has deteriorated so severely that total reconstruction is the only remaining option. Even though funding shortfalls continue, local governments are now beginning to shift their road programs to these courses of action:

1. Putting more money into reconstruction of deteriorated major arterials.
2. Continuing maintenance on high-use roads.
3. Reducing maintenance for minor streets and roads.
4. Convert low volume roads to gravel.
5. Seeking new sources of funding for local roads.



B. HIGHWAY IMPROVEMENTS

The vast majority of all travel in Kings County occurs on its streets and highways as compared to air, rail, bicycle, and walking modes. No change in this pattern is expected. The existing regional highway system represents a very large investment of public funds and agencies with jurisdiction over these roadways endeavor to maintain and upgrade them as much as is economically feasible to prepare the roadways to more efficiently and safely accommodate automobile as well as heavy truck traffic. Areas of concern are outlined below.

1. Maintenance of Regional Routes

Locally, pavement failures are found on many regionally significant roads. Portions of these roads will require total reconstruction. All regional routes should be maintained to prevent future costly repairs.

2. Safety Improvements

In order to avoid conditions that affect safety such as 1) heavy winter fogs that reduce visibility and make driving very dangerous; 2) "blind" or obstructed intersections from vegetation; and 3) at-grade intersections along state highways. Local and state agencies seek funding to regularly improve the roadway systems to lessen the possibility of accidents resulting from these conditions. The most important aspect to safe roadways are alert and conscientious drivers – as no roadway is built with standards that would make it inherently unsafe.

3. Operational Improvements

To maximize the service and efficiency of the existing regional system, wider roads and bridges, turn lanes, and interchanges are needed in places along state routes 41, 43, and 198. Severe parking congestion exists along Seventh Street in downtown Hanford. These deficiencies are discussed at length in the Appendix I.

4. New Projects

Due to increasing numbers of vehicle miles traveled, growth in Kings County's urban areas, steadily increasing numbers of registered automobiles and drivers, regional population growth resulting in greater inter-county travel, continuing expansion of LNAS, the presence of oversize trucks on SR 198 and the state prisons in Avenal and Corcoran, new projects are needed to complete the regional system in Kings County. These include new interchanges, road widening, pavement reconstruction, new roads, overpasses, and grade separations.

Three state routes serving Kings County should be improved to either four-lane freeway or two or four-lane expressway status to close service gaps in the state system. Currently, these are two-lane highways that carry a large percentage of inter-county travel: 1) SR 41 between I-5 and SR 198; 2) SR 198 between I-5 and LNAS; and 3) SR 43 between Fresno County and Kern County.

C. RIGHT-OF-WAY PROTECTION FOR FUTURE HIGHWAY IMPROVEMENTS

Local officials want to make sure that adequate right-of-way is protected from encroachment at areas this plan shows for improvements. There is a need to coordinate local general plans with Caltrans' right-of-way dedication policy at key points along SR 198, SR 41, and SR 43. The need for this protection was graphically

shown in Tulare County west of Visalia on SR 198, where closely-abutted urban development existed at important intersections. Needed improvements could not have been realistically considered there without very expensive right-of-way acquisition. KCAG wants to avoid such right of way and planning conflicts in Kings County.

D. LOCAL PERCEPTION OF STATE'S INATTENTION TO RURAL AND SMALL URBAN NEEDS

Local officials and area residents believe that state transportation officials are insensitive to the transportation needs of the rural and small urban areas. This belief is reinforced annually by the State Transportation Improvement Program's (STIP) distribution of interregional improvement program funds. The method of establishing project priority by Caltrans/CTC favors large urban counties where past growth is now causing serious congestion. While it is recognized that the state has limited revenues which are not sufficient to take care of every county's needs, more consideration for programming in rural and small urban counties should be shown.

As mentioned above, KCAG has identified the need for several costly new construction and operational improvements. KCAG realizes that from the state's perspective, such projects may not seem as cost-effective or important as some in more urbanized areas or that they appear to serve local needs. KCAG contends that this perspective is skewed; such programming policies are generally created by, and biased in favor of, metropolitan areas. The state decision makers need to impart smaller MPO and rural areas the same consideration for available funding as other areas because like the urbanized areas, the projects and recommendations of this plan are intended to improve the safety, mobility, and economy of this region, and the state system.

E. HIGHWAY SPHERES OF INFLUENCE

An examination of previous Regional Transportation Plans of Valley agencies revealed that no RTPA viewed transportation from a truly regional perspective on transportation issues. The respective RTPAs confined their studies to their own county areas, as if their interest in a road suddenly stops at the county boundary.

The result was a patchwork of partially coordinated transportation plans. Not only did this situation hinder cooperative planning for county maintained road improvements, but also it seemed to furnish a reason for the state to continue to overlook this area's requests for projects. District 6 counties (Kings, Tulare, Kern, Fresno, and Madera) will probably enjoy much better success in obtaining state funding for state system projects if we agree on what we want, and speak with one voice. Kings and Tulare Counties have coordinated efforts in past Regional Transportation Improvement Programs by programming regional dollars for the widening of SR 198.

A "Highway Sphere of Influence" is shown in Figure 4-18. This is simply an expanded planning area. It extends into neighboring counties and identifies segments of county and state maintained regional roads that serve both jurisdictions. As a practical matter, the sphere shows an area that should be monitored for changes in land use and circulation patterns that will affect Kings County.

As part of the 2014 Regional Transportation Plan update, an appendix is included which is devoted strictly to the San Joaquin Valley which emphasizes the coordinated planning efforts among the Valley RTPAs. In addition to this, Caltrans prepares and updates Transportation Concept Reports for each of the state highways traversing the Kings County Region that identify the improvements necessary for each *corridor*. As a condition of receiving Proposition 1B Corridor Mobility Improvement Account (CMIA) funds, Caltrans prepared a Corridor System Management Plan (CSMP) for the SR 198 corridor between SR 99 and Interstate 5.

See the Transportation Concept Reports at:

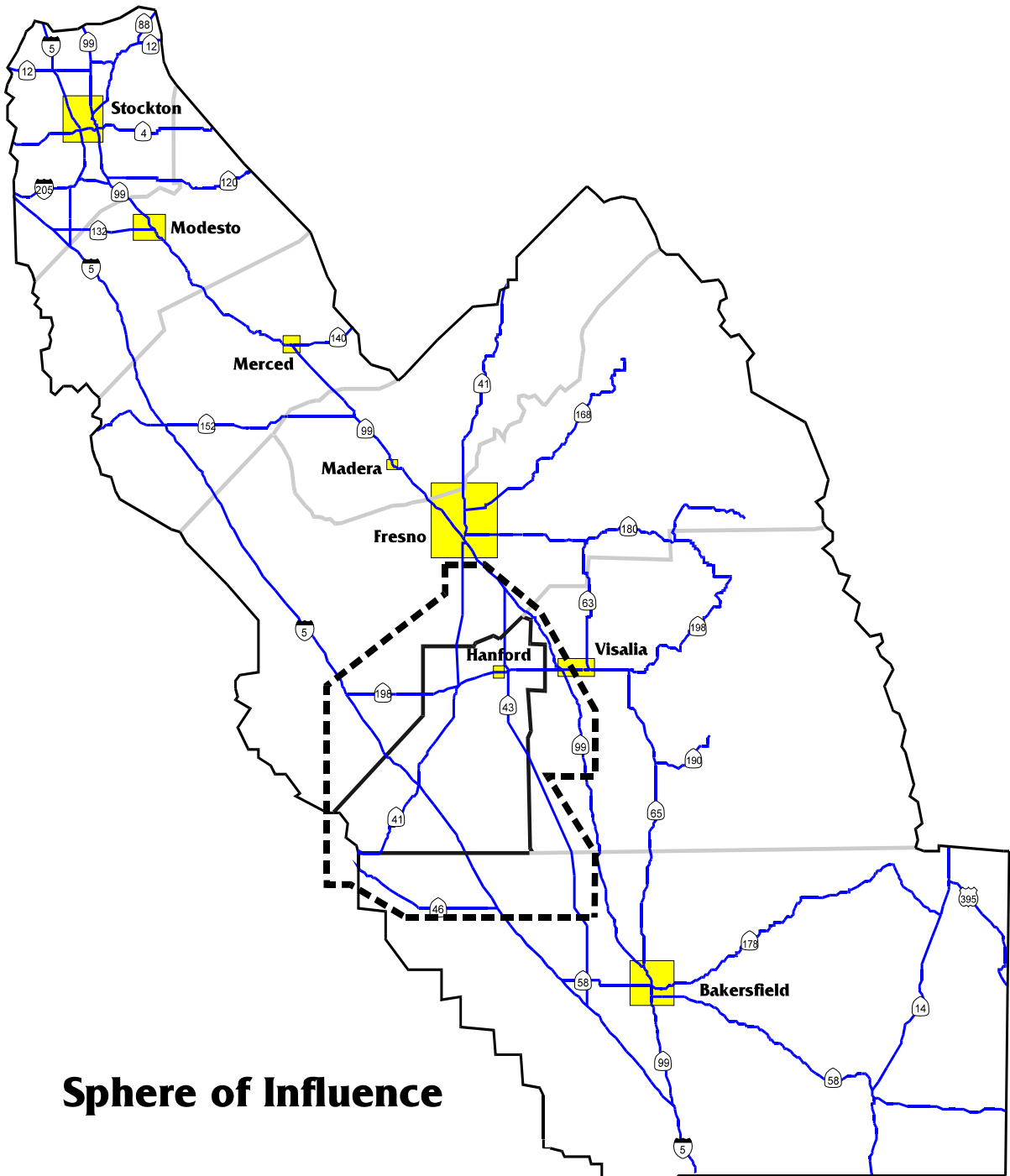
<http://www.dot.ca.gov/dist6/planning/tcrs/index.htm>

See the Corridor System Management Plans at:

<http://www.dot.ca.gov/dist6/planning/csmp/>

KCAG, in partnership with the Fresno and Tulare Regional Agencies and with Caltrans, have secured a state planning grant to fund a project that will study and recommend cost effective improvements for SR 198 from I-5 to NAS Lemoore and to collect further data for the remainder of the corridor to SR 99. This interregional partnership will provide the kind of information necessary for this *corridor* to be considered more favorably for future funding opportunities and is an example of the recommendation above.

FIGURE 4-18



F. FUNDING CONSTRAINTS

Every agency that deals with planning, building, or maintaining roads shares the problem of preserving its facilities with the available funding. Finding money for new facilities is an even bigger problem. Road projects are primarily paid for by gas taxes that are collected on a per-gallon basis.

Because of more efficient and alternative fueled vehicles, the amount of gas purchased has declined, while the number of miles driven has increased. Thus, fewer gas tax dollars are available for road improvements. In spite of the recent state excise tax (2010 – 2014) and federal gas tax (1993) increases, there is still not enough available money to repair and maintain all the regional routes, or to build new facilities. It is a constant theme in the past three transportation authorizations that the need exists to evaluate new ways to find more dollars for road improvements.

1. Regional and Interregional Shares

The California Transportation Commission (CTC) is required to distribute state highway funds to each county according to "regional shares." Of the funds available in the STIP, 75 percent are committed to the Regional Improvement Program and 25 percent to the Interregional Improvement Program. Each county's share of its respective north or south county group expenditures is based on 75 percent population and 25 percent state highway miles (Streets and Highway Code, Sec. 188.8).

While KCAG, in partnership with our member agencies, decides on eligible projects for the regional improvement funds, not all routes are eligible for Interregional Improvement Program funds. Many of Kings County's highest priority projects are not eligible for the Interregional Improvement Program funds because they are considered to be local projects, or are on routes that are not part of the designated Interregional system. SR 43 is not an eligible Interregional route and interchanges on eligible routes are considered to be "local" projects. Kings County's regional share is not enough to fund all priority projects.

The CTC also gives higher priority to funding Interregional Improvement projects that are partially funded with Regional Improvement Program funds or local sales tax measure funds. Caltrans indicates that it would like to have locals pay a considerable portion of the costs for other state system projects that also serve local needs.

2. Local Option Fuel Tax and Vehicle Registration Fees

Counties have been authorized to implement a local, per-gallon, excise tax and/or an additional vehicle registration fee if approved by the voters. So far, voters in most of the counties where this tax has been proposed have rejected the option. Currently, the ability to sell any additional tax or fee to the voters of Kings County is questionable, but even a two-cent tax would mean a boost in revenues to upgrade the regional system. For this reason, the "local option fuel tax" could be considered.

3. Amend Apportionment Formulas

Kings County has voiced opposition to paragraph "f" of Section 2104 of the Streets and Highways Code. This law apportions state gas tax revenues among counties and cities. A large portion of Section 2104 dollars are distributed to counties according to the county's portion of the states registered vehicles. In doing so, the law unfairly awards large payments to 14 urban counties that have a high proportion of registered vehicles to county-maintained road mileage.

4. Local Sales Tax

A county could impose a local sales tax of up to 1% for not longer than 20 years, upon voter approval, to help finance state highway projects, local streets and roads, transit, and non-motorized transportation modes. A sales tax measure could not be placed on the ballot until an expenditure plan has been developed and agreed upon by the county and a majority of the cities with a majority of the county population to show how the acquired funds would be used.

Fresno County was the first within Caltrans District 6 to approve a local sales tax for transportation improvements. Madera County voters passed a ½ % sales tax measure for road purposes in 1990. Tulare County voters approved a ½ cent sales tax measure in 2006. Three other San Joaquin Valley Counties have placed sales tax measures before their voters, but none have yet been successful. Each of those counties have scheduled their next attempt at passing a sales tax measure for transportation. It is estimated that a ½ % local sales tax increase over a 20 year period could generate \$114 million to finance local transportation projects in Kings County.

5. Impact Fees

The City of Hanford currently has a transportation development impact fee for all new developments within the general plan boundary area, as described in the Financial Element of this chapter.

The County of Kings considered the adoption of a transportation impact fee ordinance, but a study conducted to determine the benefit of an impact fee based on projected future growth determined that the fee would not produce an acceptable benefit. The County instead adopted a policy in their General Plan that all development would take place in the urbanized areas of the cities.

Since 1992, the City of Lemoore has maintained Development Impact Fees for City traffic-related infrastructure needs directly attributable to new development. These fees have been indexed in time with the California Construction Cost Index, as costs for the identified project have increased over time. As part of a citywide study in 2005, it was determined that the separate fees should be determined for areas with significantly different existing infrastructure: the mostly-developed portion of the City east of 19 ½ Avenue, and the almost undeveloped western portion of the City. The Eastside Streets and Thoroughfares Fee was adopted in 2006; the Westside Streets and Thoroughfares Fee was approved in November 2010. In keeping with the Mitigation Fee Act, the collected fees are used exclusively for new infrastructure, and never used for maintenance of existing or upgrading of existing deficiencies in the infrastructure level.

IV. ACTION ELEMENT

This section presents outlines for state, county, and city road projects for both long-range (more than ten years) and short-range (up to ten years) implementation. The central features of this section are implementation tables that are broken out for each responsible agency. Costs are shown in year of expenditure dollars where estimates are available. A summary of all proposed regional projects are included in Figures 4-29 through 4-33.

The listed projects have either been considered by Caltrans through its systems planning documents; by KCAG, through its regional road surveys; or through local agency monitoring programs. All local projects are broken out for specific improvements: reconstruction, overlays, and maintenance. Short-range state system projects are presented under several programs, including the State Transportation Improvement Program (STIP) (Figures 4-19 and 4-24) and the State Highway Operation and Protection Program (SHOPP) (Figures 4-25 and 4-27).

Caltrans' system planning products include, among others, the Interregional Transportation Improvement Plan, and Transportation Concept Reports for each state highway. Caltrans has identified routes 5, 41, and 198 as significant routes through Kings County. KCAG believes that SR 43 must be included as a significant route when improvement projects are considered for the STIP, particularly since it is considered as an alternative route to SR 99 which has high traffic volumes. A legislative bill was introduced by Assemblywoman Parra in the FY 05-06 session and again by Assemblyman Salas in the 2013-14 session that would have made SR 43 eligible for the Interregional Road System. Parra's bill did not pass the final hurdle in the Senate and Salas' bill is still in the Senate committee structure. KCAG continues to engage local legislators in an effort to realize this goal.

Project implementation will continue to be the responsibility of the individual jurisdictions. This will include planning, preliminary engineering, project environmental studies, citizen review, funding, and construction.

A. LONG-RANGE HIGHWAY PLAN

What follows is a very brief description of what Kings County desires for an efficient highway system. Its time-frame is 2015 and beyond 2035. What is described here provides general direction for short-range planning and shows the end result of having implemented this chapter's policies and objectives.

1. Long-Range Proposals

The long range plan for regional highways is shown on Figures 4-19 and 4-20. It should provide an ample system to serve traffic loads expected before the year 2040. However, funding constraints will delay the actual construction of the needed projects until after 2040. The main features of the plan are:

- a. Expressways linking Hanford and Lemoore with Fresno and Tulare Counties, and with I-5 in western Kings County.
- b. Expressways linking Hanford with Corcoran on SR 43; and expressway status for SR 41, between SR 198 and SR 46 in San Luis Obispo County.
- c. Well-maintained two-lane arterials linking Avenal with northern Kings County and with Coalinga in Fresno County, and linking the major regional routes together.
- d. Widening I-5 to six lanes.

**FIGURE 4-19**

**LONG RANGE  
STATE HIGHWAY PROJECTS  
2021 - > 2035  
(Unconstrained)**

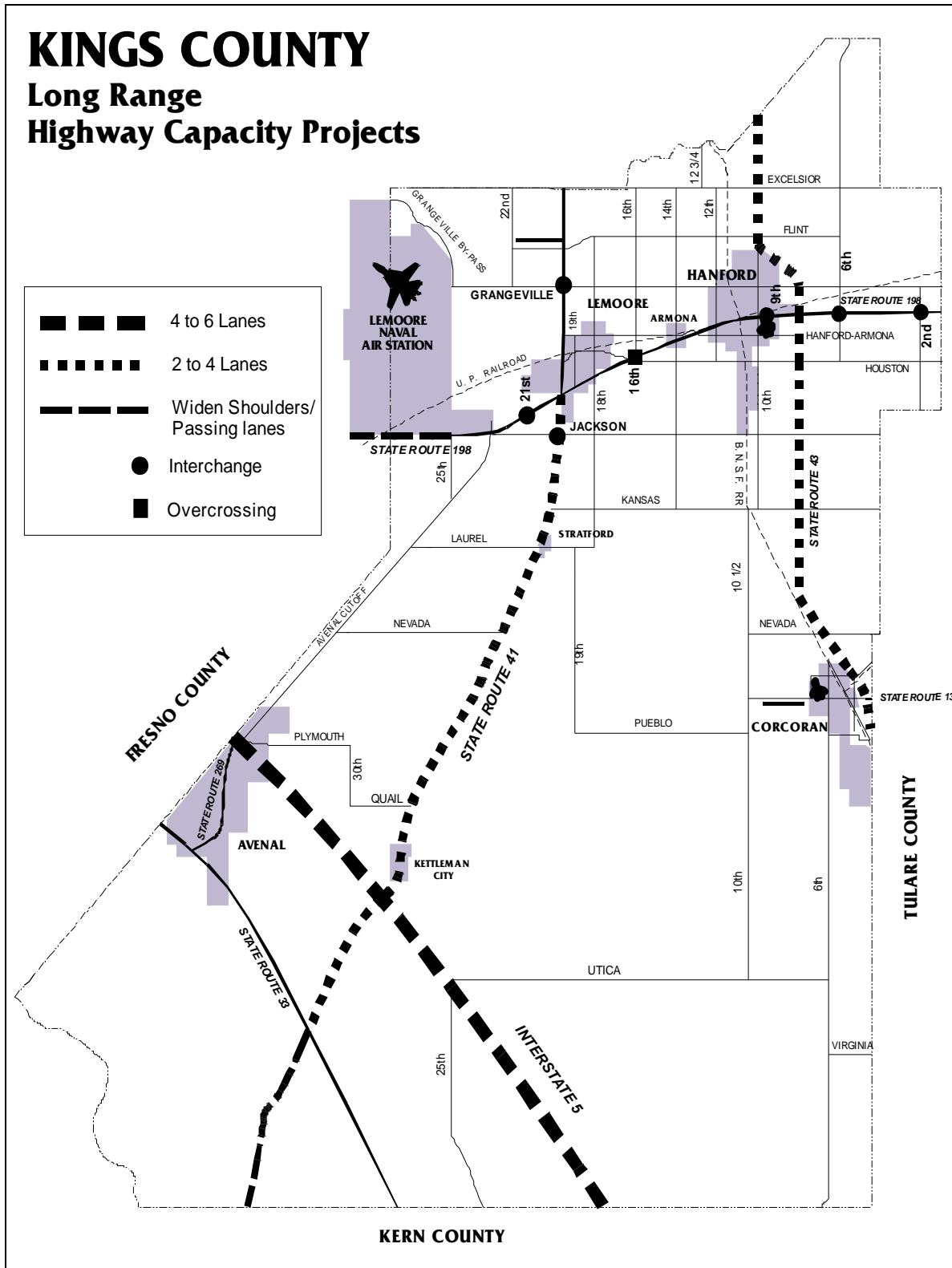
STATE ROUTE	POST MILE	LOCATION	PROJECT DESCRIPTION	CODE
198	R19.7/R20.3	At 9th Avenue	Construct Interchange	a,b,c
41	R41.6/R45.2	Grangeville Boulevard	Construct Interchange	a,c
198	9.7	At 13th Avenue / Hanford Armona Road	Reconstruct Interchange	a,c
43	22.3/27.3	Fresno Co. Line to 10th Avenue	Widen to 4 lane Expressway	a,c
43	16.3/22.3	10th Avenue to Houston Avenue	Widen to 4 lane Expressway	b,c
41	R38.5/R37.8	SR 198 to Jackson Avenue	Widen to 4 lanes and Construct Interchange	b,c
198	12.7	At 16th Avenue	Construct Overcrossing	a,c
198	7.16	At 21st Avenue Alignment	Construct Interchange	a, c
41	16.5/38.5	Kettleman City to Jackson Avenue	Widen from 2 to 4 lanes	a,b,c
41	8.1/16.3	SR 33 to I-5	Widen from 2 to 4 lanes	b
41	0.0/8.1	Kern Co. Line to SR 33	Widen Shoulders and Construct Passing Lanes	b
I-5	0.0/26.7	Kern Co. Line to Fresno Co. Line	Widen from 4 to 6 lanes	a
43	0.0/16.3	Houston Avenue to Tulare Co. Line	Widen to 4 lane Expressway	b,c
198	0.0/2.8	Fresno Co. Line to LNAS	Construct Passing Lanes	a
198	23.0	At 6th Avenue	Construct Interchange	b,c
198	27.0	At 2nd Avenue	Construct Interchange	b,c

NOTE: Project cost estimates are not available at this time.

Project Source Code: (a) Caltrans District 6 Route Concept Report Project  
 (b) Locally-Supported Project only  
 (c) Requires Local Funding



FIGURE 4-20



Source: KCAG

**B. REGIONAL FUTURE DEVELOPMENT LIST**

A Project Study Report (PSR) is required to be prepared for any capacity-increasing project before it can be included in the STIP. KCAG may prepare a future development list of capacity-increasing state highway projects for the purpose of initiating PSRs. Caltrans has either completed or have scheduled for completion any PSRs that need to be done for the 2014 STIP based on the amount of funds expected to be available for Kings County's regional share.

The regional future development list, as shown in Figure 4-21, includes each of the prioritized capacity increasing projects that has been scheduled by Caltrans to have the required PSR prepared.

**FIGURE 4-21**

**REGIONAL FUTURE DEVELOPMENT LIST OF PROJECT STUDY REPORTS FOR CAPACITY-INCREASING PROJECTS**

PRIORITY	STATE ROUTE	POST MILE	LOCATION	PROJECT DESCRIPTION	PROJECT COST (\$000)	CODE
1	41	42.1	At Hanford Armona Road	Construct Interchange	N/A	(b)
2	198	9.7	At 13th Avenue / Hanford Armona Road	Reconstruct Interchange	N/A	(b)
3	198	R19.7/R20.3	At 9th Avenue	Construct Interchange	\$25,032	(a)
4	41	R41.6/R45.2	At Grangeville Boulevard	Construct Interchange	N/A	(b)
5	41	R37.8/ R38.5	Jackson Avenue to SR 198	Widen to 4 lane Freeway and Construct Interchange	N/A	(b)
6	43	22.3/27.3	10th Avenue to Fresno Co. Line	Widen to 4 lane Expressway	N/A	(b)
7	43	16.3/22.3	Houston Avenue to 10th Avenue	Widen to 4 lane Expressway	N/A	(b)
8	43	0.0/16.3	Tulare Co. Line to Houston Avenue	Widen to 4 lane Expressway	N/A	(b)
9	198	7.16	At 21st Ave. alignment	Construct Interchange	N/A	(b)
10	198	12.7	At 16th Avenue	Construct Overcrossing	N/A	(c)
11	41	27.2/30.6	Newton Avenue to 22nd Avenue	Construct Passing Lanes	N/A	(b)
12	41	3.8/6.4	Avenal Creek to s/o SR 33	Construct Passing Lanes	N/A	(b)
13	41	11.6/16.2	Utica Avenue to I-5	Construct Passing Lanes	N/A	(b)
14	41	18.2/R38.5	Kettleman City to Jackson Avenue	Widen to 4 lane Expressway	N/A	(b)
15	I-5	0.0/26.7	Kern Co. Line to Fresno Co. Line	Widen from 4 to 6 lanes	N/A	(c)
16	198	0.0/2.8	Fresno Co. Line to LNAS	Construct Passing Lanes	N/A	(c)
17	198	10.6	At 18th Avenue	Modify Interchange	N/A	(c)
18	198	27.0	At 2nd Avenue	Construct Interchange	N/A	(c)
19	198	23.0	At 6th Avenue	Construct Interchange	N/A	(c)

Project Source Code: a) Project Study Report Completed  
 b) Project Study Report Scheduled  
 c) Project Study Report Not Scheduled

C. SHORT-RANGE HIGHWAY PLAN

The State Transportation Improvement Program (STIP) is a county-by-county schedule for project delivery of all major projects to be funded from state transportation funds and covers a four year period. The California Transportation Commission (CTC) adopts the STIP biennially by April 1 of every even-numbered year. Projects included in the adopted STIP are limited to those that are included in prior STIPs and projects submitted or recommended from Caltrans' Interregional Transportation Improvement Program (ITIP) and the regional agency's Regional Transportation Improvement Program (RTIP).

Other programs outside the STIP interact with the above mentioned programs. These are the State Highway Operation and Protection Program (SHOPP), Environmental Enhancement and Mitigation (EEM) and the Active Transportation Program (ATP). Each of these programs is briefly described later.

1. Senate Bill 45

Senate Bill 45 (Kopp, 1997) restructured the state transportation improvement program process which provided for more flexible use of state transportation funds, streamlined the process by combining numerous separate programs into one, and limited the State's involvement in regional project priority setting. Under SB 45, the STIP now consists of two broad programs: a regional program funded from 75% of new STIP funding and an interregional program funded from 25% of new STIP funding.

Under the old system, Caltrans would propose projects for programming in each county based on "county minimums". Kings County continued to be a deficit county as projects to meet its county minimum funding level were seldom programmed in the STIP. Under the new funding system, the state allocates a set amount of funding to each region in the form of "regional shares" and the regional transportation planning agency then decides how to program the funds for local projects in the Regional Improvement Program.

2. AB 1012

In order to facilitate project development work on needed transportation projects to produce a steady flow of construction projects, AB 1012 (Torlakson, 1999), added an advance project development element (APDE) to the STIP beginning with the 2000 STIP cycle. AB 1012 requires that the STIP Fund Estimate designate an amount to be available for the APDE. Regions may propose projects from their share of APDE funds for any of the STIP's four years, but can only be used for two project development components: 1) environmental and permits and 2) plans, specifications and estimates. If all or a portion of any county APDE share is not programmed in that STIP cycle, that amount will be available for any project phase in the next STIP cycle. Figure 4-22 below shows the status of Kings County's STIP regional shares programmed in the 2014 STIP.

**FIGURE 4-22**

**2014 STIP Expected Revenues/Programming  
2003/04 - 2017/18  
Dollars in \$1,000's**

2014 STIP Programmed at Fund Estimate	\$63,212
2014 STIP Fund Estimate Formula Distribution	\$7,084
2014 STIP Share Balance Advanced	\$(17,941)
2012 STIP Carry-over Programming	\$419
<b>Total County Share June 30, 2014:</b>	<b>\$(10,857)</b>

Source: 2014 STIP Shares Report (Orange Book)

2. Regional Transportation Improvement Program

A Regional Transportation Improvement Program (RTIP) must be prepared by transportation planning agencies and county transportation commissions. The RTIP is to be prepared, adopted, and submitted to the CTC on or before December 15 of each odd-numbered year and must be consistent with the RTP, the FTIP, the STIP Fund Estimate, and regional shares. The fund estimates and projections utilized in the RTIP, the FTIP and the (first four years of the) RTP are consistent with the currently adopted STIP.

The RTIP spans a five-year period and is to include a priority list of projects and programs proposed to be funded, in whole or in part with regional share funds. Projects in other programs may be included for informational purposes.

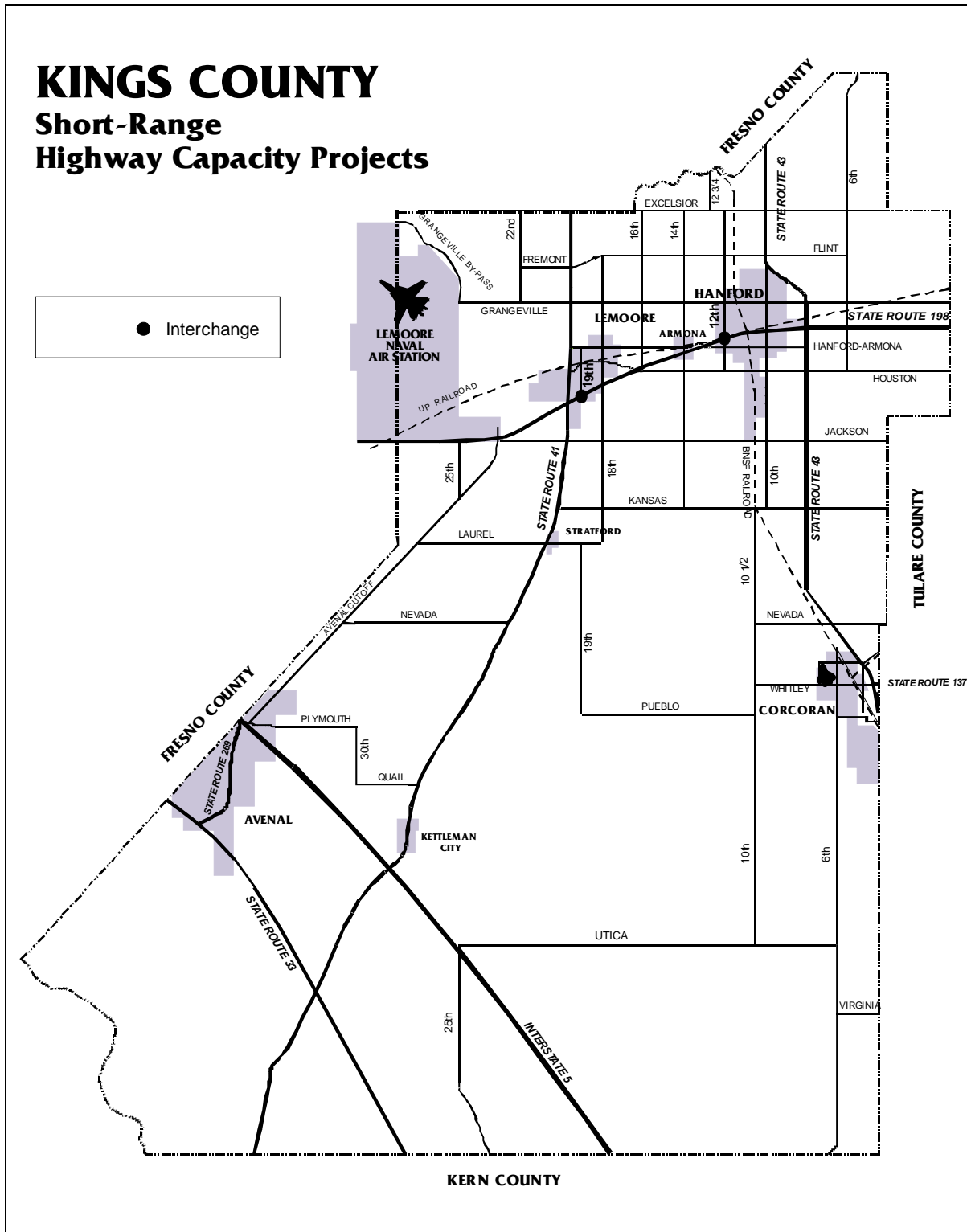
The 2014 Kings County RTIP was prepared and submitted by KCAG. The 2014 RTIP consisted of continuing the existing programmed projects:

- Continue construction of an interchange at 19th Ave. and SR 198.
- Continue reconstruction improvements of the interchange at 12th Ave. and SR 198.
- Converting the Transportation Enhancement Funds to Regional Improvement Program funds for Lemoore's Bicycle/Pedestrian Facilities Project.
- Programming of Planning, Programming, and Monitoring funds for KCAG.

As a result of advancing the 19th Avenue Interchange project through a program that allows our area to borrow against future shares of STIP funding, Kings County will continue to show a negative total STIP balance until our share amounts exceed our borrowed amount.

Figures 4-23 and 4-24 represent those state highway projects to be considered for future short range regional program funding through 2020.

FIGURE 4-23



Source: KCAg

**FIGURE 4-24**

**SHORT RANGE  
REGIONAL IMPROVEMENT PROGRAM  
KINGS COUNTY  
2013 – 2020  
(Financially Constrained)**

SHORT RANGE PRIORITY	STATE ROUTE	POST MILE	LOCATION	PROJECT DESCRIPTION	PROJECT COSTS (\$000)	ESTIMATED DATE OF COMPLETION	CODE
1	198	R8.6/R9.7	At 19th Avenue	Construct Interchange	38,426	2015	a,b
2	198	R19.7/R20.3	At 12th Avenue	Reconstruct Interchange	23,093	2015	a,b,d
3	Local	N/A	Cinnamon Dr.	Construct Bicycle/Pedestrian Facilities	669	2015	a,d

Project Source Code: (a) 2014 RTIP Project  
 (b) Route Concept Report Project  
 (c) Locally-Supported Project Only  
 (d) Requires Local Funding

### 3. Interregional Transportation Improvement Program

Caltrans prepares and submits to the CTC by December 15 of every odd numbered year the Interregional Transportation Improvement Program (ITIP) to propose projects in the STIP from the interregional program funding. Interregional Improvement Program (IIP) funding is available for state highway, intercity rail, grade separation and mass transit guideway improvements. Sixty percent of the IIP funds, or 15% of the total funds available for the STIP, is limited in use for interregional routes outside urbanized areas and intercity rail. No less than fifteen percent of this amount, or 2.25% of the total amount of funds available for the STIP, must be spent on intercity rail. The remaining 40%, or 10% of the total funds available for the STIP, is available for use anywhere on the state highway system, as well as for intercity rail, grade separations, and mass transit guideways.

In 1998, Caltrans prepared the "Interregional Transportation Strategic Plan" as a guide for proposing projects in the Interregional Improvement Program for the STIP. Eligible interregional road system routes and intercity rail routes for this program are identified in Sections 164.10 through 164.20 of the Streets and Highways Code. Within Kings County, Interstate 5 and State Highways 41 and 198 are specified as eligible routes, along with the *San Joaquins* intercity rail service. These routes are also categorized as high emphasis routes focus routes and gateways, which should be considered a priority for programming improvements in the STIP. Project improvements to meet the concepts of the Strategic Plan for each route are included in the short and long range highway plans.

4. State Highway Operation and Protection Plan

The State Highway Operation and Protection Plan (SHOPP) covers a four year period and includes programming for rehabilitation, safety, and operational improvements on the state highway system. The "Ten-Year State Highway System Rehabilitation Plan" prepared by Caltrans in 1998, to be updated every two years, is used as a basis for programming projects in the SHOPP.

Caltrans develops a biennial SHOPP that is adopted by the CTC prior to April 1 of each even-numbered year. To manage the SHOPP program, Caltrans prepares a comprehensive review and the CTC programs additional projects in a mid-cycle revision every other year.

Figures 4-26 and 4-27 represent the projects for Kings County that are included in the adopted 2010 SHOPP. Figures 4-28 and 4-29 identify the short-range state highway projects that are candidates for future SHOPP programming.

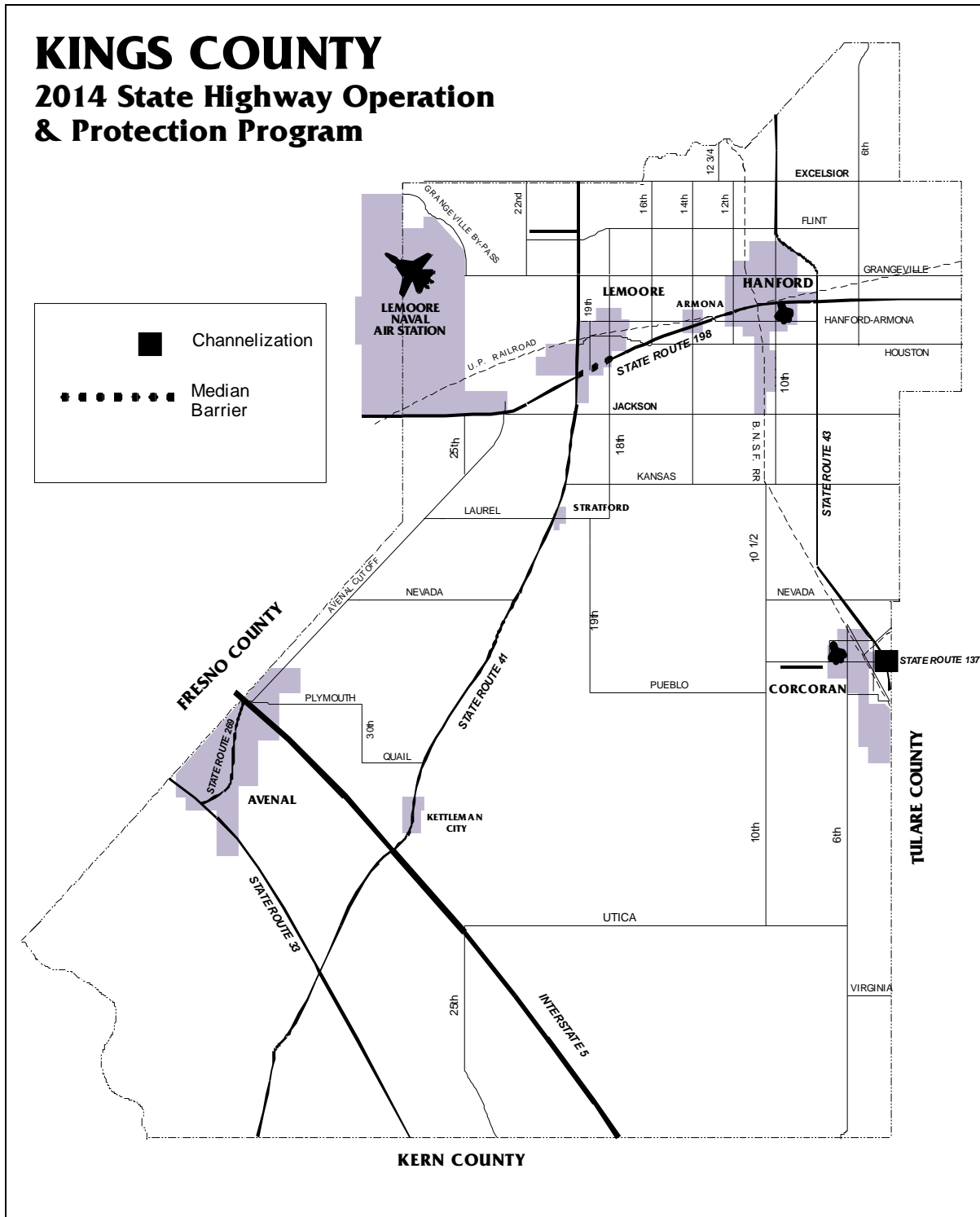
**FIGURE 4-25**

**2014 PROGRAMMED PROJECTS  
STATE HIGHWAY OPERATIONS AND PROTECTION PROGRAM  
KINGS COUNTY**

SHORT RANGE PROJECTS	STATE ROUTE	LOCATION	PROJECT DESCRIPTION	PROJECT COSTS (\$000)
1	43	Near Corcoran, at Route 137	Construct intersection improvements	\$4,214
2	198	In and near Lemoore, from 0.5 mile west to 1.2 miles east of 19th Avenue	Construct median barrier	\$4,375
			<b>KINGS COUNTY TOTAL</b>	<b>\$8,589</b>

Source: [http://www.dot.ca.gov/hq/transprog/federal/fedfiles/2014shopp\\_grppjt.html](http://www.dot.ca.gov/hq/transprog/federal/fedfiles/2014shopp_grppjt.html) CTIPS

FIGURE 4-26



Source: KCAG, Caltrans



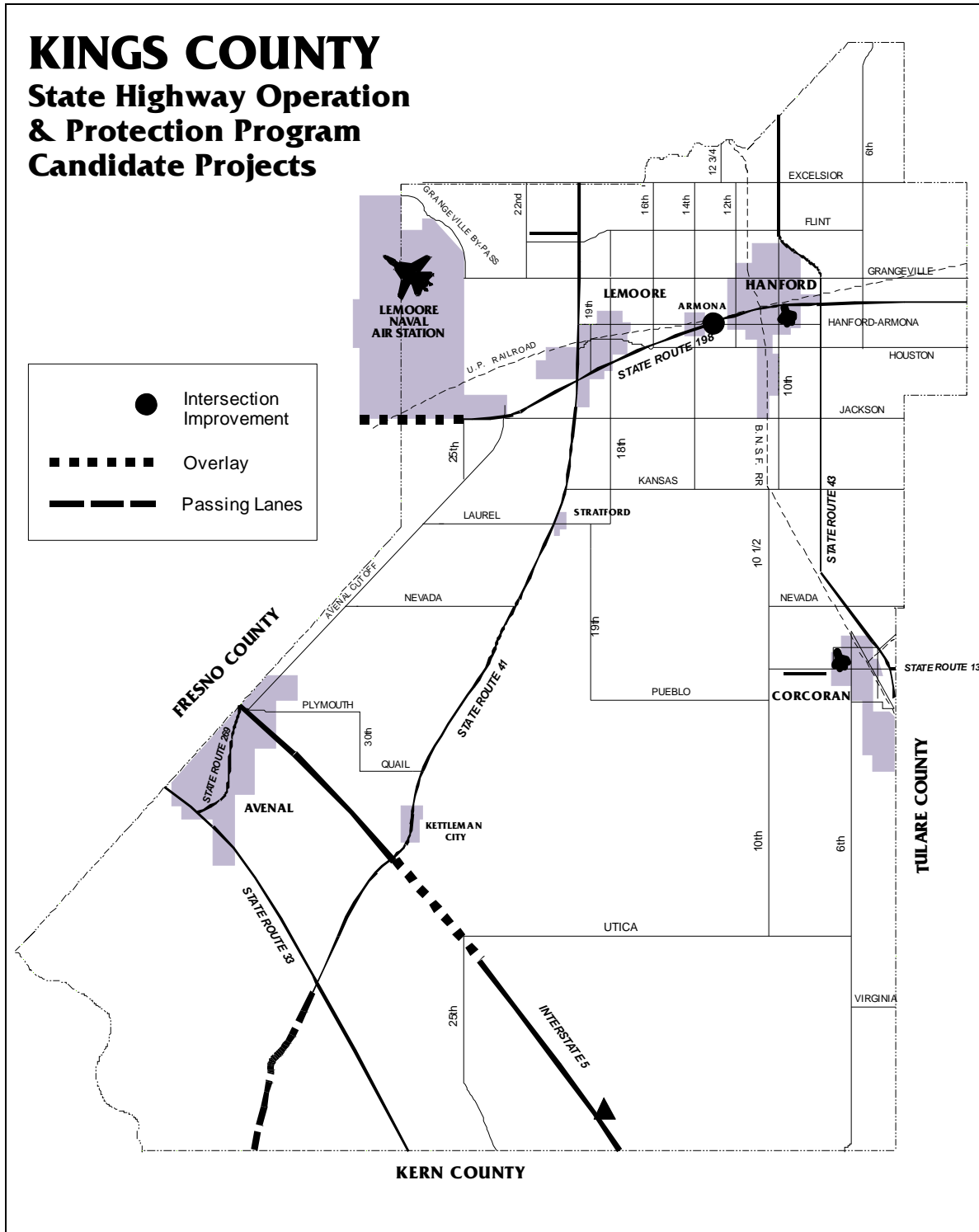
**FIGURE 4-27**

**CANDIDATE PROJECTS  
STATE HIGHWAY OPERATIONS AND PROTECTION PROGRAM  
KINGS COUNTY**

<b>SHORT RANGE PRIORITY</b>	<b>STATE ROUTE</b>	<b>LOCATION</b>	<b>PROJECT DESCRIPTION</b>
1		At Jersey Ave from 17th St. to 18th St.	Widen from 2 to 4 Lanes/Install Traffic Signals, Curb/Gutter
2	I-5	Near Kettleman City, from 3.3 miles South of Utica Ave. OC to Jct 41	Overlay
3	I-5	From PM 21.50 in Kings Co. to PM 2.5 in Fresno Co.	Install High Tension Cable Barrier
4	198	From Fresno/Kings Co. Line to 0.04 miles East of South Rossi OC	Overlay
5	198	At Hanford-Armona Rd WB Onramp	Intersection Improvements

Source: <http://www.dot.ca.gov/dist6/ppm/docs/sop/d6sop.pdf>

FIGURE 4-28



Source: KACG

5. Environmental Enhancement and Mitigation Program

Although the Environmental Enhancement and Mitigation Program (EEMP) has been absorbed into the Active Transportation Program (ATP), the program intent remains very much the same. Local, state, federal, and non-profit agencies are eligible to apply for grants under the EEMP for projects that mitigate the environmental impacts of modified or new public transportation facilities. Emphasis of the program is on projects that provide multiple benefits, reduce greenhouse gas emissions, increase water use efficiency, reduce risks from climate change impacts, and demonstrate collaboration with local, state, and community priorities. Grants are awarded for three categories of projects: Urban Forestry, Resource Lands, and Mitigations of environmental impacts beyond the scope of the lead agency. The annual funding level is \$7 million.

6. Active Transportation Program

The Active Transportation Program was developed in California after the passage of MAP-21. The program absorbs funds from 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 Program) into a competitive grant program. The program will provide about \$129.5 million per year for statewide ATP projects.

The goals of the Active Transportation Program are to:

- Increase the proportion of biking and walking trips.
- Increase safety for nonmotorized users.
- Increase mobility for nonmotorized users.
- Advance the efforts of regional agencies to achieve greenhouse gas reduction goals.
- Enhance public health, including the reduction of childhood obesity through the use of projects eligible for Safe Routes to Schools Program funding.
- Ensure disadvantaged communities fully share in program benefits (25% of program).
- Provide a broad spectrum of projects to benefit many types of active transportation users.

The ATP is a completely competitive program and projects from the Kings County area will have to compete with projects from all other areas. Many of the communities within Kings County can be identified as disadvantaged communities, according to the established program criteria, and can qualify for the Disadvantaged Communities funding requirement in the distribution of funds. The first call for projects for this program has just been released and the first project approval will be after the adoption of the 2014 RTP.

7. Traffic Congestion Relief Program

The Traffic Congestion Relief Program (TCRP) was established in 2000 with the enactment of SB 1662 and AB 2928. This program provides more than \$5.3 billion in State funds to Caltrans and certain regional and local transportation agencies for projects specifically identified in the legislation; and \$1.5 billion over a five year period to cities and counties for street and road maintenance, rehabilitation, and reconstruction.

Specific TCRP projects for Kings County have included \$4 million for the Cross Valley Rail rehabilitation project, \$1.5 million for Jersey Ave. widening between 17th and 18th Avenues, \$14 million for the SR 198 expressway, \$25 million to the SJVAPCD for heavy-duty diesel emission reduction incentives, and \$10 million for improvements to the *San Joaquins* corridor. The Cross Valley Rail project, SJVAPCD project, and the *San Joaquins* project have all been completed. The construction of SR 198 is currently underway.

D. LOCAL ROAD IMPROVEMENT FINANCIAL PLANNING

Figures 4-29 through 4-33 list local road improvement projects for which funding is reasonably expected to be available (constrained) based on historical apportionments. The project costs are escalated to Year of Expenditure (YOE) dollars; calculated based on an estimated 3% increase per year.

Major projects to be considered include reconstruction, rehabilitation and resurfacing of major county and city roads, intersection channelization and signalization, and a significant increase in the amount of non-motorized transportation projects over prior RTP financial plans. The projects listed in the first four years of this RTP are also identified in the Federal Transportation Improvement Program (FTIP) and in the Regional Transportation Improvement Plan (RTIP). These two documents (FTIP and RTIP) are the short term programming documents of this long term plan and are consistent with the project listings and/or policy direction of the RTP.

Lists of Tier 2, or unconstrained projects are included in Appendix II for reference.

**FIGURE 4-29**

**COUNTY OF KINGS REGIONAL ROUTE IMPROVEMENTS  
2014/15- 2019/20  
(Financially Constrained)**

<b>ROAD</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>OPEN TO TRAFFIC</b>	<b>Total Cost (\$000)*</b>
Lacey Blvd.	At 13th Ave.	Signals and bridge work	2014	\$500
10 ½ Ave.	Kansas Ave. to Nevada Ave.	Widen shoulder to 28 feet without increasing number of lanes	2014	\$1,308
Flint Ave.	SR43 to 12th Ave.	Overlay	2014	\$425
11th Ave.	Houston Ave. to Idaho Ave.	Overlay	2014	\$392
Kansas Ave.	4th Ave. to SR43	Overlay	2014	\$994
Kansas Ave.	14th Ave. to 16th Ave.	Overlay	2014	\$569
14th Ave.	School Street to Excelsior Ave.	Overlay	2015	\$948
Avenal Cutoff Rd.	Nevada Ave. to I-5	Install right turn and acceleration lanes	2015	\$1,035
County Intersections	Various Locations	Install right turn lanes and flashing beacons	2015	\$326
10th Ave.	Idaho Ave. to Kansas Ave.	Overlay	2015	\$1,262
Houston Ave.	10th Ave. to 10 1/2 Ave.	Reconstruction	2017	\$275
Grangeville Blvd.	12 ½ Ave. to 15th Ave.	Overlay	2017	\$536
18th Ave.	SR198 to Iona Ave.	Overlay	2017	\$183
Jackson Ave.	SR43 to 11th Ave.	Reconstruct 1.5 miles	2018	\$1,062
Jackson Ave.	11th Ave. to 14th Ave.	Reconstruct 1 mile	2018	\$948
Jackson Ave.	14th Ave. to 17th Ave. (widen to 28 feet)	Overlay	2018	\$853
12th Ave.	Hume Ave. to Idaho Ave.	Overlay	2019	\$523
Excelsior Ave.	0.25 mile west of 12th Ave. to SR 43	Overlay	2019	\$451
Excelsior Ave.	14 1/2 Ave. to Kings River	Overlay	2019	\$432
Various	12th Ave. to 14th Ave.	Overlay	2019	\$327
Grangeville Blvd.	SR41 to 22nd Ave.	Overlay	2020	\$569
Houston Ave.	SR43 to 10th Ave.	Overlay	2020	\$303
Lacey Blvd.	18th Ave. to SR41	Overlay	2020	\$345
6th Ave.	Utica Ave. to Racine Ave.	Reconstruct 1.5 miles	2020	\$1,438

\* Year of Expenditure (YOE) Dollars

**FIGURE 4-29**  
**CONTINUED**

**COUNTY OF KINGS REGIONAL ROUTE IMPROVEMENTS**  
**2020/21- 2028/29**  
**(Financially Constrained)**

<b>ROAD</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>OPEN TO TRAFFIC</b>	<b>(\$000)*</b>
Laurel Ave.	SR41 to 18th Ave.	Overlay	2021	\$588
14th Ave.	Houston Ave. to Jersey Ave.	Overlay	2021	\$850
6th Ave.	Kern County Line to ½ mile North	Overlay	2022	\$286
Utica Ave.	20th Ave. to 25th Ave.	Reconstruct 1 mile	2022	\$1,197
18th Ave.	Iona Ave. to Jersey Ave.	Install left turn lane	2023	\$1,491
Front St.	Hanford Armona Rd. to 14th Ave.	Overlay	2023	\$157
6th Ave.	Fargo Ave. to Excelsior Ave.	Overlay	2023	\$634
Houston Ave.	13th Ave. to 14th Ave.	Overlay	2023	\$183
Grangeville Blvd.	SR43 to 6th Ave.	Reconstruct	2024	\$435
Grangeville Blvd.	5th Ave. to 6th Ave.	Overlay	2024	\$493
Grangeville Blvd.	1st Ave. to 2 1/2 Ave.	Overlay	2024	\$319
Grangeville Blvd.	2 1/2 Ave. to Highline Canal	Reconstruct	2024	\$493
Grangeville Blvd.	Highline Canal to 5th Ave.	Overlay	2025	\$319
18th Ave.	Laurel Ave. to Kansas Ave.	Overlay	2025	\$341
10th Ave.	Nevada Ave. to Pueblo Ave.	Overlay	2025	\$850
10th Ave.	Redding Ave. to Seattle Ave.	Overlay	2026	\$645
10th Ave.	Pueblo Ave. to Redding Ave.	Overlay	2026	\$850
10th Ave.	Seattle Ave. to Utica Ave.	Seal Coat	2026	\$654
14th Ave.	Jersey Ave. to Kansas Ave.	Overlay	2026	\$445
Excelsior Ave.	SR 41 to 22nd Ave.	Overlay	2027	\$645
Excelsior Ave.	SR43 to 6th Ave.	Reconstruct 1 mile	2027	\$1,268
Laurel Ave.	Avenal Cut-Off Rd. to SR41	Overlay	2027	\$1,177
Nevada Ave.	Avenal Cut-Off Rd. to SR41	Overlay	2029	\$1,360
Avenal Cut Off Rd.	SR 198 to 25th Ave.	Overlay	2029	\$588
9th Ave.	SR198 to Houston Ave.	Overlay	2029	\$218

**FIGURE 4-29  
CONTINUED**

**COUNTY OF KINGS REGIONAL ROUTE IMPROVEMENTS  
2029/30- 2031/32  
(Financially Constrained)**

ROAD	LOCATION	IMPROVEMENT	OPEN TO TRAFFIC	(\$000)*
Utica Ave.	11th Ave. to 16th Ave.	Overlay	2030	\$902
6th Ave.	Utica Ave. to Virginia Ave.	Overlay	2030	\$569
6th Ave.	Virginia Ave. to Xavier Ave	Overlay	2030	\$645
6th Ave.	Kern County Xavier Ave.	Overlay	2031	\$739
Virginia Ave.	4th Ave. to 6th Ave.	Overlay	2031	\$850
Utica Ave.	16th Ave. to 20th Ave.	Overlay	2031	\$807
Utica Ave.	6th Ave. to 11th Ave.	Overlay	2032	\$1,125

\*Year of Expenditure (YOE) Dollars  
Source: County of Kings

**FIGURE 4-30**

**CITY OF AVENAL REGIONAL ROUTE IMPROVEMENTS  
2014/15 - 2029/30  
(Financially Constrained)**

ROAD	LOCATION	IMPROVEMENT	OPEN TO TRAFFIC	Total Cost (\$000)*
Third Ave.	San Joaquin St. to SR 33	Overlay and improve curb cuts/ramps	2015	\$495
Mariposa St.	First Ave. to Fifth Ave.	Overlay and improve curb cuts/ramps	2023	\$400
Fifth Ave.	Mariposa St. to SR 269	Overlay and improve curb cuts/ramps	2030	\$500

\*Year of Expenditure (YOE) Dollars  
Source: City of Avenal

**FIGURE 4-31**

**CITY OF CORCORAN REGIONAL ROUTE IMPROVEMENTS  
2014/15 - 2038/39  
(Financially Constrained)**

<b>ROAD</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>OPEN TO TRAFFIC</b>	<b>(\$000)*</b>
Various Roadways	Various	Pavement Maintenance Program	2015	\$222
Various Roadways	Various	Pavement Maintenance Program	2017	\$229
Various Roadways	Various	Pavement Maintenance Program	2019	\$235
Various Roadways	Various	Pavement Maintenance Program	2021	\$241
Various Roadways	Various	Pavement Maintenance Program	2023	\$248
Various Roadways	Various	Pavement Maintenance Program	2025	\$254
Various Roadways	Various	Pavement Maintenance Program	2027	\$261
Various Roadways	Various	Pavement Maintenance Program	2029	\$267
Various Roadways	Various	Pavement Maintenance Program	2031	\$273
Various Roadways	Various	Pavement Maintenance Program	2033	\$280
Various Roadways	Various	Pavement Maintenance Program	2035	\$286
Various Roadways	Various	Pavement Maintenance Program	2037	\$292
Various Roadways	Various	Pavement Maintenance Program	2039	\$298

\*Year of Expenditure (YOE) Dollars  
Source: City of Corcoran



**FIGURE 4-32**

**CITY OF HANFORD REGIONAL ROUTE IMPROVEMENTS  
2014/15 - 2022/23  
(Financially Constrained)**

<b>ROAD</b>	<b>LOCATION</b>	<b>IMPROVEMENT</b>	<b>OPEN TO TRAFFIC</b>	<b>Total Cost (\$000)*</b>
Campus Dr.	Lacey Blvd. to Glendale Ave.	Extend Roadway, Construct Left Turn Lanes	2014	\$750
W. Lacey Blvd.	Hfd.-Arm Rd. to Mall Dr. (Interchange Project)	Widen from 2 to 6 lanes w/ median	2015	\$25,000
W. Lacey Blvd.	Greenfield Ave. to Mall Dr.	Rehabilitate / Overlay	2015	\$800
13th Ave.	At Grangeville Blvd.	Traffic Signal	2016	\$600
6th St.	Between Harris and Brown Sts.	Construct Park-n-Ride	2016	\$425
Hanford-Armona Rd.	At Irwin St.	Traffic Signal	2016	\$425
Houston Ave.	At 11th Ave.	Traffic Signal	2016	\$575
12th Ave.	Mall Dr. to N. of Lacey Blvd.	Rehabilitate/ Overlay/ Restripe (4 to 6 lanes)	2016	\$800
City wide	Various	Bike facility improvements	2017	\$250
11th Ave.	Ivy St to Grangeville Blvd.	Rehabilitate / Overlay	2017	\$800
11th Ave.	11th / Grangeville Blvd.	Intersection Improvements/Channelization	2017	\$600
Douty St.	At Sixth St	Traffic Signal	2017	\$400
City wide	PW Corp. Yard	Electric charging station	2018	\$500
12th Ave.	Houston Ave. to Hfd-Armona Rd.	Widen from 2 to 4 lanes w/ median	2018	\$2,000
12th Ave.	12th Ave. / Hume Ave.	Traffic Signal	2018	\$500
E. Lacey Blvd.	10th Ave. to 9th Ave..	Widen from 2 to 4 lanes w/ left turn pockets	2019	\$2,500
E. Lacey Blvd.	At 9th Ave.	Install Traffic Signals	2019	\$500
E. Lacey Blvd.	9th Ave. to Sierra Dr.	Widen from 2 to 4 lanes w/ left turn pockets	2020	\$2,000
E. Lacey Blvd.	At Sierra Dr.	Install Traffic Signals	2020	\$500
Grangeville Blvd.	Douty St. to 10th Ave.	Rehabilitate / Overlay	2021	\$600
W. Lacey Blvd.	12 1/2 Ave. to 13th Ave.	Widen from 2 to 4 lanes w/ median	2021	\$1,750
W. Lacey Blvd.	At 12 1/2 Ave	Install Traffic Signals	2021	\$500
Redington St.	Lacey Blvd. to Grangeville Blvd.	Rehabilitate / Overlay	2022	\$600
Fargo Ave.	BN&SF to 12th Ave.	Widen from 2 to 4 lanes w/ left turn pockets	2022	\$1,000
Grangeville Blvd.	12th Ave. to 13th Ave.	Widen from 2 to 4 lanes w/ left turn pockets	2023	\$2,000
Grangeville Blvd.	12th Ave. to 13th Ave.	Install Traffic Signals and Pedestrian Facilities	2023	\$1,000

**FIGURE 4-32**  
 Continued  
**CITY OF HANFORD REGIONAL ROUTE IMPROVEMENTS**  
**2023/24 - 2037/38**  
**(Financially Constrained)**

ROAD	LOCATION	IMPROVEMENT	OPEN TO TRAFFIC	Total Cost (\$000)*
Fargo Ave.	12th Ave. to 13th Ave.	Widen from 2 to 4 lanes w/ left turn pockets	2024	\$2,000
Fargo Ave.	12th Ave. to 13th Ave.	Install Traffic Signals and Pedestrian Facilities	2024	\$1,000
Grangeville Blvd.	11th Ave. to 12th Ave.	Rehabilitate / Overlay	2025	\$1,000
Hfd.-Arm Rd.	12th Ave. 13th Ave.	Widen from 2 to 4 lanes w/ left turn pockets	2025	\$1,500
Hfd.-Arm Rd.	At 12th Ave	Install Traffic Signals	2025	\$500
12th Ave.	Fargo Ave. to Flint Ave.	Widen from 2 to 4 lanes w/ median	2026	\$2,000
12th Ave	Fargo Ave. to Flint Ave.	Install Traffic Signals and Pedestrian Facilities	2026	\$1,000
10th Ave.	SR 198 to Grangeville Blvd.	Rehabilitate / Overlay	2027	\$1,000
Houston Ave.	10th Ave. to 11th Ave.	Widen from 2 to 4 lanes w /median	2028	\$2,000
Houston Ave.	10th Ave. to 11th Ave.	Install Traffic Signals and Pedestrian Facilities	2028	\$1,000
10th Ave.	Grangeville to Hwy 43	Rehabilitate / Overlay	2029	\$1,000
Houston Ave.	11th Ave. to 12th Ave.	Widen from 2 to 4 lanes w/ median	2030	\$2,000
Houston Ave.	11th Ave. to 12th Ave.	Install Traffic Signals and Pedestrian Facilities	2030	\$1,000
Grangeville Blvd.	10th Ave to 9 1/4 Ave.	Rehabilitate / Overlay	2031	\$1,000
Grangeville Blvd.	9 1/4 Ave. to Hwy 43	Widen from 2 to 4 lanes w/ median	2032	\$3,000
Grangeville Blvd.	9 1/4 Ave. to Hwy 43	Install Traffic Signals and Pedestrian Facilities	2032	\$1,000
Fargo Ave.	11th Ave. to Meadow View Ln.	Rehabilitate / Overlay	2033	\$1,000
11th Ave.	Grangeville Blvd. to Fargo Ave.	Rehabilitate / Overlay	2033	\$1,000
9th Ave.	Lacey Blvd. to Grangeville Blvd.	New arterial roadway -4 lanes w/ median	2034	\$3,000
9th Ave.	Lacey Blvd. to Grangeville Blvd.	Install Traffic Signals and Pedestrian Facilities	2034	\$1,500
11th Ave.	Lacey Blvd. to Grangeville Blvd.	Rehabilitate / Overlay	2035	\$1,000
11th Ave.	Hfd-Arm Rd. to Lacey Blvd.	Rehabilitate / Overlay	2035	\$1,000
9th Ave.	Grangeville Blvd. to Fargo Ave.	New arterial roadway -4 lanes w/ median	2036	\$3,000
9th Ave.	Grangeville Blvd. to Fargo Ave.	Install Traffic Signals and Pedestrian Facilities	2036	\$1,500
11th Ave.	Hfd.- Arm. Rd. to Houston Ave.	Rehabilitate / Overlay	2037	\$1,000
11th Ave.	Houston Ave. to Idaho Ave.	Widen from 2 to 4 lanes w/ left turn pockets	2038	\$3,000
11th Ave.	Houston Ave. to Idaho Ave.	Install Traffic Signals and Pedestrian Facilities	2038	\$1,500

\*Year of Expenditure (YOE) Dollars  
 Source: City of Hanford

**FIGURE 4-33**  
**CITY OF LEMOORE REGIONAL ROUTE IMPROVEMENTS**  
**2014/15 - 2034/35**  
**(Financially Constrained)**

ROAD	LOCATION	IMPROVEMENT	OPEN TO TRAFFIC	Total Cost (\$000)*
Smith St.	Magnolia St. to Oleander Dr.	Overlay	2014	\$125
CNG Station	CNG Station	Expansion - Purchase Storage Vessel	2015	\$210
Cinnamon Dr.	19th Ave. to Hill Dr.	Bicycle/Pedestrian Facilities	2015	\$419
Skaggs and Lemoore Ave.	Intersection	Synch Pedestrian Signal	2016	\$190
Bush St. and 19 1/2 Ave.	Intersection	Install Traffic Signal	2016	\$350
Bush St. and Belle Haven Dr.	Intersection	Install Traffic Signal	2016	\$300
19th Ave. and Cedar Ln.	Intersection	Install Traffic Signal	2016	\$350
Hfd-Arm Rd. and Cinnamon Dr.	Intersection	Install Traffic Signal	2017	\$400
Fox St. and Cinnamon Dr.	Intersection	Install Traffic Signal	2017	\$400
19th Ave.	Bush St. to Cedar Ln.	Overlay	2018	\$100
Bush St.	19 ½ Ave. to 19th Ave.	Overlay	2019	\$125
C St.	Olive St. to Hill St.	Overlay	2020	\$56
Cedar Ln.	19th Ave. to Mallard	Overlay	2020	\$75
Cinnamon Dr.	Basil St. to Daphne Ln.	Overlay	2021	\$120
Vine St.	Bush St. to SR 198	Overlay	2022	\$106
Hickory Dr.	Vine St. to Oakdale Lane	Overlay	2022	\$25
Silverado Dr.	19th Ave. to Marin Dr.	Overlay	2023	\$60
Olive Ave.	B St. to Redwood Ln.	Overlay	2023	\$65
Oakdale Ln.	Vine St. to Lum Ave.	Overlay	2024	\$60
E St.	Fox St. to D St.	Overlay	2024	\$60
W. Deodar Ln.	Spruce Ave. to Glendale Ave.	Overlay	2025	\$100
S Byron Ave.	Bush St. to south end	Overlay	2025	\$45
Cambridge Dr.	Bush St. to Olive St.	Overlay	2026	\$75
E. D St.	Lemoore Ave. to Smith St.	Overlay	2026	\$50
W. Burlwood Ln.	Lemoore Ave. to Juniper Ln.	Overlay	2027	\$90
Bush St.	Lemoore Ave. to D St.	Overlay	2028	\$165
W. D St.	Bush St. to Olive St.	Overlay	2029	\$200
Hanford Armona Rd.	Lemoore Ave. to Liberty Dr.	Overlay	2030	\$200
Hanford Armona Rd.	Liberty Dr. to 19th Ave.	Overlay	2031	\$175
Hanford Armona Rd.	19th Ave. to SR 41	Overlay	2032	\$200
Iona Ave.	Vine St. to 19th Ave.	Overlay	2033	\$200
Lemoore Ave.	SR 198 to Bush St.	Overlay	2034	\$200
Lemoore Avenue	UPRR to Cinnamon Dr.	Overlay	2035	\$200

\*Year of Expenditure (YOE) Dollars  
Source: City of Lemoore

E. PERFORMANCE MEASUREMENT

The RTP Guidelines states that each RTPA should define a set of “program level” transportation system performance measures, which reflect the goals and objectives adopted in the RTP, to be used to evaluate and select plan alternatives. The Guidelines also identify the requirements for “performance-based” planning. KCAG staff reviewed the requirements and prepared an analysis of the following performance measures recommended by the California Transportation Plan 2035 and the Smart Mobility 2010 for capacity-increasing projects. Staff identified the criteria that should be applied to evaluate performance of the transportation system, the “desired outcomes” for the transportation system, to be addressed in the RTP:

- Mobility/Accessibility
- Sustainability
- Safety and Security
- Reliability
- Economic Well Being
- Equity
- Cost-Effectiveness
- Environmental Quality
- Customer Satisfaction

KCAG has developed a system for ranking or prioritizing transportation projects. The system was prepared by staff for assigning priorities to state highway projects and other street and highway projects within the region. It attempts to quantify factors which ordinarily require subjective judgments and provides a checklist for use in reaching decisions on project priorities. The standards and methodology for applying standards to identify priorities for road construction projects in Kings County are described below. The prioritization system includes a comprehensive list of standards, which can be applied to specific roadway projects in order to derive a priority for implementation. Specific standards are identified for each objective, a system of measurements discussed and alternatives proposed. Five objectives and their associated standards were established for the prioritization system.

- Create an Integrated and Balanced Road System Serving Community Needs
- Obtain Maximum Improvement in Traffic Flow and Safety
- Creates Minimum Adverse Environmental Effects
- Minimize the Disruptive Consequences of the Project
- Give a Desirable Benefit to Cost Ratio

A 5-point system was devised to measure the degree to which each standard has been attained. Experience in applying the system may indicate areas where adjustment is required or where precise measures are possible. Evaluation of noise levels by type of land use is to be related to the standards adopted in the Noise Element of the general plan for the local jurisdiction.

As the Kings Region will not receive any STIP funding for highway expansion projects for the first term of the 2014 RTP, the performance evaluation process is being re-evaluated to identify the appropriate candidate RTP projects for funding in the next RTP. Figure 4-34 explains the current performance measures.

**FIGURE 4-34**

**PRIORITIZATION SYSTEM FOR HIGHWAY TRANSPORTATION PROJECTS**

OBJECTIVE	STANDARDS	POINT SYSTEM	
<p><b>Create an Integrated and Balanced Road System Serving Community Needs</b></p>	<p>Consistent with the RTP and transportation elements of the adopted General Plan.</p>	<p>4-5 Pts. – Included in RTP and/or local transportation elements of adopted General Plans. Extra priority given to projects with pedestrian/bicycle facilities. 2-3 Pts. – Not included in any adopted plan, but is on the local/minor street system or provides “spot” improvement. 1 Pt. – Not included in any adopted plan.</p>	
	<p>Supports or is consistent with the land use element of the adopted General Plans and the Blueprint Smart Growth Principles.</p>	<p>4-5 Pt.s – Provides needed service to areas designated for immediate development. 2-3 Pts. – Provides needed service to already developed areas. 1 Pt. – Not consistent with adopted General Plans.</p>	
	<p>Facilitates transit, truck, aviation, rail, bicycle and pedestrian modes of travel.</p>	<p>4-5 Pts. – Includes provisions for more than one alternative transportation mode. 2-3 Pts. – Includes provisions for one alternative transportation mode. 0 Pt. – No provisions for alternate transportation modes.</p>	
	<p><b>Obtain Maximum Improvement in Traffic Flow and Safety</b></p>	<p>Is constructed to standards commensurate with expected travel demands.</p>	<p>4-5 pts. – Increases level of service from projected levels D, E, and F. 2-3 Pts. – Increases level of service from projected levels B and C. 1 Pt. – Does not increase level of service.</p>
		<p>Accommodates the greatest number of vehicle trips for the money spent.</p>	<p>4-5 Pts. – Highest projected traffic volume per dollar cost of project. 2-3 Pts. – Next highest projected traffic volume per dollar cost of project. 1 Pt. – Lowest projected traffic volume per dollar cost of project.</p>
		<p>Provides greatest reduction in accident rates.</p>	<p>4-5 Pts. – Accident history greater than 2 times State average. 2-3 Pts. – Accident history one to two times State average. 1 Pt. – Accident history less than State average or no existing roadway.</p>
		<p>Eliminates potentially hazardous conditions such as inadequate roadway geometrics and poor structural conditions.</p>	<p>4-5 pts. – Existing roadway below minimum geometric and structural standards. 2-3 Pts. – Existing roadway below minimum geometric or structural standards. 1 Pt. – Existing roadway not below minimum standards.</p>
		<p>Provides relief for other portions of the road system or reduces traffic on residential or minor streets.</p>	<p>4-5 Pts. – Diverts traffic from other streets and highways thereby improving traffic conditions on alternate routes. 2-3 Pts. – Diverts traffic from other streets and highways without improving traffic conditions on alternate routes. 1 Pt. – Does not divert traffic.</p>

**FIGURE 4-34**  
(Continued)

**PRIORITIZATION SYSTEM FOR HIGHWAY TRANSPORTATION PROJECTS**

<b>OBJECTIVE</b>	<b>STANDARDS</b>	<b>POINT SYSTEM</b>
<b>Promotes Positive Overall Physical Environment.</b>	Minimizes impact on trees, plants, and wildlife.	4-5 Pts. – Greater than 1,000 feet from areas containing rare/endangered plants or wildlife species.
		2-3 Pts. – Within 1,000-3,000 feet of areas containing rare/endangered plants or wildlife species.
		1 Pt. – Within 1,000 feet of areas containing rare/endangered plants or wildlife species.
	Minimizes impact on air pollution.	4-5 Pts. – Decreases concentrations of vehicle emissions.
		2-3 Pts. – No identifiable impact on vehicle emissions.
		1 Pt. – Increases concentrations of vehicle emissions.
	Minimizes impact of noise pollution.	4-5 Pts. – Produces acceptable noise levels.
		2-3 Pts. – Produces somewhat acceptable noise levels.
		1 Pt. – Produces unacceptable noise levels.
	Minimizes impact of water pollution.	4-5 Pts. – Decreases water pollution levels.
		2-3 Pts. – No identifiable impact on water pollution.
		1 Pt. – Increases water pollution levels.
	Minimizes disruption to natural beauty.	4-5 Pts. – Opens up new vistas or restores natural beauty.
		2-3 Pts. – No identifiable impact on natural beauty.
		1 Pt. – Destroys natural beauty.
<b>Minimize the Disruptive Consequences of the Project</b>	Minimize number of residential units disrupted.	5 Pts. – No residential dwelling units dislocated.
		2-4 Pts. – Dislocates between 1 and 10 residential dwelling units.
		1 Pt. – Dislocates greater than 10 residential dwelling units.
	Minimizes disruption of historical sites, cultural and social characteristics of the community.	4-5 pts. – Does not disrupt or have adverse impact on cultural, historic or social characteristics of special community value.
		2-3 pts. – Does not disrupt but has possible adverse impact on cultural, historic or social characteristics of special community value.
		1 Pt. – Disrupts cultural, historic or social characteristics of special community value.
	Creates minimum adverse economic effect on the community.	5 Pts. – Creates no adverse economic effect. No commercial/industrial buildings dislocated.
		2-4 Pts. – Some adverse economic effect. Dislocates between 1 and 10 commercial/industrial buildings.
		1 Pt. – Substantial adverse economic effect. Dislocates more than 10 commercial/industrial buildings.
<b>Give a Desirable Benefit to Cost Ratio</b>	Give a benefit-cost ratio greater than 1.0.	5 Pts. – Benefit-Cost ratio greater than 2.0.
		2-4 Pts. – Benefit-Cost ratio between 1.0 and 2.0.
		1 Pt. – Benefit-Cost ratio less than 1.0.

**F. INTELLIGENT TRANSPORTATION SYSTEMS**

Intelligent Transportation Systems (ITS) is the application of advanced information processing, communications, vehicle sensing, and traffic control technologies to the surface transportation system. The objective of ITS is to promote more efficient use of the existing highway and transportation network, increase safety and mobility, and decrease the environmental impacts of congestion.

Intelligent Transportation Systems represent a means of applying new technological breakthroughs in detection, communications, computing, and control technologies to improve the safety and performance of the surface transportation system. This can be done by using the technologies to manage the transportation system to respond to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles. ITS includes Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), Advanced Public Transportation Systems (APTS), Advanced Vehicle Control Systems (AVCS) and Commercial Vehicle Operations (CVO).

Applications of ITS technologies allow the monitoring of traffic conditions and the dynamic adjustment of traffic signals to reduce unnecessary delay, the automated collection of transit fares and advanced detection and television cameras to detect, assess and respond to traffic accidents and incidents. In the future, ITS technologies will automate transit fare collection and parking payments, use vehicle location systems to track trains and buses to give users “real time” arrival and departure information, as well as use onboard systems to detect and avoid collisions.

Specifically in Kings County, poor visibility due to fog, blowing dust and large percentages of truck traffic all contribute to the growing concerns about highway safety. Tule fog, a problem throughout the entire Central Valley region, has caused some of the worst accidents in the state involving dozens of vehicles. Accidents of this nature have closed Interstate 5 and State Route 99 for hours at a time. Blowing dust related directly to seasonal agriculture can cause similar difficulties for travelers.

Kings County has identified several opportunities for deployment of ITS technology including:

- Provide improved safety and mobility along east-west highways such as SR-198 using CMS and other ITS applications.
- Build on City of Hanford’s traffic management capabilities, including coordination with Caltrans.
- Continue to add newly purchased vehicles to the AVL system for Kings Area Rural Transit (KART).
- Improve safety at rural railroad crossings using ITS applications.
- Provide commercial vehicles with improved information in the I-5 corridor related to routes, facilities and parking within the County.
- Enhance the safety and capacity of Highway 43 as an alternate route to SR-99/I-5 using ITS applications.

The 2014 RTP and the projects inclusive are consistent, as to the extent practicable, with the regional ITS architecture.

## V. ENVIRONMENTAL JUSTICE

Environmental justice is a term used to help ensure equal protection under the country’s laws. KCAG’s goal is to ensure that all people, regardless of race, color, national origin or income, are protected from disproportionate negative or adverse impacts due to the program of projects listed in the 2014 Regional Transportation Plan.

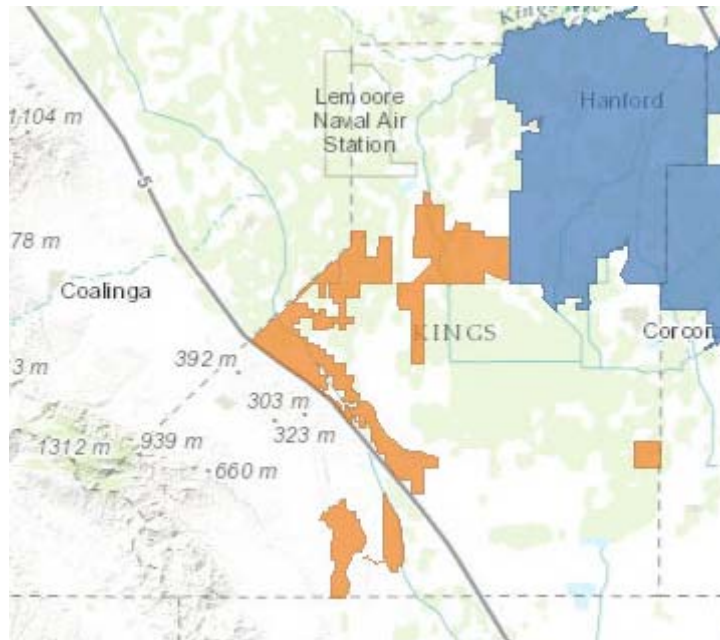
KCAG’s transportation decision making process has an inclusive approach to consider the human environment and the adverse impacts transportation projects may have. This agency also looks at safety and mobility, which are key elements in achieving environmental justice. KCAG approaches and resolves transportation decision making by:

- Meeting the needs of all people.
- Planning transportation facilities that fit into communities.
- Increasing the involvement with the public.
- Analyzing potential impacts on minority and low-income populations by accessing, monitoring, and improving data collections.
- Connecting with other public and private programs to achieve common vision for communities.
- Preventing high and adverse impacts on minorities and low-income populations.
- Identifying and mitigating concerns that the public might have which benefit or affect communities and/or neighborhoods.

The CalEnviroScreen 1.1 tool is a screening methodology, developed by the California Environmental Protection Agency and the Office of Environmental Health Hazard Assessment, that can be used to help identify communities that are disproportionately burdened by multiple sources of pollution. It is also used as a tool in identifying communities that are eligible for specific funding programs. Using this tool, Figure 4-35 is a map of the results for the highest scoring zip codes within the Kings County area.

**FIGURE 4-35**

**CalEnviroScreen 1.1 Kings County Results: Highest Scoring Zip Codes:**



Source: <http://www.oehha.ca.gov/ej/ces11.html>  
Blue shading = Top 5% of Statewide Zip Codes  
Orange shading = Top 6 – 10% of Statewide Zip Codes

Due to the increasing population, the majority of Kings County residents use and/or commute on SR 198, making this a densely populated highway resulting in congestion and accidents. For commuters continuing to use SR 198, changes are needed to reduce the possibilities of congestion and traffic accidents. Two projects are listed in this RTP's short-range plan shown on Figure 4-23 and 4-24. The purpose for these projects is to alleviate future congestion and to improve safety and traffic operations of these facilities.



A. 19th Avenue Interchange

Caltrans, in cooperation with the City of Lemoore, proposed the construction of an interchange on SR 198 at 19th Avenue. The interchange includes an overcrossing for 19th Avenue with on and off ramps in each direction for access between State Route 198 and 19th Avenue. In addition, on State Route 198, auxiliary lanes will be added east of State Route 41 to 18 ½ (Vine) Avenue and at-grade access at 18 ½ (Vine) Avenue will be eliminated and replaced with cul-de-sacs for turnarounds. Iona Ave., west of 19th Ave., will be modified for right of way access.

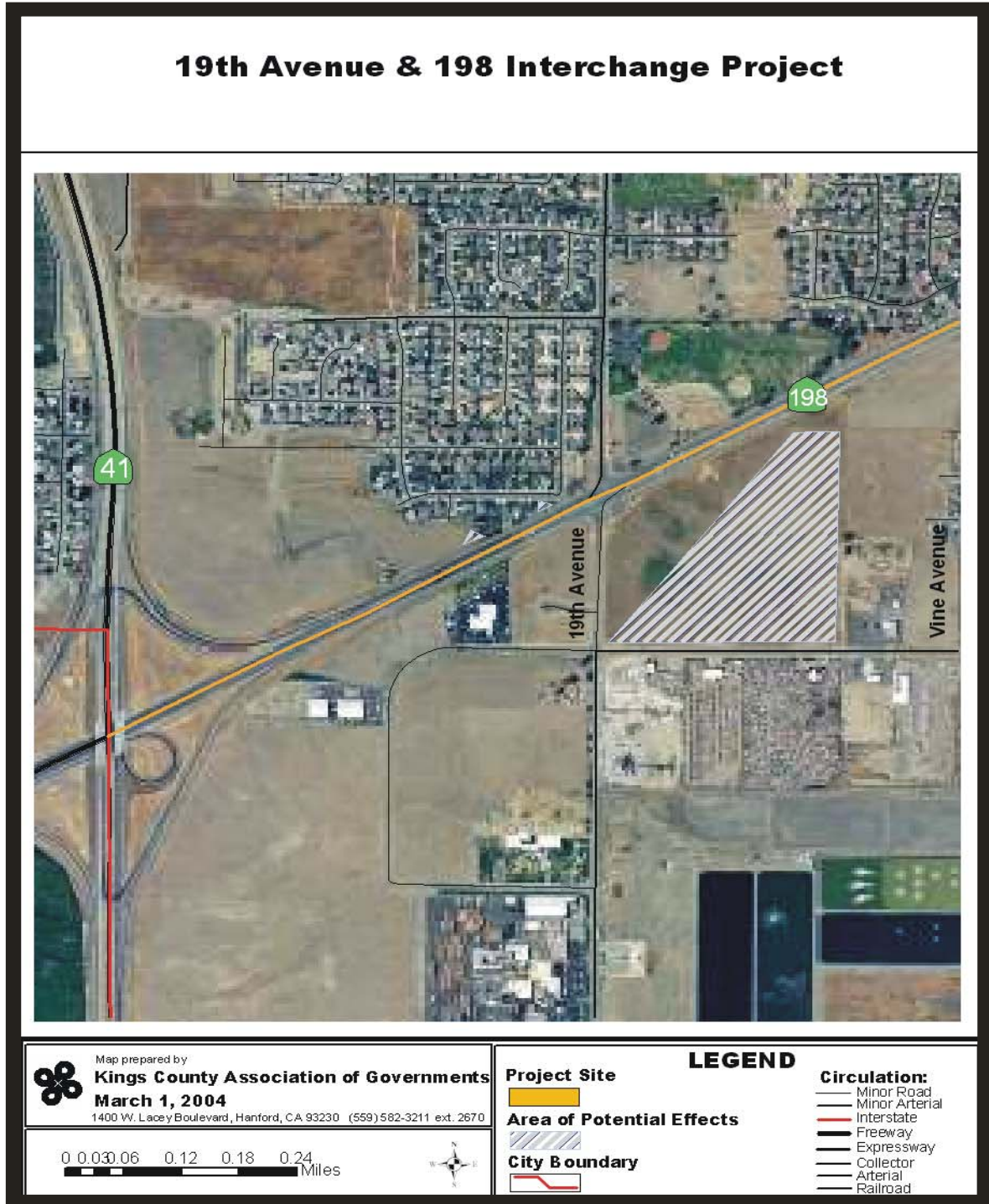
In order to comply with the Environmental Justice procedures, Caltrans researched the demographics of the project area to determine and compare those of minority or low-income populations. Caltrans discovered that in the Kings County Census Tracts of 4.02, 4.04, and 4.05 would be the Tracts affected by the by the 19th Avenue Interchange project.

No minority or low-income populations have been identified within the project limits, therefore, the project would have no adverse effect on minority or low-income populations. Spanish-speaking residents from a low-income housing development located just southeast of the project area on Iona Ave. and 18 ½ Avenue attended the March 2002 Open House/Information Meeting. Their comments expressed concerns for a safer pedestrian crossing over SR 198. As the project is currently designed, sidewalks would be constructed on the 19th Ave. overcrossing. Therefore, this identified minority and low-income population would benefit from the project's safer pedestrian and bicycle access across State Route 198.

Other permanent impacts that may be associated with the project include:

- The City of Lemoore relocating the BMX Park to the city limits which could be an inconvenience.
- The Alvia Field parking lot, located on 19th Ave. would be reduced and modifications towards sports facility requiring re-alignment of the football/soccer field.
- An increase in traffic and noise stemming from the Alvia Field may be expected although the pedestrians living south of SR 198 would be provided safe access on the 19th Ave. overcrossing bridge.
- Increased in truck traffic entering/exiting an industrial park to the south of SR 198 via the 19th Ave. interchange is expected.

**FIGURE 4-36**  
**Lemoore Project**



B. 12th Avenue Interchange

12th Ave. is a north/south (four lanes north of SR 198 and two lanes south of SR 198) major collector street that serves the rapidly developing community of Hanford. The existing configuration of the 12th Ave. interchange is equipped with signalized intersections and is challenged by the cumulative residential and commercial growth. Land uses in the area include major retail centers, government offices, hospital, high school, and other office and commercial developments. The area is described as a link that ties together the central business district and commercial center with the regional commercial centers of 12th Ave. and Lacey Blvd. The existing 12th Ave. interchange was built in 1985 and traffic operations at the interchange are expected to deteriorate due to the current and planned development in the area.

Four build alternatives would provide two lanes in each direction with additional north bound and south bound right-turn lanes to the on-ramps. The west bound off-ramp would have three lanes: one left, one shared left/right, and one right and the east bound off-ramp would have three lanes: two left and one right. Two of the alternatives would provide a single east bound on-ramp loop in the southwest quadrant to accommodate the projected volume of traffic entering east bound SR 198. The alternative selected includes the east bound on-ramp loop in the southwest quadrant.

The currently programmed cost of the project is \$27 million. This project includes additional right-of-way, rail road involvement, post and pre-construction environmental mitigation, and utility relocation. The environmental document for the proposed project is a Negative Declaration/Finding of No Significant Impact (ND/FONSI).

**FIGURE 4-37**  
**Hanford Project**



VI. FINANCIAL ELEMENT

The purpose of this section is to discuss funding sources to implement the highway plans. This section will briefly sketch the financial outlook for transportation projects and develop revenue projections for a twenty-year period.

The financial estimates and projections are consistent with the estimates and projections of state and federal revenues as provided by Caltrans and the Federal Highways Administration.

A. FUNDING SOURCES FOR STREETS AND HIGHWAYS

1. Federal Funds

The Moving Ahead for Progress in the 21st Century (MAP-21) has continued some of the programs created by the Intermodal Surface Transportation Efficiency Act of 1990 and modified or eliminated others for which federal funds are to be apportioned. (See Chapter 11). These include:

a. Regional Surface Transportation Program

The Regional Surface Transportation Program (RSTP) replaced the Federal-Aid Secondary and Federal-Aid Urban programs under the previous Federal Highway Act.

SB 1435 (Chapter 1177, Statutes of 1992) established statutory provisions necessary to pass-through STP funds to regional/local agencies as Regional STP funds by making changes in the Streets and Highways Code. Section 182.6(g) of the Code allows certain regional transportation planning agencies (RTPA) the opportunity to exchange all of their Federal STP funds for State funds. Section 182.6(h)(1) allows the unincorporated county entities, represented by the RTPA, to exchange their suballocation for State funds in the event the RTPA does not elect to do so. Exchanged funds received may be used for any Article XIX purpose including maintenance, equipment purchases, administration and construction.

Projects to be funded from Section 182.6(d)(1) are to be nominated by cities, counties, transit operators and other transportation agencies through a process that directly involves local government representatives. Funds are to be apportioned on a fair and equitable basis based upon an annually updated five-year average of allocations.

All Federal STP allocations received have been exchanged for non-federal State funds and it is expected that the future allocations of STP funds will also be exchanged for State funds.

b. Congestion Mitigation and Air Quality

Congestion Mitigation and Air Quality (CMAQ) program funds are allocated to metropolitan planning organizations (MPO) in designated non-attainment areas such as the San Joaquin Valley Air Basin. These funds are to be directed toward transportation projects that will contribute to meeting air quality standards in non-attainment areas for ozone, carbon monoxide, and particulate matter. Priority is to be given to implementing those projects that have documented emissions reductions associated with them and are included in the approved State Implementation Plan (SIP) for air quality as a transportation control measure (TCM).



CMAQ funds are suballocated by the state based on criteria pollutant rating and population. These funds are programmed by KCAG in the Federal Transportation Improvement Program (FTIP) for transit and roadway eligible projects such as traffic signals to reduce vehicle congestion and vehicle emissions, bicycle and pedestrian facilities, surface treatments to roads for the reduction of particulate matter and the construction of CNG fueling facilities and conversion of public agency fleet vehicles to CNG.

c. Highway Bridge Program

The Highway Bridge Repair (HBP) program is an 80% matching program available to fund local bridge projects on a discretionary basis. Caltrans, through its biennial bridge inspection program, establishes a list for each county of the five worst bridges in need of replacement or rehabilitation. One bridge from this list is selected each year by the local agency to be funded with HBP funds.

d. Highway Safety Improvement Program (HSIP)

This is a formula program to the state, but a competitive program managed by Caltrans for the regions and local agencies. HSIP remains largely as it was under SAFETEA-LU, supporting projects that improve the safety of road infrastructure by correcting hazardous road locations, such as dangerous intersections, or making road improvements. HSIP has also absorbed the High Risk Rural Roads (HRRR) and the Rail-Highway Grade Crossing Program. Funding for this program is based on existing programming.

e. Section 130 Highway/Railroad Grade Crossing Improvement Program

The purpose of this program is to reduce the severity and number of accidents by eliminating hazards at existing railroad crossings. Each year the California Public Utilities Commission is required to furnish a list of railroad/highway projects most urgently in need of separation or alteration. Eligible projects are for the installation of signs and pavement markings, installation or upgrading of active warning devices, and crossing illumination.

The multi-year plan for the administration of the Section 130 Highway/Railroad Grade Crossing Improvement funds includes several projects for Kings County jurisdictions.

f. Transportation Alternatives Program

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 California Active Transportation Program (ATP) explained below. Under MAP-21 regions the size of KCAG are to receive 10% of the state apportionment. However, there are no guarantees of funding to any region that does not include an urbanized area of 200,000 or more.

2. State Funds

The three main sources of revenue for the State Highway Account, gasoline and diesel taxes, truck weight fees, and driver's license and vehicle registration fees.

a. Gas Tax

In March 2010 the California legislature repealed the sales tax on gasoline and increased the excise tax and required that the tax be indexed annually. The same legislation changed the way the program was administered. Revenues from the state excise tax on gasoline and diesel fuel apportioned to cities and counties for FY 2013/14 will total about \$1.8 billion. The remaining funds from the tax swap will be used to pay transportation bond debt service. The State Constitution limits the use of these revenues to specific transportation purposes. These include constructing, maintaining, and operating public streets and highways, acquiring right-of-way and constructing public transit systems. These revenues are also used for mitigating the environmental effects of these facilities.

The annual apportionments from the State Highway Account are codified in the Streets and Highways (S & H) Code, beginning at Section 2101. The annual apportionments will not be consistent across the years due to the requirement for indexing the excise tax annually. The main sections are:

- 2103: Apportionments to counties and cities
- 2104: Annual apportionments among counties
- 2105: Apportionments to counties and cities
- 2106: Apportionments to counties and cities
- 2107: Apportionments to cities
- 2108: To the State Highway Account

The manner in which the gasoline and diesel fuel taxes are distributed is shown in Figure 4-38.

**FIGURE 4-38**

**CALIFORNIA VEHICLE FUEL TAX APPORTIONMENT  
Cents Per Gallon**

STREET AND HIGHWAY CODES	AGENCY	GASOLINE ¢	DIESEL ¢	Total Allocations (1000s)
2103	Counties	75% Reg Veh/ 25% miles		\$439,010
2103	Cities	Per capita		\$439,010
2104	Counties	2.035	1.80	\$308,827
2105	Counties/Cities	11.5% of tax over 9.0	11.5% of tax over 9.0	\$173,000/\$173,000
2106	Counties/Cities	1.040	-----	\$33,275/\$124,553
2107	Cities	1.315	2.59	\$200,916
2108	State	4.610	4.61	
<b>TOTAL</b>		<b>17.000</b>	<b>17.00</b>	<b>\$954,112/\$937,479</b>

Section 2103 – Gasoline Sales Tax – Excise Tax Swap

- Repealed the state sales tax on gasoline
- Increased the excise tax on gasoline by 17.322 cents and added an annual indexing requirement

- Increased sales tax on diesel by 1.75 percent and allocates 75% to local transit and 25% to state transit programs.
- The excise tax on diesel was reduced to 13.6 cents pre gallon and redirects all diesel taxes to transit programs.

Section 2104 - An annual apportionment to counties:

- for engineering and administrative costs.
- Snow removal funds (Kings County not eligible).
- for heavy rainfall and storm damage (Kings County not eligible).
- for streets, roads and public mass transit guideways and facilities
- Kings County apportionment for FY 2013/14 is \$1,046,636.

Section 2105 - Apportionment of additional revenues to cities and counties:

- a. 11.5% of the revenues derived from a per gallon tax over 9 cents per gallon allocated to cities and the same amount to counties based on each county's receipt of funds under Sections 2104 and 2106, based on each county's proportion of registered vehicles in the state, and each county's proportion of maintained road mileage in the state.
- b. 11.5% of the revenues derived from a per gallon tax over 9 cents per gallon apportioned to each city and county in proportion to the city's share of the population of all the cities in the state.

Section 2106 - Apportionment to cities and counties.

- a. \$400 per month to each city and \$800 per month to each county.
- b. For each calendar year specified, an amount is transferred to the Bicycle Transportation Account: CY 2004 and thereafter - \$5,000,000.
- c. The balance of the fund is apportioned between the county and cities according to various computations involving population, assessed valuation of tangible property, and apportionments for fee-paid and exempt vehicles.

Section 2107 - Apportionment to cities.

- a. Snow removal funds for eligible counties.
- b. The balance of the fund is allocated to each city in proportion to the city's share of the population of all the cities in California.

Section 2107.5 - Apportionment to cities.

- a. To be used for engineering and administrative expenses only. Annual allotments range from \$1,000 for a city of less than 5,000 persons to over \$20,000 for a city of over 500,000 persons.



Section 2108 - State Highway Account.

- a. The balance of the money after making the apportionments or appropriations pursuant to Sections 2103 to 2107.7, is transferred to the State Highway Account for expenditure on state highways and for exclusive public mass transit guideway projects.

**FIGURE 39**

**HIGHWAY USER TAX: FY 2013/14 Apportionments**

Agency	Streets and Highways Code Sections					TOTAL Base	Prop 42 2103	TOTAL Apport.
	2104	2105	2106	2107	2107.5			
Kings Co.	1,046,636	893,875	199,988	0	0	2,140,499	2,688,761	<b>4,829,260</b>
Avenal	0	80,700	67,608	99,171	4,000	251,479	225,559	<b>477,038</b>
Corcoran	0	125,590	102,545	154,335	6,000	388,470	351,027	<b>739,497</b>
Hanford	0	265,785	211,656	326,618	7,500	811,559	742,874	<b>1,554,433</b>
Lemoore	0	122,764	100,346	150,863	6,000	379,973	343,129	<b>723,102</b>

3. Local Funds

a. Transportation Development Act (TDA)

The Transportation Development Act of 1971 instituted a regular funding source for various local transportation programs. Special emphasis is given to local transit systems. TDA funds are derived from the statewide sales tax. One-quarter of one cent of the 7 ¼ cent sales tax collected in Kings County is returned to KCAG for apportionment among eligible recipients through the Local Transportation Fund (LTF).

According to Section 99400 of the Public Utilities Code, LTF funds may be used for streets and roads only after: 1) RTPA planning and administration costs have been deducted; 2) the RTPA conducts public hearings to assess bicycle and pedestrian needs (§99234 P.U.C.); and 3) the TPC conducts public hearings to determine the extend to which LTF funds are needed to meet reasonable unmet public transit needs.

Approximately \$3,500,000 of LTF revenue becomes available each year in Kings County. Of this amount, about 40 percent is normally directed to support the Kings Area Rural Transit (KART) and Corcoran transit services. After deduction for administrative costs, the remaining available dollars are used for local street and road purposes. Apportionment is made according to the latest Department of Finance population estimates.

Remaining TDA funds are distributed back to counties through the State Transit Assistance (STA) Fund. These funds can only be used for transit purposes and are used to support KART and Corcoran Dial-a-Ride.

b. General Fund

Normally, a portion of local street and road revenues are drawn from the jurisdiction's general fund. Typical sources are property taxes, fees, interest, and sales taxes. For counties this could include vehicle "in lieu" registration apportionments from the state, and federal revenue-sharing funds. Another source cities and counties may use are fines and bail forfeitures collected in municipal or justice courts.

Normally, these funds are not restricted in use and may be programmed at the discretion of the local legislative body. Because of competing public service demands, dollars budgeted for roads will vary from year to year. For information on which local agencies receive any of these funds, check with the local agency.

c. Street Assessment Levies

Pursuant to the Improvement Act of 1911 and similar legislation, local agencies are able to provide various public works through the creation of special assessment districts. If benefited residents are willing to attach the cost of improvements to their property taxes, this device can generate needed revenue for improvements. The fact that the landowners are billed exclusively for their improvements generally limits special levies to one-time projects rather than to roads which require continuing maintenance. In Kings County, these districts are normally used to supply water or sewer lines, curbs, gutters, sidewalks, and street lights.

d. Transportation Impact Fees

The City of Hanford passed an ordinance in 1990 that established a transportation development impact improvement fee for all new developments within the city's General Plan boundary area. This impact fee will help mitigate the transportation, traffic, and air quality impacts caused by new development by financing 70% of the cost of public transportation system facility improvements. The improvements may include right-of-way acquisition, roadway construction, traffic signalization, and street expansion improvements.

The fee was based on determining the cost of improvement projects needed to support the projected population growth and the projected number of new trips per day generated by the growth. The total cost per each new trip per day is applied to the number of trips generated per use, as determined in the Institute of Transportation Engineers (ITE) Trip Generation Manual.

Since 1992, the City of Lemoore has maintained Development Impact Fees for City traffic-related infrastructure needs directly attributable to new development. These fees have been indexed in time with the California Construction Cost Index, as costs for the identified project have increased over time. As part of a citywide study in 2005, it was determined that the separate fees should be determined for areas with significantly different existing infrastructure: the mostly-developed portion of the City east of 19 ½ Avenue, and the almost undeveloped western portion of the City. The Eastside Streets and Thoroughfares Fee was adopted in 2006; the Westside Streets and Thoroughfares Fee is currently the subject of a new study, and was adopted in November 2010. In keeping with the Mitigation Fee Act, the collected fees are used exclusively for new infrastructure, and never used for maintenance of existing or upgrading of existing deficiencies in the infrastructure level.

e. Local Sales Tax Measure

Kings County could place a measure on a ballot to impose a local sales tax of up to 1% for not longer than 20 years, to fund projects in an approved expenditure plan for state highway projects, local streets and roads, transit and other transportation related projects. It is estimated that a ½ % local sales tax over a 20 year period could generate \$114 million to finance local transportation projects in Kings County. Proposed 1999 state legislation (SCA 3 and SB 1155) would have allowed for a 2000 ballot measure and expenditure plan. Recently, the state legislature has begun considering changing the 2/3 voter-approval requirement for local transportation taxes to a 55% majority vote.

f. Local Option Fuel Taxes

As authorized by state legislation, voters in each county have the option of approving a local tax on gasoline and diesel fuel, in one-cent increments per gallon. Such a tax could provide a significant source of revenue in Kings County.

Caltrans estimates that 66,100,000 gallons of motor fuel were consumed in Kings County in 2000. Calculating a two-cent tax per gallon yields about \$1,322,000 in revenue.