2007

Regional Transportation Plan

The Long-Range Transportation Vision
for the Fresno County Region
for the Years 2007 to 2030

Prepared by

Council of Fresno County Governments

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Reference Summary of Common Abbreviations

ADT	Average Daily Traffic
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CHP	California Highway Patrol
CMAQ	Congestion Mitigation/Air Quality program
CNG	Compressed Natural Gas
COFCG	Council of Fresno County Governments
CTC	California Transportation Commission
CTSA	Consolidated Transportation Service Agency
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAX	Fresno Area Express
Fresno COG	Council of Fresno County Governments
FCEOC	Fresno County Economic Opportunities Commission
FCMA	Fresno-Clovis Metropolitan Area
FCRTA	Fresno County Rural Transit Agency
FCTA	Fresno County Transportation Authority
FHWA	Federal Highway Administration
FY	Fiscal Year
GIS	Geographic Information Systems
GPS	Global Positioning Satellite
HOV	High Occupancy Vehicle
ISTEA	Intermodal Surface Transportation Efficiency Act
ITS	Intelligent Transportation System
LNG	Liquid Natural Gas
LTF	Local Transportation Fund
Measure “C”	Fresno County’s self imposed 1/2% sales tax
MOU	Memorandum of Understanding
MPO	Metropolitan Planning Organization
NAAQS	National Ambient Air Quality Standard
OWP	Overall Work Program
PAC	Policy Advisory Committee
RSTP	Regional Surface Transportation Program
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SAFETEA-LU	Safe, Accountable, Flexible and Efficient Transportation Equity Act: A Legacy for Users
Section 16(b)(2)	Former Federal Transit Administration Non-Profit Elder & Disabled Capital Fund Program
Section 5310	Current Federal Transit Administration Non-Profit Elderly & Disabled Capital Fund
Section 18	Former Federal Transit Administration Rural Capital & Operating Fund Program
Section 5311	Current Federal Transit Administration Rural Capital & Operating Fund Program
Section 5311(f)	Current Federal Transit Administration Inter-City Bus Funding Program
SHOPP	State Highway Operation and Protection Program
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Unified Air Pollution Control District\
SMSA	State Metropolitan Statistical Area
SOV	Single Occupant Vehicle
SRTP	Short Range Transit Plan
SSTAC	Social Services Transportation Advisory Council

STA	State Transit Assistance
STIP	State Transportation Improvement Program
TCM	Transportation Control Measure
TDA	Transportation Development Act
TEA	Transportation Enhancement Activities program
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TEALU	Transportation Equity Act, a Legacy for Users
TSM	Transportation Systems Management
TTC	Transportation Technical Committee
VMT	Vehicle Miles Traveled

Chapter 1
San Joaquin Valley Regional Transportation Overview

1.1 Executive Summary

This chapter provides an interregional perspective to transportation planning within the San Joaquin Valley of California, consisting of the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Tulare, Kings, and the San Joaquin Valley portion of Kern County. This chapter addresses several issues of regional and interregional importance including air quality, highways, streets and roads, aviation, rail, goods movement and bicycle efforts. The purpose of this chapter is to provide a broad overview of issues that cross jurisdictional boundaries.

1.1.1 Valleywide Planning

The recently approved Safe, Accountable, Flexible, Efficient Transportation Act: A Legacy for Users (SAFETEA-LU) replaced the TEA-21 as the funding for major infrastructure investment for transportation improvements. SAFETEA-LU funds are directed toward projects and programs for a broad variety of highway and transit work through several funding components including: Surface Transportation Program (RSTP), Congestion Mitigation and Air Quality (CMAQ), Transportation Enhancements, Safety Program, Rail Program and Emergency Relief Programs. Previous federal legislation included the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21). Transportation planning efforts are directed to be coordinated in geographically defined air basins. The eight counties mentioned above share an air basin and have many attributes in common. There are also significant differences in the context of transportation planning. The eight San Joaquin Valley counties have already implemented an aggressive program of coordinated Valleywide planning.

In September of 1992, the eight Valley Regional Transportation Planning Agencies (RTPAs) entered into a memorandum of understanding (MOU) to ensure a coordinated regional approach to transportation and air quality planning efforts. The MOU was revisited in 2006 to update and solidify the partnership. The MOU goes well beyond the requirements of state and federal transportation planning acts by establishing a system of coordination of plans, programs, traffic and emissions modeling, transportation planning, air quality planning, and consistency in data analysis/forecasting. Development of the MOU and the ongoing process of coordinated planning have improved an already close working relationship between the eight Valley RTPAs and the representatives of the California Department of Transportation (Caltrans), California Air Resources Board, San Joaquin Valley Air Pollution Control District (SJVAPCD) and the Federal Highway Administration.

Each of the areas addressed in the Valleywide MOU have been assigned to a specific RTPA to serve as a lead in the coordination of planning activities. Representatives of each of the eight agencies have been meeting regularly to coordinate the preparation of Regional Transportation Plans (RTPs), Regional Transportation Improvement Programs (RTIPs), and an aviation systems plan that involves not only the eight Valley counties but the Sacramento region as well. These cooperative efforts include both staff and financial assistance from Caltrans, California Air Resources Board (CARB), the Environmental Protection Agency and the SJVAPCD. These efforts have taken place as a voluntary response to the new issues, challenges and requirements facing the transportation planning community. The San Joaquin Valley Regional Transportation Overview represents the cooperative effort between the eight counties and their coordination in the Regional Transportation Plans.

1.2 San Joaquin Valley Profile

The San Joaquin Valley is the southern portion of the Great Central Valley of California. Geographically, the San Joaquin Valley is long and relatively narrow. The San Joaquin Valley stretches from the Tehachapi Mountains in the south to the San Joaquin Delta in the north, a distance of nearly 300 miles. The eastern boundary is the Sierra Nevada Mountains, which reach elevations of over 14,000 feet, while the western boundary is the lower coastal ranges. Total land area is approximately 23,720 square miles.

The topography is generally flat to rolling, and the climate is characterized by long, very warm summers, and short, cool winters. Precipitation is related to latitude and elevation, with the northern portions of the valley receiving approximately 12-14 inches of rain a year, while the southern portion has an annual average of less than six inches. Snow rarely falls on the Valley floor, but heavy winter accumulations are common in the Sierra Nevada Mountains.

The Valley occupies an area between the two largest metropolitan areas in California, San Francisco and Los Angeles. The major transportation facilities are Interstate 5, State Route 99, Union Pacific Railroad, Burlington Northern Santa Fe Railroad, numerous oil and natural gas pipelines, a myriad of telecommunication facilities, and air travel corridors. East to west transportation facilities are less numerous but critical to the Interregional transportation network of the West Coast and the western United States. Numerous highways and rail lines cross the Valley, including State Routes 58, 46, 152, 198, and 120 among others.

For the purposes of this report, the San Joaquin Valley is considered to include the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and Kern. Kern County straddles the Sierra Nevada Mountains and occupies a portion of the Mojave Desert. The desert portion of Kern County is within the Southeastern Desert Air Basin (see Exhibit 1-1).

One issue that the eight counties have in common is a rapidly expanding population. In 1960, the eight San Joaquin Valley counties had a population of just over 1.4 million. By 1990, their population more than doubled to nearly 3.0 million. The region experienced a 34.0 percent increase in population over the 1980s and grew at 20.4 percent in the 1990-2000 period. The San Joaquin Valley has grown faster than the state of California in each calculation period since 1960 and accounted for about 10.3 percent of the population of California in 2006 (see Exhibit 1-2).

The San Joaquin Valley will continue to develop and become more populated. Both ends of the Valley are under growth pressures from huge metropolitan areas. Kern County population growth is being influenced by the Los Angeles area, while growth in Stanislaus, San Joaquin, and Merced counties is partially due to overflow growth from the San Francisco Bay Area. Much of the residential growth observed has been caused by people searching for affordable owner-occupied housing within automobile commuting range of the large metropolitan areas.

Future population growth is also expected to be sustained and significant. Population in the eight Valley counties is projected to exceed 6 million by the year 2030, using recently released growth projections from the California State Department of Finance and other sources (see Exhibit 1-3 and Exhibit 1-4).

Air quality is a major issue in the region. Many sections of the Valley are non-attainment areas for a number of pollutants. Geographical situation, economic activity and population pressures tend to exacerbate air pollution within the region.

The San Joaquin Valley is famous for agricultural production. Nearly ideal growing conditions, reservoirs, and water distribution projects, such as the federal Central Valley Project and the State Water Project have resulted in seven of the top ten agricultural counties in the nation being in the San Joaquin Valley (Fresno, Tulare, Kern, Merced, Stanislaus, San Joaquin and Kings). Urban areas tend to be widely separated from each other and are developed at low densities. A majority of the locally developed road and rail network serves farm-to-market activity. Major transportation facilities serve as conduits between major metropolitan areas, and national recreation areas.

Exhibit 1-1
The San Joaquin Valley Counties Within the Western US

Economically, the region is tied to primary production. Agriculture production will always be a major industry because of the physical characteristics of the Valley. According to the U.S. Census Bureau's American Community Survey, the 2005 work force is structured as displayed in Exhibit 1-5. Agricultural activities, service occupations, and retail trade occupations account for over half of the employment in the San Joaquin Valley. However, direct employment in agriculture and other primary production (such as oil production - Kern County oil fields produce two-thirds of the on-shore oil recovered in California.) will continue to drop as production becomes more automated.

Educational attainment for San Joaquin Valley residents is outlined in Exhibit 1-6. San Joaquin Valley household income distribution is described in Exhibit 1-7. San Joaquin Valley age structure is outlined in Exhibit 1-8.

Exhibit 1-2
San Joaquin Valley Counties Population Growth

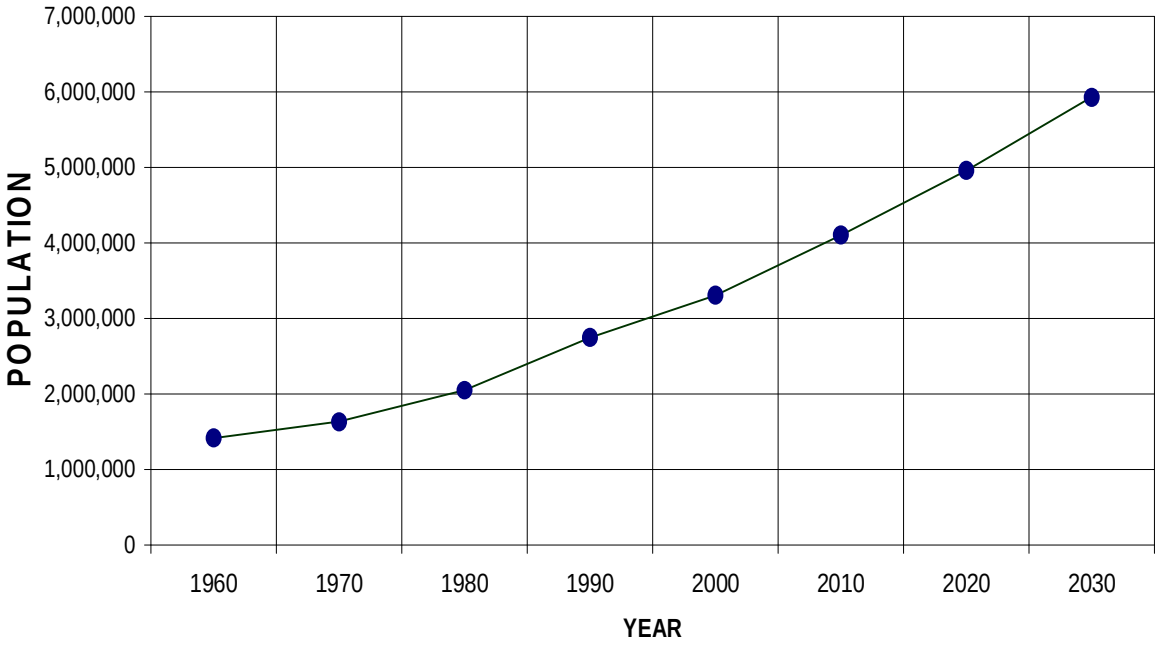
COUNTY	COUNTY SEAT	1970 POPULATION[1]	1980 POPULATION[1]	1990 POPULATION[1]	2003 POPULATION[2]
FRESNO	FRESNO	413,053	514,621	667,490	836,100
KERN	BAKERSFIELD	329,162	402,089	543,477	698,000
KINGS	HANFORD	64,610	73,738	101,469	135,100
MADERA	MADERA	41,519	63,116	88,090	129,500
MERCED	MERCED	104,629	134,560	178,403	223,800
SAN JOAQUIN	STOCKTON	290,208	347,560	480,628	607,800
STANISLAUS	MODESTO	194,506	265,900	370,522	477,900
TULARE	VISALIA	188,322	245,738	311,921	383,100
SAN JOAQUIN VALLEY TOTAL		1,626,009	2,047,322	2,742,000	3,491,300
CALIFORNIA TOTAL		19,053,134	23,667,902	29,760,021	35,336,000
S.J. VALLEY % CALIFORNIA		8.53%	8.65%	9.21%	9.88%

COUNTY	% GROWTH 1970-2003	ANNUAL % GROWTH 1970-2003	% GROWTH 1980-2003	ANNUAL % GROWTH 1980-2003
FRESNO	102.42%	2.14%	62.47%	2.11%
KERN	112.05%	2.29%	73.59%	2.40%
KINGS	109.10%	2.24%	83.22%	2.64%
MADERA	211.91%	3.48%	105.18%	3.14%
MERCED	113.90%	2.31%	66.32%	2.21%
SAN JOAQUIN	109.44%	2.25%	74.88%	2.43%
STANISLAUS	145.70%	2.74%	79.73%	2.55%
TULARE	103.43%	2.16%	55.90%	1.93%
SAN JOAQUIN VALLEY TOTAL	114.72%	2.32%	70.53%	2.32%
CALIFORNIA TOTAL	85.46%	1.88%	49.30%	1.74%

COUNTY	2003 LAND USE[3] (Sq.Miles)	2003 POPULATION DENSITY (Pop./Sq.Mile)
FRESNO	5,963	140.21
KERN	8,073	86.46
KINGS	1,392	97.05
MADERA	2,147	60.32
MERCED	1,984	112.80
SAN JOAQUIN	1,440	422.08
STANISLAUS	1,521	314.20
TULARE	4,863	78.78
SAN JOAQUIN VALLEY TOTAL	27,383	127.50
CALIFORNIA TOTAL	155,973	226.55

Sources: [1] U.S. Bureau of the Census, April 1
[2] State of California Department of Finance, July 1, 2003
[3] State of California Governor's Office of Planning and Research, Book of Lists, 2003

Exhibit 1-3
San Joaquin Valley Counties Population Growth



Sources: Aggegration of data for eight counties in the San Joaquin Valley. Source of individual counties listed under Sources for Exhibit 1-4 below.

Exhibit 1-4
San Joaquin Valley Counties Population Growth Projection

COUNTY	Population April 1, 1960[1]	Population April 1, 1970[1]	Population April 1, 1980[1]	Population April 1, 1990[1]	Population April 1, 2000[1]	Population July 1, 2010	Population July 1, 2020	Population July 1, 2030
Fresno County	365,945	413,329	514,621	667,490	799,407	992,351 [2]	1,185,150 [2]	1,402,349 [2]
Kern County	291,984	330,234	403,089	544,981	661,645	845,600 [3]	1,010,800 [3]	1,208,200 [3]
Kings County	49,954	66,717	73,738	101,469	129,461	156,334 [4]	184,751 [4]	223,767 [4]
Madera County	40,468	41,519	63,116	88,090	123,109	175,132 [5]	224,567 [5]	281,300 [5]
Merced County	90,446	104,629	134,560	178,403	210,554	276,200 [6]	340,800 [6]	417,200 [6]
San Joaquin County	249,989	291,073	347,342	480,628	563,598	708,364 [7]	888,536 [7]	1,117,006 [7]
Stanislaus County	157,294	194,506	265,900	370,522	446,997	567,645 [8]	693,600 [8]	821,963 [8]
Tulare County	168,403	188,322	245,738	311,921	368,021	433,868 [9]	521,300 [9]	620,605 [9]
San Joaquin Valley Counties	1,414,483	1,630,329	2,048,104	2,743,504	3,302,792	4,155,494	5,049,504	6,092,390

Sources: [1] U.S. Bureau of the Census
[2] Central California Futures Institute
[3] Kern Council of Governments, adopted July 2005
[4] State of California Department of Finance, Interim projection released June 2001
[5] State of California Department of Finance, Final projection released November 1998, and MCTC interpolation
[6] State of California Department of Finance, Interim projection released June 2001, and addition for UC Merced-related growth
[7] San Joaquin Council of Governments
[8] Association of Bay Area Governments (ABAG)
[9] U.S. Department of Finance

Exhibit 1-5
San Joaquin Valley Counties Employment by Industry, 2005

Industry	Fresno County		Kern County		Kings County		Madera County		Merced County	
Agriculture, Forestry and Mining	28,142	8%	40,213	14%	6,667	16%	7,411	14%	8,724	9%
Construction	26,668	7%	23,169	8%	2,707	6%	4,421	8%	7,486	8%
Manufacturing	25,399	7%	14,143	5%	3,260	8%	5,343	10%	14,192	15%
Wholesale Trade	18,967	5%	12,452	4%	810	2%	1,784	3%	3,489	4%
Retail Trade	39,477	11%	37,655	13%	5,351	13%	5,662	10%	12,031	13%
Transportation, Warehousing and Utilities	16,032	5%	14,286	5%	1,985	5%	1,135	2%	4,372	5%
Information	6,108	2%	4,232	1%	372	1%	493	1%	2,419	3%
Finance, Insurance and Real Estate	20,822	6%	12,697	4%	932	2%	2,233	4%	2,785	3%
Professional, \Management and Waste Management Services	30,456	9%	22,290	8%	1,506	4%	3,843	7%	4,075	4%
Education, Health Care and Social Assistance	75,411	21%	54,541	19%	8,447	20%	10,997	20%	20,437	22%
Arts, Recreation, Accommodation and Food Services	26,038	7%	22,284	8%	2,791	7%	4,130	8%	4,949	5%
Other Services, except Public Administration	17,295	5%	13,273	5%	1,475	3%	1,790	3%	2,952	3%
Public Administration	24,997	7%	22,734	8%	6,416	15%	5,431	10%	4,150	5%
Civilian Labor Force	389,290		324,182		51,171		61,101		105,884	
Civilian Employment	355,812		293,969		42,719		54,673		92,061	
Civilian Unemployment	33,478		30,213		8,452		6,428		13,823	
Civilian Unemployment Rate	8.6%		9.3%		16.5%		10.5%		13.1%	

Industry	San Joaquin County		Stanislaus County		Tulare County		San Joaquin Valley Total		California Total	
Agriculture, Forestry and Mining	11,386	4%	8,274	4%	26,753	17%	137,570	9%	297,177	2%
Construction	22,902	8%	24,113	12%	10,590	7%	122,056	8%	1,257,180	8%
Manufacturing	29,022	11%	24,473	12%	13,575	9%	129,407	9%	1,793,833	11%
Wholesale Trade	11,717	4%	10,253	5%	8,408	5%	67,880	5%	636,007	4%
Retail Trade	33,577	12%	30,735	15%	16,577	11%	181,065	12%	1,791,422	11%
Transportation, Warehousing and Utilities	17,130	6%	9,837	5%	7,542	5%	72,319	5%	730,274	5%
Information	6,497	2%	4,426	2%	1,042	1%	25,589	2%	479,011	3%
Finance, Insurance and Real Estate	15,741	6%	10,335	5%	5,552	4%	71,097	5%	1,215,715	8%
Professional, \Management and Waste Management Services	21,845	8%	16,194	8%	9,439	6%	109,648	7%	1,889,224	12%
Education, Health Care and Social Assistance	54,263	20%	39,160	19%	32,691	21%	295,947	20%	2,982,972	19%
Arts, Recreation, Accommodation and Food Services	22,196	8%	11,465	6%	8,225	5%	102,078	7%	1,395,401	9%
Other Services, except Public Administration	13,116	5%	7,252	4%	6,636	4%	63,789	4%	817,105	5%
Public Administration	14,008	5%	6,670	3%	8,336	5%	92,742	6%	723,223	5%
Civilian Labor Force	302,132		229,570		173,106		1,636,436		17,244,650	
Civilian Employment	273,400		203,187		155,366		1,471,187		16,008,544	
Civilian Unemployment	28,732		26,383		17,740		165,249		1,236,106	
Civilian Unemployment Rate	9.5%		11.5%		10.2%		10.1%		7.2%	

Source: 2005 American Community Survey, U.S. Census Bureau

Exhibit 1-6
Percent Distribution of
Educational Attainment of Persons 25 Years of Age and Older
San Joaquin Valley, California and United States
2005

Educational Level	San Joaquin Valley Counties		California		United States	
Less than 9th grade	336,997	16.0%	2,341,399	10.5%	12,092,849	6.4%
9th to 12th grade, no diploma	251,688	12.0%	2,096,110	9.4%	17,950,322	9.5%
High school graduate	547,600	26.1%	4,861,191	21.8%	55,929,425	29.5%
Some college, no degree	459,680	21.9%	4,682,799	21.0%	37,979,103	20.1%
Associates's degree	167,954	8.0%	1,717,026	7.7%	13,982,356	7.4%
Bachelor's degree	233,179	11.1%	4,214,519	18.9%	32,499,531	17.2%
Graduate or professional degree	103,508	4.9%	2,363,698	10.6%	18,895,076	10.0%

Source: 2005 American Community Survey, U.S. Census Bureau

Exhibit 1-7
San Joaquin Valley Counties Median Household Income, 1989 and 1999

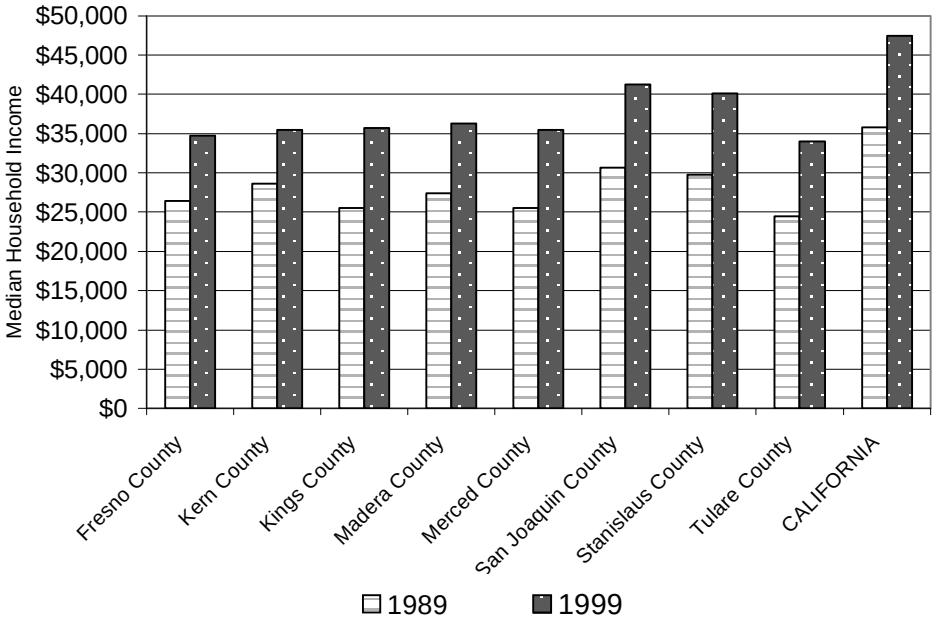
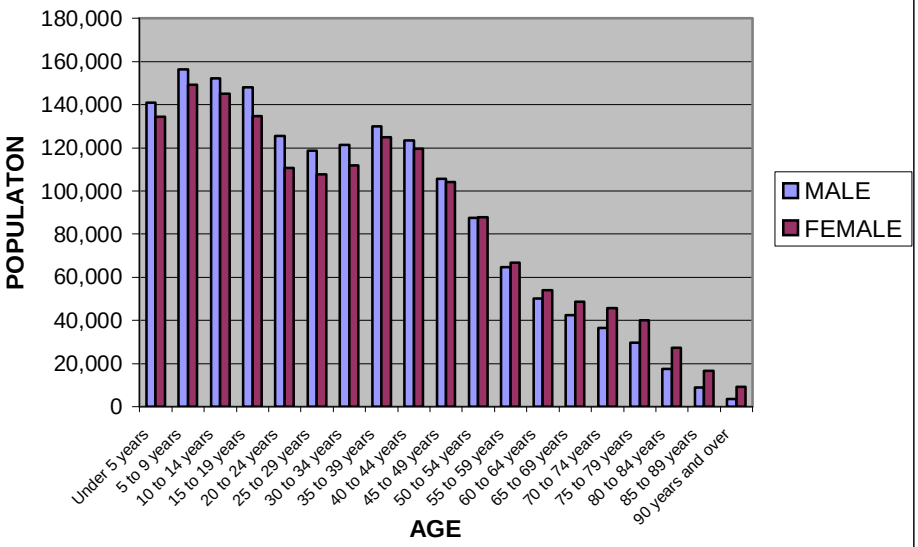


Exhibit 1-8
San Joaquin Valley Counties Age Structure, 2000



Source: 2000 U.S. Census

1.2.1 Trends and Assumptions

Changes in population, housing and employment alter travel demand and patterns that affect transportation facilities and services. By anticipating the magnitude and distribution of growth and change within the San Joaquin Valley, present-day decisions can be made to capitalize on the positive aspects of the anticipated growth while minimizing the adverse consequences.

Population
Population growth within the San Joaquin Valley will continue into the foreseeable future. The driving force for the increasing population is the availability of land, the availability of water, the proximity of the urban centers of Stockton, Modesto, Fresno and Bakersfield to the large urban areas of Los Angeles and San Francisco, and the relatively low cost of land in the San Joaquin Valley.

Housing
Housing growth is generally a function of population growth. Housing is anticipated to grow at a rate similar to population growth.

Employment
Employment opportunities within the Valley will change over the time span of this plan. Agricultural employment will drop as a percentage of total employment as agricultural activities become more automated, requiring less human labor to accomplish more production. Services, wholesale trade and retail trade are anticipated to increase in importance in the future employment pattern of the Valley.

Other Trends and Assumptions
Cost of Travel
The cost of travel will increase for all modes as the price of fuel, equipment, labor, and service continue to rise.

Automobile Use
The private automobile will continue to be the dominant and preferred method of travel within the region. Travel demand management programs may lessen the percent of trips made by private automobile.

Transit Use
Public transit use, including passenger rail, will keep pace with the rise in population and additional incentives, such as voluntary employer trip reduction programs, will be initiated to encourage additional transit use.

Aviation Activity
General and commercial aviation activity will increase as the regional population and economy expand.

Air Quality
Increases in hydrocarbons, oxides of nitrogen, carbon monoxide, and particulate matter may result as population increases. Efforts will be made to reduce the number of vehicle miles traveled (VMT). VMT reduction efforts will take several forms, including compensatory and possible compulsory ridesharing, flex time work scheduling, and non-motorized commuting. Jobs-to-housing balance in local land use decision-making will become more important. Introduction of newer, cleaner fuels and more efficient internal combustion engines are also anticipated.

Railroad Activity
The California High-Speed Rail Authority is working toward the development and implementation of an inter-city high-speed rail system. Current activity focuses on evaluating alternative Central Valley alignments connecting the Los Angeles Basin with the San Francisco Bay Area and Sacramento. Amtrak and Caltrans will continue their successful San Joaquin trains between Bakersfield and Oakland/Sacramento, with bus feeder lines to southern California and other areas.

Land Use
It is anticipated that agricultural land will continue to be converted at an increasingly rapid pace to residential, commercial, and industrial uses.

1.3 San Joaquin Valley Policy Element

This Policy Element has been developed to set forth the common transportation goals, objectives, and policies as expressed in the existing eight Regional Transportation Plans of the San Joaquin Valley counties. Effective cooperation and defined areas of focus are established by the eight agencies to enable the next step of defining specific objectives and policies. This version of the Policy Element is only designed to achieve the first objective, noting the areas of cohesion. Staff members of the eight agencies will then work progressively toward developing individual RTP updates to address specific objectives of the individual counties. Also included in the updates will be a full discussion of financial resources required to meet the individual county needs.

This cooperative effort as mandated by two separate memorandums of understanding among the eight agencies demonstrates that the eight counties are coordinating their programs and plans in a two-fold effort:

1. To meet the requirements of federal legislation, specifically SAFETEA-LU and its extending legislation, ISTEA, TEA-21, as well as the Federal Clean Air Act Amendments; and more importantly,

2. To address the issues that impact the overall Valley as well as issues that directly impacts each of the eight counties.

Before listing the goals, objectives, and policies, it is important to have a broad understanding of the intent behind each of the terms. These terms are defined in the adopted California Regional Transportation Plan Guidelines.

A **"goal"** is the end toward which effort is directed; it is general in application and timeless.

An **"objective"** provides clear, concise guidance to attaining the goal. Objectives are successive levels of achievement in movement toward a goal. They are results to be achieved by a stated point in time. Individual objectives are capable of being quantified and realistically attained.

A **"policy"** is a direction statement that guides present and future decisions on specific actions. Policies should support the attainment of objectives.

1.3.1 Transportation Goals, Objectives, and Policies

GOAL: **Design, develop and maintain a multimodal transportation system that efficiently and safely moves people and goods; serves the social, economic, and physical needs of Valley residents while enhancing the quality of life.**

Objectives:

- A multimodal circulation network which is convenient, safe and efficient;
- A multimodal circulation network which is both cost effective and environmentally sound; and
- A transportation system that meets the travel demands of both citizens and businesses.

Policies: Facilitate a cooperative effort between the public and private sectors to integrate transportation modes through a coordinated transportation planning process, carried out by the eight regional transportation planning agencies.

Work with public transit and social service agencies to assist in implementing short and long range transit development plans.

Involve citizens as well as businesses in planning transportation facilities and services. Special efforts should be made to include those individuals and groups who may not have been included in the past. These groups may include the elderly, infirm, and racial/ethnic minorities, including Native Americans. Working with these and other groups, strategies that address transportation issues of importance to under-served groups will be developed. Direct involvement by under-represented groups will be promoted in transportation planning, project selection, and other transportation issues that affect them.

Support transportation planning and programming efforts.

Minimize conflicts between modes.

Assure that the existing transportation facilities are maintained and repaired as necessary to continue usability.

Emphasize improvement of existing facilities, thereby increasing capacity and flow.

Cooperatively work toward a transportation system that will widen the mode choice available to travelers and shippers.

Support the implementation of Transportation System Management, Transportation Demand Management and Transportation Control Measures that reduce emissions from the circulation system. This support shall include consultation with the San Joaquin Valley Air Pollution Control District.

Support transportation systems that have the lowest levels of energy consumption while meeting mobility needs by promoting clean, alternative and renewable energy sources.

Promote the development of the high-speed rail alignment along the State Route 99 corridor with at least one stop in each of the Central Valley counties.

Support alternative land use patterns that will facilitate walking, biking and transit modes of transportation.

GOAL: **Develop and finance multimodal transportation facilities that are consistent with regional, subregional and local growth policies that are consistent with state and federal air quality plans.**

Objectives:

- Prepare Regional Transportation Improvement Programs that list multimodal transportation facility improvements/operations in a financially constrained manner and are in conformance with adopted California State Implementation Plans for air quality purposes.
- Work to attain and maintain National Ambient Air Quality Standards in the San Joaquin Valley.

Policies:

Use the Public Utilities Commission notification of any rail line abandonment proposals to facilitate the evaluation of possible impacts on the transportation system and encourage the development of alternative uses for the facilities.

Analyze the impact of all transportation proposals to ensure cost effectiveness.

Maximize use of state and federal funds available for transportation.

Make system enhancements, where warranted, when economically feasible and environmentally sound.

Maximize the use of Interregional Improvement Program (IIP) and State Highway Operational and Protection Program (SHOPP) funds through partnerships within the San Joaquin Valley counties and Caltrans.

Work directly with the San Joaquin Valley Air Pollution Control District in the developmental phases of transportation programs, air quality, transportation plans and fee schedules.

Improve air quality through a cooperative effort to dedicate Congestion Mitigation & Air Quality funding for projects that improve air quality.

Improve air quality by supporting jurisdictions that take steps to reduce VMT through compact, mixed-use land use patterns.

GOAL: **Define, preserve and enhance Valley transportation corridors.**

Objectives:

- Ensure that Valleywide multimodal circulation is maintained and improved; thereby serving the social, economic and physical needs of Valley residents.

Policies:

Coordinate planning efforts to prioritize a system of regional corridors of importance.

Cooperatively determine appropriate measures to pursue preservation and improvement of the defined corridor system.

Promote the improvement of significant Valley routes as Focus Routes and High Emphasis routes as defined in the *Interregional Transportation Strategic Plan.*

Jointly pursue funding for expansion and maintenance of significant Valleywide corridors.

GOAL: **Promote the maintenance of the existing transportation system.**

Objective:

- Preserve existing transportation facilities where practical, develop ways to meet transportation needs by using existing transportation facilities more efficiently.

Policies:

Allocate sufficient resources to maintain current system at the current level of repair.

Pursue additional funding to increase level of maintenance to correct deficiency.

Encourage creative transportation demand management policies to utilize existing facilities more efficiently.

GOAL: **Encourage land use design which is more efficient and more conducive to the use of transit, non-motorized transportation and rail alternatives.**

Objective:

- Support land uses that are in the interest of the general community by encouraging population densities and patterns that are conducive to transit and non-motorized transportation options.

Policies:

Advise decision-makers on land use issues to favor compact development.

Discourage non-contiguous development that is widely separated from existing urban services.

Promote the concept of jobs-housing balance in new and existing development.

Facilitate infill development to raise population density in existing settings.

Provide incentives to promote walkable subdivision design that is based on an interconnected grid of neighborhood streets and small blocks.

Provide incentives for the development of high density, mixed use neighborhood centers at that will promote and sustain transit ridership.

1.3.2 Air Quality

Introduction

The San Joaquin Valley faces a serious environmental problem: air quality. Both the state and federal governments set standards and monitor air quality based on the need to protect public health. Despite twenty years of legislation and regulation, many regional areas in the state of California, including the San Joaquin Valley, still do not meet all air quality standards. The three major pollutants of concern in the San Joaquin Valley are:

- Ozone
- Carbon Monoxide
- Suspended Particulate Matter (PM10 & PM2.5)

The severity of the problem is related to Valley topography and climate. The Valley has a warm, sunny climate, a relatively flat valley floor, and is surrounded by mountain ranges. Air pollutants generated from other air basins as well as activity in the Valley floor become trapped by an inversion layer caused by cool air masses, held captive by the Coastal and Sierra Nevada Mountain Ranges, and held down by the sun-warmed air expanding above the Valley.

Pursuant to Federal law, the EPA has designated the entire Valley a non-attainment area for ozone and particulate matter. In 1998, the metropolitan areas of Fresno, Modesto, Stockton and Bakersfield were redesignated to maintenance/attainment areas for carbon monoxide. In July 2006, EPA proposed that the Valley attained the National Ambient Air Quality Standards (NAAQS) for PM10. The Valley is unique within the nation and is not typical of most air basins. The ozone attainment area encompasses eight counties and contains six separate and distinct metropolitan areas amidst millions of acres of farmland. The travel patterns also vary between each metropolitan area.

Problem Causes

Traditionally recognized sources of air pollution are divided into two categories as follows:

Stationary/Area Sources - examples are:

- Fuel combustion (oil and gas production, other manufacturing/industrial/agricultural)
- Solvent use (dry cleaning, printing, de-greasing, asphalt paving)
- Industrial processes (food and agriculture, mineral processes)

- Waste burning (agricultural debris, range management)
- Petroleum processes (oil and gas extraction, petroleum refining and marketing)
- Miscellaneous processes (landfills, unplanned fires, pesticide application)

Mobile Sources - examples are:

- On-road vehicles (automobiles, trucks, motorcycles)
- Other mobile (off-road vehicles, trains, aircraft, utility equipment)

In addition to the sources listed above, the California Clean Air Act requires that emissions from "indirect" sources be examined and, where feasible, control measures be proposed to reduce or mitigate their impacts. The Federal Clean Air Act defines an "indirect" source as a facility, building, structure, installation, real property, road, or highway that attracts mobile sources of pollution.

Assumptions/Future Needs and Issues

Many of the most effective tools for reducing the impact of motor vehicle emissions are not within the control of local government agencies or regional transportation planning agencies. Local agencies do not have the authority to set vehicle exhaust standards or to determine the number of vehicles registered for use. In addition, their ability to influence the national or state production standards that would accelerate alternative fuels usage is limited. This type of authority rests at the state and federal levels. Moreover, effective economic tools such as tax incentives for low emissions vehicles, registration surcharges for high pollution vehicles, and general gasoline tax rates lie with the state and federal regulatory and legislative arenas. Local agencies cannot be expected to bear the sole responsibility for attaining air quality standards. Improving air quality will take a cooperative effort on the part of federal, state and local agencies with continued emphasis on aggressive on-board emission control measures at the state and national levels.

Local agencies can be expected to complement those measures through adoption of transportation control programs. Local decision makers need to consider the land use/transportation/air quality link.

The demand for transportation services is affected by a variety of factors:

- Per capita vehicle ownership and use (both increasing at higher rates than population);
- Regional center and facility siting decisions;
- Residential proximity to employment and commercial centers;
- Convenience and efficiency of local transportation systems, in particular those related to automobile traffic; and
- Comparative cost of each transportation alternative.

The challenge is to establish a reasonable balance between the legitimate demand for a safe and convenient transportation system with individual access to a broad range of services and equally legitimate environmental and conservation concerns. Implied is a heightened awareness of the impacts of growth and development on local conditions. The relationship of land use patterns to regional scale traffic flow must be emphasized and considered as an integral part of the process to improve air quality.

A safe and convenient transportation system must be maintained. It is important that reasonable alternatives to daily use of single-occupant vehicles be developed and made available to the public. The

combination of public acceptance of the need for change and the availability of reasonable alternatives to encourage that change should lead to long-term changes in individual travel behavior.

Short-Range Strategy

The following are areas of focus with respect to the Valley's short-range strategy:

- Support maintenance of aggressive state programs to control hydrocarbon, nitrogen oxide, and carbon monoxide emissions through on-board controls;
- Support SJVAPCD activities to ensure compliance with EPA regulations for motor vehicle inspection and maintenance programs;
- Support state and federal programs to promote development of alternative fuel sources;
- Continue the cooperative effort between the eight RTPAs and the SJVAPCD in providing coordinated transportation/air quality planning;
- Continue to cooperate/consult with the SJVAPCD in its activities aimed at achieving air quality standards; and
- Achieve air quality benefits from funding sources that target motor vehicle emission reductions.

Existing Efforts

EPA and the United States Department of Transportation, through the mechanism of transportation conformity, require a cooperative effort between themselves, Caltrans, the eight Valley RTPAs, and the San Joaquin Valley Air Pollution Control District. Currently, the eight Valley RTPAs and the SJVAPCD have entered into an MOU to ensure a coordinated transportation/air quality planning approach. The MOU defines a cooperative process aimed at maximum effectiveness and compatibility of both air quality and transportation plans. The MOU establishes a strong working relationship between the eight RTPAs and satisfies ISTEA, TEA-21, and SAFETEA-LU requirements by having a cooperative agreement between agencies located in the same non-attainment boundary.

Valley RTPAs hired an "Air Quality Coordinator" to address the logistics of valleywide coordination. The goals of the position are: to monitor compliance with federal and state clean air acts; coordinate and provide ongoing communications between valley RTPAs, FHWA, FTA, Caltrans, SJVAPCD, CARB, and EPA; provide RTPAs representation at meetings, workshops and public hearings; provide technical air quality assistance, and facilitate development of improved modeling data. In addition, air quality policy consultants have been hired to develop long-term policies to address air quality in the valley.

San Joaquin Valley Model Coordinating Committee

The San Joaquin Valley Model Coordinating Committee has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley air quality, conformity and transportation modeling issues. The committee's goal is to ensure valleywide coordination, communication and compliance with Federal and State Clean Air Act requirements. Each of the eight Valley RTPAs and the SJVAPCD are represented. In addition, FHWA, FTA, EPA, CARB and Caltrans are all represented on the committee. Information about the committee's activities is made available over the Fresno COG website http://www.fresnocog.org/, which includes meeting agendas and minutes; locally adopted BACM and RACM plans; and a summary of current air quality issues.

Air Quality Conformity

The November 15, 1990 Federal Clean Air Act Amendments (FCAAA) placed tough new requirements on the sources and causes of air pollution in areas that fail to meet federal standards, including the San Joaquin Valley. The FCAAA require substantial reductions from all pollution sources, including the transportation sector, and establishes a conformity requirement to ensure that those reductions are achieved. Conformity has been a requirement of the 1977 Clean Air Act and was primarily a qualitative procedure. Under the FCAAA, quantification of emission sources from the transportation sector is also required.

Overall, the term "air quality conformity" refers to the process whereby transportation plans, programs and projects are shown to conform to the requirements of the FCAAA and the applicable SIP. It ensures that transportation projects contribute to improvements in air quality and not make it worse. Conformity applies to federal non-attainment areas for any air pollutant and to all RTPAs within non-attainment areas. The process is performed by designated MPOs and Caltrans on behalf of rural TPAs and some MPOs. Only FHWA has the authority to approve conformity with EPA, CARB, Caltrans and local agencies providing comment, technical resources and assumptions. Any adverse comments (public or private) can lead to disapproval by FHWA.

The interagency consultation provision of the conformity rule, §93.105, requires that general processes be established for, and specific decisions be made through, the interagency consultation. One regional emissions analysis is required for the entire San Joaquin Valley; however, separate modeling and conformity documents may be developed by each MPO. In the Valley the interagency consultation process is being used when conducting regional emissions analysis and demonstrating conformity for both the 8-hour ozone standard and the PM-2.5 standard.

EPA's Transportation Conformity Rule (40 CFR part 51 and 93) was most recently updated on March 10, 2006, to include the July 1, 2004, final conformity rule (69 FR 40004) addressing conformity for 8-hour ozone and PM-2.5 standards; the May 6, 2005, final conformity rule (70 FR 31354), addressing PM-2.5 precursors; and the March 10, 2006, final conformity rule (71 FR 12468), addressing PM-2.5 and PM-10 "hot spot analysis".

Transportation Control Measures

Transportation Control Measures (TCMs) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. States are required to show that they have included all reasonably available control measures in the State Implementation Plans, including Transportation Control Measures. The San Joaquin Valley is designated as a non-attainment air basin under both the Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA); both Acts require implementation of TCMs. Section 108(f) of the FCAA provides a list of TCMs that regions should consider implementing.

TCMs included in the SIP are discussed in the conformity documentation of each agency, which must demonstrate timely implementation of TCMs in approved SIPs. TCMs will continue to be mandated by FHWA, and will be included in the Valley's air quality efforts.

Ozone Attainment Demonstration Plan

The San Joaquin Valley Air Basin has seen noteworthy air quality improvements over the past decade. However, despite a 45 percent reduction since 1989 in the number of days the Valley's air exceeded health-based levels for ground-level ozone, also known as smog, the region still does has not attained standards established by the federal EPA. The Valley's long, hot summers; stagnant weather conditions; frequent inversions; and bowl shaped topography characterized by surrounding mountain ranges create the perfect conditions to form and trap ground-level ozone.

The San Joaquin Valley was classified as a Serious non-attainment area for the 8-hour Ozone standard under the June 15, 2004 federal 8-hour ozone standard and was given an attainment date of June 15, 2013. In addition to implementing the 8-hour ozone conformity requirements, the 1-hour ozone standard

was revoked on June 15, 2005. The 8-hour ozone plan must include all Reasonably Available Control Measures (RACM), many of which are local measures best identified and evaluated by local jurisdictions.

The RACM process consists of local agencies developing lists of all measures that might be reasonable to implement and then involves evaluating measures to determine whether any should be committed to. In considering new measures, the RACM analysis must show that the measure:

- Is economically and technically feasible.
- Advances attainment. That is, if implemented, the measure could help achieve emissions reductions sooner.
- Have measurable emission reductions.
- Is available and within the jurisdiction's authority to implement and enforce.

The Valley has discretion on how to address local RACM requirements in the SIP. Implementing agencies must either commit to implement the measures or provide reasoned justification for not implementing RACM. The commitments are critical to the success of the plan in demonstrating that RACM are being considered properly and implemented where appropriate. Once the commitments are included in the air quality plan, they become legal, binding commitments to implement measures. Failure to implement a committed measure may result in a lawsuit. Each jurisdiction decides that a new measure is not feasible for implementation. If a jurisdiction decides that a new measure is not feasible for implementation or an existing measure is not feasible for strengthening, the jurisdiction needs to justify why the measure is not feasible by citing technological and economic infeasibility. These reasons are important and may be subject to a legal challenge.

Meeting the challenge of attaining the 8-hour ozone standard in the Valley will require an innovative approach that involves every person and business in the Valley. The main focus of the Ozone Plan is the control strategy. California Air Resources Board modeling suggests that both Nitrogen Oxides (NOx) and Volatile Organic Compounds (VOC) will need to decrease 60% beyond levels reflecting current control measures. A four faceted control strategy is being considered to achieve this reduction. The strategy will include regulatory components; incentive based strategies; alternative compliance; and local, state, and federal sources/partnerships.

PM-10 Attainment Demonstration Plan

On March 15, 2002, EPA proposed to find that the San Joaquin Valley did not attain the 24-hour and annual PM-10 NAAQS. EPA issued a "finding of failure" to attain standards in July 2002. In accordance with the Clean Air Act and the EPA finding, a new Serious PM-10 plan was required to be submitted to EPA. The Serious PM-10 plan had to include all Best Available Control Measures (BACM) as required under the Clean Air Act.

There were six local control measures that each jurisdiction within the San Joaquin Valley air basin had to adopt in order to be included in the Serious plan. They included (1) paving or stabilizing roads and alleys; (2) paving, vegetating and chemically stabilizing unpaved access points onto paved roads; (3) curbing, paving or stabilizing shoulders on paved roads; (4) frequent routine sweeping or cleaning of paved roads; (5) intensive street cleaning requirements for industrial paved roads and streets providing access to industrial/construction sites; and (6) erosion clean-up. The Air District Board adopted the Draft 2003 PM-10 Plan on June 19, 2003. Adoption by the California Air Resources Board (ARB) occurred June 26, 2003.

On May 8, 2006, the State requested that EPA find that the Valley attained the PM-10 standards based on Valley air quality data for the years 2003-2005. On October 17, 2006, EPA finalized approval of the state's request to find the Valley in attainment of the PM-10 NAAQS. With this finding EPA also suspended the Valley's PM-10 contingency measures requirements. Current control measures and commitments to reduce pollutants by the state and the district will continue to be implemented.

EPA's October 17, 2006, finding would not re-designate the Valley to a PM-10 attainment/maintenance area under CAA section 107(d)(3). Redesignation would occur upon the state's request for redesignation and submittal of a maintenance plan.

PM 2.5

Since the PM10 standards were established in 1987, a large number of important new studies have been published on the health effects of particulate matter. Many of these studies suggested that significant effects, such as premature mortality and respiratory illnesses, occurred at concentrations below the 1987 standards. In July 1997, EPA adopted new air quality standards for ozone and particulate matter. After reviewing hundreds of peer-reviewed scientific studies, EPA determined that these changes were necessary to protect public health and the environment. EPA established annual and 24-hour standards for the fine fraction of particulates (PM2.5). Based on health studies conducted, PM2.5 is considered to be more adverse to human health than any other pollutant. The San Joaquin Valley currently violates both standards. The Air District is scheduled to draft a State Implementation Plan (SIP) for PM2.5 due in 2008. The attainment date is 2010 with a possible 5 year extension.

EMFAC 2002

The EPA issued a Notice of Availability on April 1, 2003 in the Federal Register announcing the official release of the EMFAC2002 Motor Vehicle Emission Factor Model for use in the State of California. The EMFAC, short of EMission FACtor, is a computer model developed by the California Air Resources Board (CARB) that is used to calculate current and future inventories of motor vehicle emissions at the state, county, air district, air basin or air basin within the county level.

EMFAC 2002 is used in transportation conformity for pollutants and precursors that affect transportation emissions and are identified in air quality plans as significant. The transportation conformity rule requires that analyses be based on the latest motor vehicle emissions model approved by EPA for SIP purposes. Effective July 1, 2003, EMFAC 2002 became the only approved motor vehicle emissions model for new regional and hot-spot transportation conformity analyses in California.

EMFAC 2007

EMFAC 2007 was released in November 2006. Although, EMFAC 2007 was released prior to the completion of the 2007 RTP update, EMFAC 2002 will be used in valley conformity determinations as EMFAC 2002 was the latest planning assumption available at the time valley conformity analysis began (§93.110). The implementation schedule for EMFAC 2007 conformity analysis is found in ARB's January 3, 2006, "Latest Planning Assumptions" letter to EPA and FHWA. After the 2007 RTP Conformity Analysis, all future conformity determinations must use EMFAC 2007.

1.3.3 Specific Transportation Strategies and Modal Action Plans

Introduction

The specific transportation strategies used throughout the eight counties are classified under three programs: Transportation Demand Management, Transportation Control Measures, and Transportation Systems Management. Each of the eight counties is currently using a combination of the three programs to manage the vehicular flow on their streets, roads and highways.

Transportation Demand Management

Transportation Demand Management (TDM) consists of efforts to influence behavior regarding how, when, and where people travel. TDM strategies are designed to reduce vehicular trips during peak hours by shifting trips to other modes of transportation. TDM may also reduce trips by providing jobs and housing balance. TDM is specifically targeted at the work force that generates the majority of peak hour traffic. In each of the eight counties, a ridesharing outreach program is designed to educate employers

and employees about the benefits of reducing trips. Some of the TDM strategies include the following techniques:

- Rideshare programs
- Transit usage
- Flex hours
- Vanpools
- Bicycling & walking
- Telecommuting
- Mixed land uses

By educating people, TDM strategies can be implemented and utilized within the circulation system. However, in order to change travel habits, employers must identify transportation alternatives and encourage employees to reduce single occupant vehicle trips.

Transportation Control Measures

As discussed earlier, Transportation Control Measures are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. The following are examples of TCMs for implementation in the San Joaquin Valley area:

- Rideshare programs
- Park-and-ride lots
- Telecommunications
- Alternate work schedules
- Bicycle Facilities
- Public Transit
- Traffic Flow Improvements
- Passenger Rail and Support Facilities

RTPAs and local jurisdictions continue to make efforts to complete existing TCMs. New State Implementation Plans will include the evaluation of existing TCMs for potential improvements, and also determine whether new TCMs will need to be implemented to meet the requirements of the Clean Air Act.

Congestion Management System

As with TEA-21 and ISTEA, under SAFETEA-LU (Section(s) 1107, 6001), all urbanized areas larger than 200,000 population are required to have a Congestion Management System (CMS) or Congestion Management Process. The federal CMS requirements are similar to the optional California requirements; in fact, the CMS was largely modeled after the California program. Both programs are structured around the identification and monitoring of a system, the establishment of performance standards, and the identification and correction of congestion problems.

The Final Rule for the Federal Management and Monitoring Systems defines an effective CMS as a systematic process for managing congestion that provides information on: 1) transportation system performance, and 2) alternative strategies for alleviating congestion and enhancing the mobility of persons and good to levels that meet state and local needs. This process includes the following six elements:

1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the causes of congestion, identify and evaluate alternative actions, provide information supporting the implementation of actions, and evaluate the efficiency and effectiveness of implemented actions;

2) A definition of parameters for measuring the extent of congestion and for supporting the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies;

3) The establishment of a program for data collection and system performance monitoring to define the extent and duration of congestion, to help determine the causes of congestion, and to evaluate the efficiency and effectiveness of implemented actions;

4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies, such as: transportation demand management measures, traffic operational improvements, Intelligent Transportation Systems technologies, and system capacity;

5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy proposed for implementation; and,

6) Implementation of a process for periodic assessment of the efficiency and effectiveness of implemented strategies, in terms of the area's established performance measures.

Transportation Systems Management

Transportation Systems Management (TSM) is designed to identify short term, low cost capital improvements that improve the operational efficiency of the existing transportation infrastructure. An effective TSM program using the appropriate techniques can improve circulation and reduce automobile emissions throughout a region. TSMs are an important tool endorsed by the SJVAPCD and State to obtain air quality standards and congestion management levels-of-service. Furthermore, TSM strategies are used in coordination with TDMs and TCMs to improve our local and regional environment. Some of the TSM strategies include the following Traffic Flow Improvements:

- Traffic signal synchronization
- Traffic engineering improvements (geometric)
- Channelization
- One-way streets
- Turning and bus pocket bays
- Bus Terminals
- Removal of on street parking
- Limit arterial street access
- Street & Highway widening
- Bicycle facilities
- Pedestrian Malls

Applicable Regions

In the Central Valley, TSM strategies are currently in practice in all eight counties. The cities that experience severe traffic congestion during peak hours will benefit most from implementing TSMs.

Strategies

Transportation System Management (TSM) strategies are most effective in densely populated

communities rather than on a regional Valleywide scale. However, implementing some of the applicable TSMs on a regional basis will require a cooperative effort among the eight counties. There are TSM alternatives available for reducing traffic congestion regionally in the Central Valley (i.e. coordinate traffic signals). TSMs have several advantages that influence the environment and circulation system. By using TSM improvements, the circulation system becomes efficient and environmentally sensitive toward air quality.

1.4 Action Elements

1.4.1 Highway, Streets, and Roads

Introduction

The eight counties comprising San Joaquin Valley have extensively planned systems of streets and roads. Each of these single-county systems is designed to meet the demand for three types of travel: local, regional, and interregional. This section of the San Joaquin Valley Regional Transportation Plan Overview focuses on the interregional components of each system. It is important to note, however, that an effective interregional road system depends on sufficient local and regional facilities to provide access to interregional facilities and to provide sufficient capacity for local trips.

Existing Interregional Facilities

For several years, neighboring transportation planning agencies, Caltrans, and the Federal Highway Administration have coordinated single county, local and regional components of the street and road system for the counties that form San Joaquin Valley to ensure that the needs of interregional travelers have been met. In some cases, neighboring agencies have entered into more formal agreements to address multi-county problems.

Intended to serve as a long-range planning tool for the state transportation system, the Interregional Road System (IRRS) was adopted by Caltrans in 1998. The IRRS was developed to provide a highway system that was sufficient to meet the demand for travel between urban areas. Exhibit 1-11 identifies the IRRS road system within the eight-county San Joaquin Valley. This could be described as the San Joaquin Valley Interregional Road System (SJVIRRS). Facilities that are on the SJVIRRS, including the portions through urbanized areas, are those that are most important to Valleywide travel. By including the urbanized portions of IRRS routes in the conceptual SJVIRRS, the system meets the need for connectivity of roads between metropolitan areas and rural areas.

The San Joaquin Valley component of the IRRS provides access to ports, airports, intermodal transportation facilities, major freight distribution routes, national parks, recreation areas, monuments and historic sites and military installations. Moreover, extensions of Interstate 5, north and south of the Valley, provide access to border crossings into Canada and Mexico.

Caltrans is responsible for developing the Interregional Strategic Plan (ITSP) that identifies priorities for Interregional Improvement Program funds allocated through the State Transportation Improvement Program. This Plan is updated on a regular basis and includes specified projects in the San Joaquin Valley. Regional transportation planning agencies participate in the development of this Plan.

With respect to the movement of people and goods in the eight-county region, Interstate 5 and State Route 99 provide the most significant capacity. Many state routes provide major connections between Interstate 5 and State Route 99 as shown in Exhibit 1-9.

Interregional Issues

Each of the eight county Regional Transportation Plans address significant issues (either explicitly or implicitly) in transportation planning today. While several of these issues are local or regional in focus, three issues are significant on a Valleywide basis.

1. Aging highway network

The average design life of a state highway facility is 20 years; however, most of the facilities within the San Joaquin Valley Interregional Road System were originally constructed prior to 1970. Many do not meet today's design standards, particularly within urban areas. Others, such as Interstate 5, are deteriorating in condition.

Pursuant to Senate Bill 45, Caltrans has maintenance and operational responsibility for the State Highway System via the State Highway Operation and Protection Program (SHOPP). Regardless of how the improvements are funded, it is clear that preservation and maintenance of interregional roads is vital to the economic interests of the Valley.

In May 1999, Senate Resolution 8 was enacted by the Legislature that required the California Transportation Commission (CTC) to prepare a report documenting transportation infrastructure needs throughout the State. The report summarized the needs of San Joaquin Valley counties, highlighting the need for additional street and road maintenance and capital improvement funding.

Exhibit 1-9
Interregional Road System

2. Population growth and its implications for transportation

Each of the eight Valley counties experienced higher-than-average rates of population growth during the 1990s and into the 21st century. Projections by the California Department of Finance and local transportation planning agencies anticipate above-average population increases in the San Joaquin Valley for many years to come. This growth (past and projected) has a significant implication for interregional transportation facilities. While travel demand has risen in proportion to the increase in population, the state's investment in the highway system has not kept pace.

3. Increased levels of truck traffic

The California economy is largely based on the efficient movement of goods, including the movement of raw materials to manufacturing and processing plants, as well as the movement of finished products to market. While goods are moved through a variety of modes (including rail, air, and pipeline), most are moved by trucks over roadways. The large-scale abandonment of railroads since 1980 and the expansion of the highway system since World War II have caused a major shift in freight movement from rail to trucks.

The increase in freight movement over State highways is now growing faster than increases in capacity. Moreover, the fastest growing segment of truck traffic is trucks with five or more axles; the State of California is under pressure to allow "triples" (trucks with three trailers) on selected state highways. With the introduction of Canadian and Mexican heavy trucks, traffic congestion will be compounded.

Truck traffic has three significant effects on highway transportation. First, high truck volumes affect pavement life and the cost of rehabilitating highway facilities. Second, the high volume of truck traffic on San Joaquin Valley roadways has increased the demand for additional roadway capacity. Third, facilities that attract large numbers of trucks are often located in or adjacent to areas with high levels of passenger vehicles and non-motorized traffic. Under these conditions, the potential for conflicts and accidents increases. Additional comments on this issue are provided in the Goods Movement section of this chapter.

4. Lack of adequate and stable State highway financing.

It is imperative that the State pursues a stable and consistent source of funding for transportation infrastructure needs. The voters, in 2003, enacted Proposition 42 that set aside transportation funds for transportation expenditures. In 2003, Governor Davis elected to override Prop. 42 and Governor Schwarzenegger is expected to do the same in 2004 to help backfill the $15 billion dollar state deficit. In conjunction with Proposition 42, the California Transportation Plan underscores that need by stating that "methods of financing the transportation system will be evaluated and recommended to achieve adequate funding levels and equity in the distribution of transportation costs and benefits." Because of the state's stalled economy, limited funds are available for transportation improvements, bringing a close to the large budget surpluses that have made specialized funding, such as the Traffic Congestion Relief Program, available for transportation infrastructure improvements in the San Joaquin Valley.

The Traffic Congestion Relief Act (AB 2928) provided some additional funding for capital improvements in the San Joaquin Valley region prior to the suspension. Of the $5.3 billion made available throughout the State, however, about $502 million was allocated to the San Joaquin Valley. The Traffic Congestion Relief Act was not fully funded, and it did not represent a fair share allocation of funding as defined under the current formulas for the State Transportation Improvement Program. In addition, the State has continued to borrow funds from the State Highway Account to support the General Fund. The result has been a lack of any STIP funding for over four years. Repayment of the loans within the next few years is necessary if programmed projects are not to be further delayed. This infusion of the loan repayments is one of the needs if the counties within San Joaquin Valley are to be able to move forward with planned (constrained) projects.

Current State highway financing is a mix of State and federal dollars, augmented by a wide variety of local funds such as transportation sales taxes and development impact fees for some counties. The "Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users" (SAFETEA-LU) federal transportation act, approved August 10, 2005, followed several years of capital and maintenance backlog for the entire state. The last three biennial planning cycles for the State Transportation Improvement Program were exercises in project delay; these state programs will require several more years to catch up with the backlog before County shares reach full historical funding levels.

In November 2006, voters approved a number of bonds that provide funding for statewide infrastructure improvement. These include the (1) Corridor Mobility Improvement Account (CMIA), which provides $4.5 billion for congestion relief and connectivity/gap closures, (2) Highway 99 Program, which provides $1.0 billion to bring Highway 99 from Tehama to Kern County to a minimum 6 lane freeway standard. Program includes other significant capacity and operational improvements. Of the $1 billion, $850 million is for the San Joaquin Valley, (3) the Trade Corridor Program, which includes $2.1 billion to enhance important trade corridors (freeways, roadways, rail), and (4) STIP Augmentation of $2.0 billion.

Despite the recent bond approvals, the challenges to maintain a stable and consistent source of funding remain. As the State's success with alternative fuels grows, traditional transportation improvements revenue sources, such as state and federal gasoline taxes, will grow at a much slower rate, perhaps even declining. In light of the higher than average growth in population and vehicles miles of travel projected for the San Joaquin Valley, these revenue trends are particularly alarming. Other, more significant, funding sources will have to be identified if the Valley is to adequately address its transportation needs.

5. State Route 99

State Route 99 is a major component of the California State Highway System, stretching nearly 500 miles from Red Bluff to past Bakersfield, generally parallel to Interstate 5. However, unlike Interstate 5, State Route 99 connects each of the major urbanized areas in the San Joaquin Valley, including Bakersfield, Visalia, Fresno, Modesto, Merced, and Stockton. State Route 99 attracts high volumes of inter-city commercial truck traffic serving the Valley's economic activities. Truck traffic on State Route 99 ranges from 18 to 37 percent of total volume.

The majority of State Route 99 is currently a four-lane facility, but plans are underway to expand the route to a six-lane facility over a 15-year period. Numerous segments of State Route 99 are classified as expressway-class with at-grade intersections at rural arterials. Ultimate build-out for SR 99 is planned as a eight-lane facility. Safety and deterioration of the facility are issues of common concern to the Valley transportation planning agencies.

Highway Improvements

Each county RTP includes a funding-constrained action plan. These action plans have been prepared through extensive local and regional planning processes to best address regional needs with projected resources. This section intentionally does not address specific projects or interregional priorities. To the extent necessary, future transportation plans for the San Joaquin Valley will address project-specific actions and interregional priorities.

In the interim, county transportation planning agencies in the Valley are committed to considering the objectives, goals, and policies identified in this chapter's Policy Element and the significant issues identified in this section when establishing regional priorities.

Relationship to Caltrans Systems Planning Process

Caltrans has been actively involved in the development of this section. Each District's System Management Plan has been reviewed and considered.

Intelligent Transportation Systems

Background

Intelligent Transportation Systems (ITS) 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 ITS to manage the transportation system in response to changing operating conditions, congestion or accidents. ITS technology can be applied to arterials, freeways, transit, trucks and private vehicles, which 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).

Today, 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.

Using a federal planning grant, the eight counties within the San Joaquin Valley formed an ITS committee to focus on solving transportation problems within the region. The ITS vision for the San Joaquin Valley Strategic Deployment Plan is to enhance quality of life, mobility, and the environment through coordination, communication, and integration of ITS technology into the Valley’s transportation systems. The Plan includes major local elements, and coordinates architecture, standards and institutional issues as well as providing the framework for deploying an integrated ITS throughout the Valley.

The overall strategy for the deployment of ITS includes a number of components and user services:

- Completion of advanced traffic management of the region’s freeways and certain arterial corridors, through traffic operations centers, signal synchronization, visual detection and deployment of incident management systems;

- Advanced Traveler Information Systems to provide real-time information for system users on traffic conditions, incidents, accidents, events, weather and alternative routes and modes;

- Advanced Public Transportation Systems to provide the technology to implement improved dispatching of transit vehicles and enable improved demand-responsive transit services;

- Improved Commercial Vehicle Operations by deploying technologies that track vehicles through the Valley, providing improved traveler information and safety warnings.

General Opportunities

- Geographically expand the Yosemite Area Traveler Information (YATI) system and either develop additional systems for other major recreation areas or combine with YATI.

- Build on the existing extensive Caltrans District 6 and District 10 Traffic Management Systems to fill gaps and complete coverage on major facilities, including expansion of the highway closures and restrictions database to include other agencies.

- Capitalize on the extensive ITS technology testing and standards development conducted by Caltrans by using their approaches for local traffic management systems, where appropriate.

- Build on lessons learned from past and current transit ITS deployment experience (Fresno Area

Express, Golden Empire Transit District, San Joaquin Regional Transit).

- Build on Caltrans District 6 and District 10 experience with co-location and coordination between traffic management and Highway Patrol staff.

- Build on the momentum and stakeholder coalition generated through the San Joaquin Valley Goods Movement Study to pursue ITS commercial vehicle projects.

- Traveler information for commercial vehicle operators at truck rest stop locations. As new laws require longer off-duty periods, demand for rest areas and for access to services will increase.

- Investigate how ITS can support other efforts to improve east-west travel between the Valley and the Central Coast.

- Improve the visibility of and access to existing Caltrans Valleywide alternate route plans.

- Use momentum from the Valleywide ITS planning effort in conjunction with proposed federal rules (ITS architecture and standards conformity and statewide and metropolitan planning).

Fresno County Opportunities

- Maintain momentum generated by recent ITS strategic deployment planning process, taking advantage of the level of awareness and precedent for joint action established through the previous planning effort.

- Continue efforts to improve coordination between the Caltrans District 6 and Fresno metro area traffic management centers, taking advantage of the current District 6 and Fresno fiber optic implementation projects. Utilize the Fresno-District 6 coordination efforts as a demonstration of the benefits of improved coordination between Caltrans and local traffic management centers.

- Encourage other local entities (in addition to City of Fresno) to investigate opportunities to coordinate with Caltrans District 6 fiber optic system with City of Clovis and County of Fresno.

- Support and expand upon the projects identified in the Fresno County ITS Strategic Deployment Plan that are intended to develop a regional transportation user information system (project 4.1), connections to a Valleywide or statewide information system (project 4.2), and development of common or standard electronic maps to support applications such as automatic vehicle location.

Kern County Opportunities

- Coordinate Bakersfield area TMC with Caltrans' District 6 TMC via satellite.

- Look for ways to integrate the ITS capabilities being implemented at Golden Empire Transit (GET) with the developing Bakersfield traffic management system, including sharing of information between the two centers during emergencies.

- Facilitate the transfer of lessons learned from the Golden Empire Transit (GET) ITS deployment, now beginning, to other area transit operators, and look for opportunities for those agencies to better coordinate with GET using GET's new ITS capabilities.

- Expand upon the accident-reduction successes of the Route 46 Safety Coalition Program and the South Kern Corridor Safety Program.

Kings County Opportunities

- 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 develop 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.

Madera County Opportunities

- Evaluate surveillance and automated red-light running at high accident locations in Madera
- Enhancements to emergency vehicle dispatching systems for rural areas, including improved evacuation plans for Yosemite Park that build on the additional roadway connections that are being constructed (i.e., elimination of "dead ends").
- Traveler information and/or other ITS applications that would support needed park and ride lots along Highway 99.
- Develop traveler information strategies to support the relocated Amtrak station.
- Investigate options for utilizing ITS in support of upcoming restructuring/optimization of rural demand-responsive transit service.
- Develop analysis tools for traffic accidents, such as a geographic information system, for the City of Madera.

Merced County Opportunities

- ITS traveler information and traffic management in support of the future University of California facility, red-light running enforcement and train warning and information system applications in Merced.
- Consideration of ITS traffic signal applications in support of Merced's major interchange improvements.
- Develop traveler information and other transit management strategies to improve coordination of the regional bus service ("the Bus") with the intermodal transportation center in downtown Merced.
- Investigate options for supplemental railroad crossing warning and information systems at high-volume train crossings where delays are frequent and long.
- Investigate potential ITS enhancements to the planned weigh station on SR 99 at PM 2.1.

San Joaquin County Opportunities

- Utilize ITS to support the coordination of local transit services with the new commuter rail service to the Bay Area.
- Investigate methods to further improve coordination between San Joaquin Regional Transit and Stockton and/or Caltrans District 10 TMCs.
- Build upon next bus arrival signs and automated phone system traveler information strategies at San Joaquin Regional Transit, possibly to include kiosks and Internet information.

Stanislaus County Opportunities

- Expand on the City of Modesto/Ceres Traffic Management System (TMS) to develop an integrated Urban ATMS for the County.
- Improve interjurisdictional signal coordination.
- Build upon ITS transit applications in Stockton, Fresno and Bakersfield to provide Modesto Area Express (MAX) and local transit services with a means to improve operations and management.
- Improve safety and mobility on the Counties east-west rural highways including Highway 132 between the I-5 and SR-99 corridors using ITS applications such as Road Weather Information Systems (RWIS).
- Utilize intermodal freight facilities to provide improved information to commercial vehicles.
- Improve mobility, coordination and information between the urbanized areas of Stockton and Modesto along the SR-99 corridor.

Tulare County Opportunities

- Implement red-light running enforcement in Visalia.
- Build upon the current traffic signal system efforts to develop an urban ATMS in the areas of Visalia, Tulare and Goshen.
- Provide safe areas along rural routes to the National Parks system including improved traveler information.
- Development of an improved communication link between the Visalia/Tulare urbanized area and Caltrans – District 6 to address coordination efforts along the SR-99 and SR-198 corridors.

Short Range/Long Range Action Plan

Federal Highway Administration

- Continue to provide funding for projects that will maintain and expand interregional routes, regional routes, and local routes.

State of California - Department of Transportation and California Transportation Commission

- Continue to program projects that will enhance interregional routes and access to interregional routes.

- Maintain and preserve interregional routes and routes that provide access to interregional routes.
- Identify and implement operational improvements on interregional routes and routes that provide access to interregional routes.

Metropolitan Planning Organizations/Regional Transportation Planning Agencies

- Continue to coordinate planning of interregional transportation facilities to the extent necessary and feasible.
- Continue to support efforts by state and federal agencies to program priority projects that enhance interregional transportation.
- Support and participate with Caltrans in corridor studies on State Route 99.
- Support new funding sources to fund local street and road maintenance needs.

Local Agencies - Cities and Counties

- Continue to maintain and improve local facilities.
- Support new funding sources to fund local street and road maintenance needs.
- Participate in the planning of regional and interregional facilities.

1.4.2 RAIL

Introduction

In general, rail facilities are privately owned. Passenger service is provided by the National Rail Passenger Corporation, referred to as Amtrak. Private rail corporations, primarily the Union Pacific (UP) Railroad and the Burlington Northern Santa Fe (BNSF) Railroad provide freight service. In recent years, regional transportation planning agencies in the eight Valley counties have had an enhanced role in the planning of Interregional passenger rail service and rail freight movement.

Existing Interregional Rail Facilities

Rail facilities are located throughout the San Joaquin Valley. Many of these facilities provide for long distance movement of goods. In particular, several facilities owned by UP and BNSF stretch for significant lengths north-south through the Valley. These are connected at locations up and down the Valley by several shorter, east-west lines, owned by a number of different companies, such as the San Joaquin Valley Railroad.

Valley passenger rail service is provided by Amtrak's *San Joaquins* service route. The *San Joaquins* is the fourth busiest route in the Amtrak national system outside the Northeast Corridor, with ridership in FY 2003-04 over 735,000. At present, there are six daily round trips provided from Oakland or Sacramento to Bakersfield. Connecting bus service has been significantly expanded over the years to now offer service points to the South Bay Area, as far north as Eureka, and as far south as Palm Springs and San Diego. The *San Joaquins* also provides connecting services to long-distance nationwide trains. Service stops along the route include the Valley cities of Lodi, Stockton, Modesto, Turlock/Denair, Merced, Madera, Fresno, Hanford, Corcoran, Wasco, and Bakersfield.

Interregional Issues

Passenger Rail

In 1987, members of the Caltrans San Joaquin Task Force formed a committee to take a more active role in developing suggestions for improving the Amtrak *San Joaquins* service. This committee, known as the San Joaquin Valley Rail Committee is comprised of representatives from each of the counties served by the trains, and representatives of interested counties served by the connecting bus network. The committee serves as an advisory body to Caltrans and Amtrak on issues pertaining to the *San Joaquins* service.

Efforts of the San Joaquin Valley Rail Committee included the adoption of a Strategic Growth Plan for the San Joaquin Corridor. This report becomes a significant resource to the Caltrans Rail Program in their work efforts to update a business plan for the *San Joaquins* rail corridor.

In recent years Committee work has focused on:

1. Increasing service frequencies and improving on time performance;

2. Improving the utilization of equipment so as to get the maximum number of car miles from this expensive equipment;

3. Extending service to fill the gaps in the current route. The first priority is to extend through service with an existing train on an overnight schedule from Bakersfield to Los Angeles with connections to San Diego;

4. Continuing efforts to make incremental track and signal system upgrades to improve speed, efficiency, and capacity;

5. Creating a fare structure to maximize revenue per passenger mile;

6. Restructuring on board services in order to satisfy the travel needs of passenger train travelers; and

7. Increasing the level of public awareness of the *San Joaquins* so that citizens of the communities along the route think of the *San Joaquins* as their trains and communities along the route develop a pride of ownership.

The California Department of Transportation released the “California State Rail Plan 2005-06 to 2015-06” in December 2005. This Plan is to develop and implement a statewide rail blueprint that will guide future planning and investment decisions in the near and long term.

Some highlights of the plan include:

- Improve on-time performance to 90 percent by 2015-16.

- 2010-11 Bakersfield – Sacramento, third round-trip to extend from Stockton to Sacramento (seventh round-trip on route).

- Bakersfield – Oakland, fifth round-trip from Stockton to Oakland (eighth round-trip on route).

High Speed Rail

In addition to state and regional planning efforts and interest in conventional inter-city passenger rail service, the State of California has made progress in establishing High-speed Rail service. To investigate whether high-speed rail might be appropriate for California, the Governor and Legislature authorized Senate Concurrent Resolution 6 (SCR 6) in 1993. SCR 6 established a nine-member Intercity High-speed Rail Commission to assess the feasibility of a high-speed rail system in California. The Commission determined that high-speed rail is technically, environmentally, and economically feasible once constructed, and would be operationally self-sufficient. The Commission recommended a statewide high-speed rail network 700 miles long. The network will link all of California's major population centers: Sacramento, the San Francisco Bay Area, the Central Valley, Los Angeles, and San Diego. The Commission recommended that the service be routed through the Central Valley roughly parallel and adjacent to State Route 99. The construction of a high-speed rail system in California will be a public works program on the scale of the State Water Project or the creation of the state's freeway system.

Implementing the high-speed rail project is the responsibility of the California High-speed Rail Authority, created by Senate Bill 1420 in 1996 and signed by the Governor in September 1996. The Authority is required to direct the development and implementation of intercity high-speed rail service that is fully coordinated with other public transportation services. The Authority is required to prepare a plan for the construction and operation of a high-speed train network for the state capable of achieving speeds of at least 220 mph, and that is consistent with and continues the work of the Intercity High-Speed Rail Commission. The Authority has all the powers necessary to oversee the construction of a statewide high-speed rail network. Assembly Bill 1703 (Florez/Costa) authorized in 2000, extended the tenure of the Authority through 2003. In 2002 the sunset date for the Authority was repealed with SB 796 (Costa) giving the California High-Speed Rail Authority permanent authority.

The California High Speed Rail Authority completed a Business Plan in 2000 that recommended the route and alignments to be studied in the environmental clearance phase. For the San Joaquin Valley, the recommended alignment between Bakersfield and Sacramento is along the SR 99 corridor with stations at Bakersfield, Visalia, Fresno, Merced, Modesto, Stockton and Sacramento. Access to the Bay Area would be aligned from south of Merced through either the Pacheco Pass or the Altamont Pass. Access to Los Angeles is being considered on three alignments. One follows Interstate 5 over the Grapevine and the second is a line through the Antelope Valley across the Tehachapi Mountains, and the third is along the alignment of the California Aqueduct. Kern COG has supported service to the Antelope Valley along the Palmdale/Mojave alignment.

The Authority began implementation of the environmental process by preparing a Draft Program CEQA EIR and a NEPA Tier 1 EIS released on January 27, 2004. After extensive review, the Final EIR/EIS was posted on the Federal Register on September 23, 2005 and certified on November 2, 2005. The EIR/EIS identifies the preferred alignments which includes: the SR 99 corridor in close alignment with the BNSF; a broad corridor requiring further study for access to the Bay Area bound by Pacheco Pass to the south, Altamont Pass to the north, BNSF to the east, and Caltrain to the west; and an alignment through the Tehachapi Mountain Range between Los Angeles and Bakersfield via a crossing through Palmdale and the Antelope Valley. The 2005 State Budget included $1.7 million to complete the next tier in the EIR/EIS.

Freight Rail

Central California is a major corridor for freight/goods movement. The highway system, and in particular State Route 99, is at times overwhelmed with truck traffic. In an effort to relieve congestion on highways, streets, and roads, several planning efforts are underway to enhance the efficient movement of freight and more efficiently use existing transportation facilities.

In 1992, Caltrans District 6 prepared a report titled *Freight Movement in the San Joaquin Valley*. The report identifies key issues relating to goods movement and concludes with several recommendations,

including "...modifying truck traffic demand over state highways by encouraging alternatives to highway freight movement. A logical alternative especially to long haul freight through the San Joaquin Valley would be to take advantage of available capacity on rail mainlines."

In 2000, the counties of the San Joaquin Valley in conjunction with Caltrans, hired the consulting firm Cambridge Systematics, to conduct the "San Joaquin Valley Goods Movement Study". This study noted that trucking is the dominant mode for moving freight, while rail accounted for 11% of the total tonnage. Rail was also found to be important for long-haul shipments of certain key commodities. Less than 25% of shippers surveyed currently use rail services and only one third of those indicated that their rail usage was likely to grow. The decline in rail shipments since 1993 may have been attributable to rail network mergers and acquisitions. Many rail shippers looked for alternative shipping options during this time and found it difficult to locate enough boxcars to meet their needs. There was also a transition with higher value shipments to alternative modes that provided greater reliability and faster transit times than rail. Food processors in the San Joaquin Valley continue to show strong interest in rail as a preferred shipping mode, and both UP and BNSF are taking steps to maintain market share in the Valley. In the future, it is expected that rail shipment volumes in the Valley will increase, although market share may continue to decline as demand for shorter-haul service increases and the quality of rail intermodal facilities improves.

Another collaborated effort in rail planning was conducted in 1993 and 2001 by the City of Fresno, the Union Pacific Railroad, the Burlington Northern Santa Fe Railroad, Caltrans, the Council of Fresno County Governments, Madera County Transportation Commission and Fresno County. This effort was directed at estimating the cost of consolidating the Burlington Northern Santa Fe tracks into the Union Pacific corridor to eliminate freight train travel through the center of the City of Fresno.

In an effort to preserve a rail corridor that was threatened with abandonment, funding for the rehabilitation of the Union Pacific Coalinga branchline between Huron and Visalia was obtained from various sources. Rehabilitation of the tracks improved freight service operated by the San Joaquin Valley Railroad and reduced the amount of truck traffic on regional roads and state highways. Funding for the $15 million project was provided with the Governor's Traffic Congestion Relief Program, federal Economic Development Initiative grant, Congestion Mitigation and Air Quality funds from Fresno, Kings and Tulare Counties, the cities of Huron, Lemoore and Visalia, private agencies and the San Joaquin Valley Railroad. Rehabilitation work was completed in early 2004 and passenger service along this corridor will be revisited again.

Short Range Action Plan

Federal Government

- Continue to fund Amtrak service.

State of California

- Continue financial support of Amtrak service.
- Implement the California State Rail Plan 2005-06 to 2015-16.
- Implement the *San Joaquins Route FFY 2005-06 Business Plan*, specifically:
    - [Open new stations in Lodi and Martinez;
    - [Complete final engineering for the next phase of track and signal improvements;
    - [Develop a marketing/public relations program campaign for the new stations;
    - [Monitor the feeder bus network and make appropriate adjustments;

[More clearly define the checked baggage procedures and promote use of the service;

[Explore the feasibility of providing a premium service on all trains;

[Work with the San Joaquin Valley Rail Committee to coordinate with local on-line cities to increase community involvement; and

[Coordinate schedules with other Amtrak services where feasible.

- Continue cooperative planning and coordination with recommendations of the San Joaquin Valley Rail Committee.

Regional Transportation Planning Agencies

- Participate in the San Joaquin Valley Rail Committee and support the committee recommendations.
- Monitor the planning and analysis work of the California High Speed Rail Authority and participate in the planning effort to ensure that Valley interests are appropriately reflected.
- Support state and federal actions that would increase accessibility to passenger rail service. The Central Valley passenger rail system should be designed to fully integrate the larger intermodal passenger transportation network including multimodal stations that provide convenient and direct access to all appropriate state, regional, and local modes, including, where applicable, urban commuter, inter-city and high speed rail service, regional and local bus service, airport shuttle services, and other feeder serviced that provide intermodal linkage.

Long-Range Action Plan

Federal Government

- Continue to fund Amtrak service.

State of California

- Continue financial support of Amtrak service.
- Implement the recommendations of the San Joaquin Valley Rail Committee.

Regional Transportation Planning Agencies

- Participate in the San Joaquin Valley Rail Committee and support the committee recommendations.
- Support state and federal actions that would increase accessibility to Amtrak service.

1.4.3 Aviation

Introduction

Aviation facilities within the eight county San Joaquin Valley are used for the interregional movement of persons and goods. Each of the eight San Joaquin Valley counties has a system of aviation facilities designed to meet the local and regional needs of its municipalities. The eight RTPAs representing the counties participated with Caltrans in the development of the region's first Central California Aviation

System Plan (CCASP). The CCASP was completed in January 1998 to include the Valley's fifty public use airports that serve the aviation needs in the Valley. Each county was responsible for preparing their CCASP document for Caltrans to use in the California Aviation System Plan (CASP). The CCASP analyzes each county's aviation system. The contents of the CCASP include an inventory of services and operations, forecasting of future needs, financial sources and needs, and systems requirements to meet the needs of aviation over the next twenty years.

Existing Facilities

A variety of aviation facilities are available in the San Joaquin Valley. A few of these facilities serve interregional aviation needs. Local public use airports serve the county's general aviation needs. Kings County's Lemoore Naval Air Station is the only remaining military airport in the San Joaquin Valley. Castle Air Force Base in Merced and Crows Landing Naval Air Station in Stanislaus County were converted to civilian use airports in 1995. There are four facilities in the Valley that provide interregional commercial aviation service: Modesto Airport, Fresno Yosemite International Airport, Meadows Field (Kern County), and Visalia Municipal Airport. Stockton Metropolitan Airport currently does not carry commercial services, however, Farmington Fresh, a local produce packaging business, has located at the airport to transport fresh produce around the world. The remaining Valley airports offer services that include chartering, agricultural spraying, fire fighting, recreational activities, and medical emergency facilities.

Interregional Issues

Interregional air service for commercial service is an important issue in the Valley. High fares and inconvenient service have made commercial aviation difficult to access for the public, and commercial air service out of the Valley is perceived as inadequate. Existing services are essential for the Valley to maintain connections with the major hub airports of San Francisco and Los Angeles. Fresno Yosemite International Airport has traditionally served as the major hub airport in the Valley, but has in the past had difficulty keeping major air carriers and jet service established. Currently service has expanded to the northwest and links to other major hubs in the west. In addition, airline deregulation had an adverse effect on aviation in the San Joaquin Valley in the late 1970s resulting in decreased service and higher fares. Despite these setbacks, aviation use is expected to grow over the next twenty-five years as the Valley's population and economy continue to expand.

Aviation Systems

State law PUC 21701 requires Caltrans to update the CASP every five years. Caltrans contracted with the ten transportation planning agencies in the Valley and the Sacramento area to develop the CCASP using a grant from the Federal Aviation Administration (FAA). These federal funds allowed Caltrans and the Valley agencies to prepare individual aviation plans to assist Caltrans in updating the CASP for the Valley region. The CCASP was completed with each RTPA developing and adopting their Aviation Plan, which includes the following elements:

- The Inventory Element contains the existing conditions and services at each airport.
- The Forecasts Element contains projections of future demand through the year 2020, in five year increments.
- The System Requirements Element includes projected aviation needs through the year 2020 in five year increments.
- The Action Element identifies strategies and projects to implement the plan.
- The Financial Element identifies local, state, and federal funding sources, and methods of allocating future funds.

Airport Land Use Commissions

Included in the individual RTPs is a status evaluation of airport land use commissions and their progress in implementing comprehensive land use plans.

Coordination

Valleywide coordination efforts have been achieved through the CCASP process with Caltrans. Components of this section are drawn from the aviation sections of each of the eight Valley RTPs, and as such are consistent with the eight RTPs. Each of the RTPs is coordinated with the appropriate airport master plans, comprehensive land use plans, regional aviation systems plans, and the California Aviation System Plan.

Short Range Action Plan

Federal Aviation Administration

- Continue to fund airport projects, including projects that enhance interregional aviation facilities.

State of California

- Implement the California Aviation System Plan.
- Continue to fund airport projects, including projects to enhance interregional aviation facilities.
- Continue to provide matching funds for federally funded airport projects.

Regional Transportation Planning Agencies

- Maintain the regional aviation system plans.
- Update Regional Transportation Plans to be consistent with the California Aviation System Plan and regional aviation system plans as necessary.

Local Agencies

- Continue to expand aviation facilities, as needed.
- Promote increased commercial air service to major Valley airports.

Long-Range Action Plan

Federal Aviation Administration

- Continue to fund airport projects, including projects to enhance interregional aviation facilities.

State of California

- Continue to fund airport projects, including projects to enhance interregional aviation facilities.
- Continue to provide matching funds for federally funded airport projects.

Regional Transportation Planning Agencies

- Update Regional Transportation Plans to be consistent with the California Aviation System Plan, and regional aviation system plans, as necessary.

Local Agencies

- Continue to expand aviation facilities, as needed.
- Promote increased commercial air service to major Valley airports.
- Support a Valley international airport with immigration services.

1.4.4 Goods Movement

Introduction

The movement of goods plays an important role in the overall economy of the San Joaquin Valley. As one of the prime agricultural regions in the nation, the intra-county road linkage of goods to processing plants, and the inter-county linkage of goods to other regions, manufacturers, and shipping ports is essential. Not only is the San Joaquin Valley a leading agricultural producer, it is also a prominent producer of oil and other minerals. These industries rely heavily on bulk movement by truck, rail and pipeline.

The regional highway system is a vital aspect in the movement of people and goods. The Valley's transportation system serves as an east-west and north-south connection to major markets. Commodity movement is an important economic factor to Valley prosperity. Also of great significance to the transport of goods is the Port of Stockton, located in San Joaquin County at the northern end of the San Joaquin Valley. The Port is an integral part of the state transportation system and is the third largest seaport on the west coast.

Transportation planning has traditionally emphasized the movement of people; often the importance of large trucks, rail, ship, and air cargo is overlooked in the technical transportation planning process. Continuing growth in freight and goods movement traffic is beginning to cause conflicts with passenger transportation as the region is also experiencing significant population and service sector employment growth. Consideration must be given to goods movement needs and its coexistence with other modes of transportation.

The eight RTPAs in the San Joaquin Valley in conjunction with Caltrans and the San Joaquin Valley Air Pollution Control District have undertaken a series of studies to improve the understanding of truck transportation of commodities within and through the Valley. The first phase of the San Joaquin Valley Goods Movement Study was completed in 2000 and focused on documenting the freight transportation system and identifying existing issues and problems of regional goods movement. This first phase also made recommendations on future data collection and analytical tools to aid in goods movement planning. The second phase of the Study concluded in 2004, described the development of a model tool to forecast truck movement within and through the San Joaquin Valley. The truck model is intended to forecast truck trips and vehicle miles traveled, analyze air quality and emissions from heavy-duty trucks, impacts of congestion on major truck routes, and safety and road maintenance issues associated with truck activity. The third phase of the Study initiated in 2006, will provide improvements to the San Joaquin Valley truck model and integration with local models. This model will provide an analytical basis for evaluating the benefits of transportation investments that impact the movement of goods in the San Joaquin Valley.

Existing Facilities

Trucks

Trucking is the most commonly used mode for transporting freight. Goods movement by truck is popular because of its flexibility, timely delivery, and efficiency for haul distances of up to 600 miles. Trucking, however, can be more expensive than other modes for longer hauls because of its higher energy costs. Commodity movement by this mode is a major cause of street and highway surface failures necessitating a high level of street and highway network maintenance.

Heavy trucks contribute to the damage of roads much faster than do automobiles; however, deferred maintenance and water intrusion in the roadbed continue to be the primary causes of road damage. As a result, Valley streets and highways are subject to rapid deterioration and failure. According to the American Association of Highway Officials, a fully loaded truck (80,000 pounds) has an impact on roads equal to the passage of approximately 9,000 cars.

Trucking is the dominant mode of transporting freight, accounting for 87 percent of outbound tonnage and 81 percent of inbound tonnage (*San Joaquin Valley Goods Movement Study, September 27, 2000*). Commodity movements by truck also indicate a strong relationship with the rest of the state with shipments to/from Southern California and the Bay Area constituting the greatest percentage of total tonnage to and from the Valley (18 and 14 percent of the total, respectively). Major interregional highway corridors experience relatively high volumes of heavy (3 to 5 axle) truck traffic, usually between 16-30 percent of the annual average daily traffic (AADT). By their very size and slower speeds, trucks lead to congestion and reduced levels-of-service on rural highways and local streets. In addition, emissions from trucks, like automobiles and railroad power units, have an adverse affect on air quality.

Travel along the major corridors in the San Joaquin Valley is mostly in a north-south direction. The primary truck routes in the Valley are Interstate 5 and State Route 99, which together account for 24 of the 25 highest volume truck routes in the system. Many other state highways and county roads play major roles in distribution as well. As the Valley develops to support a more mobile and service-oriented population, the need for east-west travel corridors will become crucial. Special attention must be given to the regional routes to keep them in serviceable condition and to avoid major reconstruction costs.

Cooperative efforts are needed between the trucking industry, the driving public, and local officials to assess the impacts that trucks have on local streets and to create regulatory guidelines for trucks in urban areas. Alternative transportation modes for the long haul movement of goods should be explored and supported. These include improved intermodal freight transfer facilities and access at major airports and rail terminals. As a result of surveys conducted for the *San Joaquin Valley Goods Movement Study,* several significant truck operational issues were found. These trucking issues include congestion, railroad crossings, roadway geometry, parking/rest area problems, route restrictions, and signal timing. These issues must be considered throughout the transportation planning process.

The San Joaquin Valley has both agricultural and light industrial demands for trucking. The needs of individual growers and manufacturers to get their goods to major terminals, market places, and processing centers are met by trucks. In addition, trucks are used as feeder lines to distribute goods from major rail, water, and air centers as well as shopping centers. Because many Valley agricultural products are destined for world markets, efficient freight access at California export points must be ensured.

Rail

Trains provide an economical means of transporting bulk goods. Although each engine requires large amounts of fuel, its ability to haul large amounts of cargo makes for an overall low energy requirement per unit of weight when compared to highway or air transport.

Two major rail companies, Union Pacific and Burlington Northern Santa Fe Railroads, serve the San Joaquin Valley. UP representatives report that they operate an average of 19 trains a day through the

San Joaquin Valley carrying food products, general freight, grain, and lumber (*San Joaquin Valley Goods Movement Study).* UP and CSX Transportation have teamed to offer a new service in the San Joaquin Valley for perishable goods. Express Lane offers two tiers of refrigerated service from the San Joaquin Valley to New York and Boston. The San Joaquin Valley Railroad (State Railways Inc.) operates a regional rail freight service between Tulare, Fresno, and Kings Counties on 125 miles of leased Union Pacific branch lines connecting outlying areas to mainline carriers. The Modesto and Empire Traction railroad connects with the UP in Modesto and with the BNSF in Empire. These rail systems and a number of local spur lines, move freight through the Valley daily.

Most cargo shipped by rail are bulk items such as grains, food products, vehicles, and fuels. Rail transport provides the option of specialized rail cars such as flatbeds, refrigerated boxcars, fuel tankers, and piggy back cars. These specialized rail cars allow transport to move a large variety of goods giving rail an advantage over other modes of transportation for distances over 500 miles or more. Transport by rail is generally less expensive for long hauls than air or truck transport; however, rail is limited by speed and by the limitation of fixed rail track. An especially acute example of rail limitation is the rail route over the Tehachapi Summit in Kern County. Some of the route is single track, and although recent work on tunnels now allows for double-stacked containers to pass over the line, opposite traffic is often diverted to sidings, creating a freight bottleneck over, into, and out of the San Joaquin Valley.

Greater coordination and integration of the various modes of freight transportation have become increasingly important in recent years. Limited resources and the intense pressure on existing transportation systems have brought broad-based support for intermodal transportation systems. In order to allow goods movement to be more efficient and maintain a reasonable highway level of service, a public/private cooperation between these modes should be encouraged.

Rail/Truck Transfer Facilities

Rail/Truck transfer facilities for bulk and semi-bulk commodities are often not considered in narrow definitions of goods movement, but are a growing means of combining the efficiencies of the two modes for movement other than trailers and containers. Transfer facilities are generally of two types:

- Simple facilities for direct transfer between freight cars and trucks by means of conveyors, hoses, etc. without immediate storage or handling; and

- More extensive facilities with the capability to store, sort, package, or otherwise process the commodity.

Rail Intermodal Facilities

Intermodal terminals are critical to the success of intermodal services. Terminals are the starting and ending points for trains and the sites of crucial distribution between modes. Terminals also function as equipment storage, maintenance and dispatching centers, and as focal points for the flow of information. Terminals vary widely in configuration, capacity, and operations. Only a small number of terminals have been built from the ground up as intermodal facilities.

In the 1980s, railroads consolidated their intermodal service networks into fewer, larger hub terminals. Railroads saw an opportunity to consolidate facilities in mergers and a need to consolidate enough volume in one location to justify lift machines. The recent rapid growth of intermodal traffic, the enormous influx of double-stack trains of containers, and the even more recent entry and rapid growth of rail-truck trailer initiatives all raise questions about the adequacy of intermodal terminals to handle traffic increases, and to do so efficiently.

Union Pacific Railroad has intermodal facilities in Fresno and Lathrop. Intermodal facilities for Burlington Northern Santa Fe Railroad are located in Stockton, Modesto, Fresno, and Bakersfield. Construction of the new Mariposa yard in Stockton by BNSF is one example of direct investment by the Class I carriers aimed at meeting growing demand for intermodal service. Increased intermodal service will create

potential for local truck congestion problems and access to intermodal facilities could become a critical issue.

Buses

Passenger bus companies such as Greyhound and Orange Belt Stage Lines, provide carrier service in addition to their passenger service. Because of the small amounts handled, buses are a very minor contributor to goods movement in the region.

Air Service

Air service is characterized by the fast shipment of small bulk items of high value over long distances for high cost. Goods movement by air is an emerging element of freight movement in the San Joaquin Valley. Statewide, 23 out of the 43 commercial air carrier airports account for almost 3 million tons of freight transported by air. While air freight is a specialized mode of transportation, it accounts for an estimated 60 percent of the export values in California. Air carriers depend heavily on truck transportation to deliver goods for transport. It is important, therefore, to have adequate infrastructure in place for this significant element of the State's economy. According to the Intermodal Transportation Management System GIS database, the commodities most typically shipped by air to and from the Valley include food and kindred products, machinery, and miscellaneous manufactured products. Of the numerous airports in the Valley, only Fresno Yosemite International (FYI) airport reports cargo statistics to state and federal agencies. A significant feature of air movement is its dependability and very short in-transit time. For businesses seeking to open new markets or dealing in high value items, air shipment is an important means of providing rapid access to distant manufacturing facilities, thereby eliminating large inventory requirements. In such cases, air shipment makes it possible to establish supply lines quickly and significantly lowers the cost of carrying inventory. This offsets the higher cost of the air mode.

Of increasing economic significance to FYI is the role and value of air cargo. In this regard, major airports in both Southern and Northern California are experiencing significant air cargo constraints that include both facilities and operations capacity, thereby presenting an opportunity for the Fresno Region. Intermodal goods movement planning that effectively links the site-suited airports will provide an attractive infrastructure for near-future demand for increased air cargo/distribution service. Longer term, increased associated passenger demand for FYI may also result. These economic opportunities should be pursued.

Ports

The Port of Stockton is the only significant port facility in the San Joaquin Valley. The Stockton Deepwater Channel, with a 37-foot depth at average low tide and a 40-foot depth at average high tide, could accommodate 70 percent of the World's Bulk Fleet. Located 75 nautical miles due east of the Golden Gate Bridge, the Port of Stockton owns and operates a diversified and major transportation center that encompasses 600 acres. Port officials estimate that, on average, 150 to 200 vessels use the Port each year. Included among the commodities that the Port handles are: dry bulk commodities, neo-bulk cargo (steel coils, steel products), general cargo, and liquid bulk cargoes (fertilizers, molasses, petroleum products, etc.) The Port's Beltline Railroad accesses all Port warehouses, transit sheds, and other facilities.

The Port of Stockton is an integral part of the state transportation system and is immediately accessible to the interstate highway system. Convenient access by surface transportation to the entire United States is provided by the two transcontinental railroads: UP and BNSF. The Port handles millions of tons of cargo that otherwise would be using the railroads or roadways; however, they continue to rely on both trucks and rail to deliver inbound cargo and distribute outbound cargo.

In 2003, Cambridge & Associates completed a planning study analyzing the growing transportation link between the San Joaquin Valley and the Port of Oakland. This "link" is growing in importance due to the substantial growth in the Valley as a regional and national distribution center for importers and exporters.

This study known as the California Interregional Intermodal Shuttle Market Assessment & Public Benefit Analysis (CIRIS) study focused on examining the feasibility of running a short-haul intermodal freight rail shuttle between the Valley and the Port as one alternative to the current motor carrier drayage system. In the San Joaquin Valley, the rail shuttle would shift goods from truck to rail, which would reduce overall truck traffic volumes on key corridors resulting in reductions in congestion and emissions for the Valley. The freight rail service would also increase mobility options for shippers located in the San Joaquin Valley and could potentially increase the capture area for the Port of Oakland. The study examines the extent of the market for a CIRIS service, as well as the extent of potential benefits to the public and identifies how public sector agencies might best be able to support such a project.

Pipelines

Various pipelines carry natural gas, crude oil and other petroleum products through the San Joaquin Valley. Storage, pumping, and branch line facilities are used to distribute those products.

Pacific Gas and Electric (PG&E) is responsible for the maintenance and operation of the natural gas line, while major petroleum corporations are responsible for the crude oil pipelines throughout the region.

Hazardous Materials Movement

Hazardous materials movement presents a potential danger to human life and property. It is estimated that 50 percent of all goods transported throughout the world are to some degree hazardous. Each year, more than 4 billion tons of hazardous products and waste are transported throughout the United States. Hazardous materials are commonly transported by rail, small or large trucks, and possibly by air or pipeline.

At present and for the foreseeable future, large trucks transport the largest volume of hazardous material. Truck transport accounts for about half of all hazardous material shipments. The types of vehicles carrying hazardous materials on the nation's highways range from tank trucks, bulk cargo carriers, and other specially designed mobile containers, to conventional tractor trailers and flat beds that carry drums and other small containers. Rail shipments are commonly bulk commodities, such as liquid or gaseous chemicals and fuels carried in tank cars.

Potentially adverse effects associated with the transportation of hazardous material can be partially mitigated by restricting roads available for hazardous material trucking. Under California law, transportation of hazardous waste is required to be carried out via the most direct route over interstate highways whenever possible. Exceptions to this general rule are such occasions when it is necessary to avoid highly congested areas and areas of high population density. Interstate 5 and most of State Route 99 are built to full freeway standards. Interstate 5 provides the service for north-south transporters and serves the Interregional transport needs of local and long distance hazardous waste haulers. Interstate 5 has been proposed as a route for the transportation of radioactive materials. Route 99 is the major artery connecting the north and south central San Joaquin Valley areas. Route 99 passes through the more populated areas of the San Joaquin Valley, including Stockton, Modesto, Merced, Fresno, and Bakersfield.

Kings County, located in the southern region of the San Joaquin Valley, is the site of a Class I hazardous waste facility. This facility, located in Kettleman Hills, draws trucks carrying hazardous materials from all western states. The presence of these trucks on regional routes increases the probability of dangerous spills.

Forecasts

California's seaports, airports, railroads, and highways together move about one billion tons of freight annually overseas, across the Canadian and Mexican borders, to and from other states, and within the state. This volume of freight places a high demand on the state's transportation system. Much of this

freight originates from, passes through, or comes to the San Joaquin Valley by various modes.

Economic development is one of the vital interests to the San Joaquin Valley. Hundreds of small and mid-sized companies are making decisions based on their own best judgments about the extent of future goods movement. Much of this judgment is proprietary. It is expected that rail transport will continue to increase because of its availability to haul large amounts of long distance cargo at lower cost. Trucking is expected to increase because of its flexibility and timeliness. Increases in fuel costs will affect all modes of transportation.

Goods movement by bus will continue to be an alternate source for moving small goods. As the population in the Valley increases, airlines serving regional airports are expected to introduce larger aircraft thereby expanding the air service area and making goods movement by air a more viable option.

Pipelines will continue to be the most effective way of moving oil and gas through the region. Fuel and natural gas use will likely increase in the future, as they are both primary sources of energy.

Assumptions/Future Needs and Issues

The movement of goods by trucks is essential to the economy of the San Joaquin Valley. Trucking will continue to be the most inexpensive form of goods movement and will continue to add highway congestion. In addition, trucks, like cars, produce an adverse effect on air quality. The presence of trucks carrying hazardous materials will continue to increases the probability of dangerous spills. As air and rail services are under developed for the movement of goods, most goods will continue to be moved by trucks.

Short Range Action Plan

State of California

- Pursue additional funding for street, road, highway, air, and rail projects by working with the League of California Cities and the County Supervisors Association of California to ensure the efficient movement of goods;
- Oppose higher axle load limits for the trucking industry;
- Encourage and support strict enforcement of transportation regulations concerning the transportation of hazardous materials;
- Support and work with districts, local jurisdictions, regional agencies, and the private sector to provide improved intermodal freight transfer facilities and access at major airports and rail terminals;
- Assess and incorporate, where appropriate, innovative intermodal linkage; and
- Explore all viable options to facilitate freight movement while reducing conflicts between freight and passenger traffic.

Metropolitan Planning Organizations and Regional Transportation Planning Agencies

- Continue to refine the San Joaquin Valley truck model for evaluating the benefits of transportation investments and to assess the future of goods movement within the Valley;
- Identify opportunities for truck-to-rail and truck-to-intermodal mode shifts, and evaluate the contributions of different types of truck traffic on regional air quality;

- Provide heavy truck access planning guidance including a review of the current Surface Transportation Assistance Act route system, review of geometric issues and signaling for all routes identified as major local access routes, and the development of standards;
- Study parking for long distance trips including a review of available rest areas, layover lots, and truck stops to determine needs for more parking;
- Oppose higher axle load limits for the trucking industry;
- Provide technical and planning assistance to local jurisdictions for industrial and wholesale land use and transportation planning;
- Coordinate planning efforts to ensure efficient, economical and environmentally sound movement of goods;
- Support a higher safety level requirement for hazardous material transportation programs;
- Encourage the use of rail and air for the transportation of goods to reduce impacts to state and inter-county routes, and reduce air quality impacts;
- Encourage coordination and consultation between the public and private sectors to explore innovative strategies for the efficient movement of goods; and
- Support the intermodal linkage of all freight transportation.

Counties and Cities

- Continue to evaluate and designate truck routes;
- Coordinate and consult with private sector providers in order to identify obstacles to the efficient movement of goods, and develop alternative strategies;
- Seek strict enforcement of transportation regulations concerning the transport of hazardous substances; and
- Consider locating industrial development near rail, airports, and major highways in the land use elements of local General Plans.

Industry

- Increase the use of rail and air service for the movement of goods; and
- Develop hazardous material transportation plans.

Long Range Action Plan

- Continue to follow the objectives of the short-range plan.

1.5 FINANCIAL ELEMENT

The San Joaquin Valley contains urban and rural counties, self-help and non self-help counties, passenger rail and non-passenger rail counties and two Caltrans districts. Funding for transportation

projects is subject to the north-south split requirements, county share requirements and availability of development or other mitigation fees, local sales taxes, state and federal gas taxes, gasoline sales tax and bond revenues. No two counties are exactly alike.

State Route 99

Over the last three to four years, various valley-wide efforts have been undertaken to develop guidance and planning documents for the improvement of the Route 99 corridor through the San Joaquin Valley. Highway 99 is the transportation backbone of the San Joaquin Valley. A high rate of growth in the area is quickly using and exceeding the capacity of this corridor. It is clear that to maintain the corridor's ability to support ongoing development, facilitate efficient goods movement, and improve the quality of life in this fast-growing region, a substantial investment is needed to maintain and improve the corridor. The California Department of Transportation (Caltrans) and the Great Valley Center (GVC) have been key leaders and participants in efforts to improve the corridor. Caltrans completed a final draft Route 99 Corridor Enhancement Master Plan for the 274 mile segment of Route 99 from its junction with Interstate 5 in Kern County in the south, to the northern limits of San Joaquin County in the north. While the Master Plan focused on enhancing the appearance of the corridor and the driving experience for those using it, it also recognized the need for significant improvements to the route's safety, capacity, operations, and road condition. The Master Plan was developed in conjunction with the GVC, the eight Metropolitan Planning Organizations (MPOs) in the San Joaquin Valley, and the GVC Route 99 Task Force.

The overall goal of the Master Plan is to convert all existing expressway segments to freeway status, widen the facility to 6 lanes, improve the condition of the pavement and bridges, complete any needed safety improvements, improve its operational characteristics, and enhance its appearance. After the Master Plan was completed, a Business Plan was drafted to provide a road map for how the goals can be met. The Business Plan grouped projects into four Priority Categories. These categories include:

- **Priority Category 1—Freeway Conversion**
  This category consists of projects to convert the existing Route 99 expressway sections to a full 6-lane freeway. Projects in this category will close at-grade intersections and add interchanges where appropriate to maintain local circulation, as well as widen the route to 6 lanes within the projects' limits.

- **Priority Category 2—Capacity-Increasing Projects**
  Priority Category 2 consists of projects that would widen Route 99 to a minimum of 6 lanes throughout the corridor. Projects to widen Route 99 to 8 lanes in some urban areas, where feasible, will also be considered for this category.

- **Priority Category 3—Major Operational Improvements**
  This category consists of projects that will improve existing outdated interchanges and construct auxiliary lanes in urban areas.

- **Priority Category 4—New Interchanges**
  Priority Category 4 consists of projects that will construct interchanges at new locations on Route 99.

Within the four Priority Categories there are 67 projects to be prioritized as a part of the Business Plan effort. They include 13 programmed projects and 54 candidate projects. The total cost for these improvements is estimated to be approximately $6 billion in 2005/06 dollars.

Understandably, the most significant obstacle facing the improvement of Route 99 and the implementation of Route 99 Master Plan is the lack of adequate funding. Neither the STIP nor the SHOPP are adequately funded to maintain and improve the route. In an attempt to address this issue, the Business Plan identifies a number of innovative funding strategies. Unfortunately, most of these are financing methods to advance future revenue streams. While these strategies can advance the delivery of improvement projects, most of them do not actually generate additional revenues.

The Business Plan does lay out a 20-year program to meet the goals stated. The program is broken down into three phases. The phases generally coincide with the Priority Categories. Phase 1 will complete Priority Category 1, and parts of Priority Categories 2 and 3. Phase 2 will complete Priority Categories 2 and 3, and Phase 3 will complete Priority Category 4. The 20-year schedule provides five years to "ramp up" the delivery effort, and then 15 years of $333 million in projects per year. While it is difficult to determine how much capacity the construction industry can handle each year and how much of the route can practically be under construction simultaneously, $333 million appears to be a reasonable target. The $333 million per year is in 2005/06 dollars; however, the effect of inflation must also be considered. The Business Plan assumes a five percent inflation rate. When calculated into this equation, each subsequent year demands additional funds, finally topping out at approximately $883 million in year 20.

California Partnership for the San Joaquin Valley

On June 24, 2005, through an Executive Order, Governor Arnold Schwarzenegger established the California Partnership for the San Joaquin Valley. The Partnership was created to bring state agency secretaries and Central Valley representatives together to make recommendations to the Governor regarding changes that would improve the economic well-being of the Valley and the quality of life of its residents. In its Strategic Action Proposal to the Governor, the Partnership recommended that improvements to the Route 99 Corridor are needed. The Partnership agreed that the implementation of the Business Plan for Highway 99 will require funding of $6 billion over the next ten years. Incorporating the Partnership's recommendations into his Strategic Growth Plan, the Governor worked with legislative leaders to sign SB 1266, by Sen. Don Perata (D-Oakland). SB 1266 is the transportation element of the Strategic Growth Plan that will help relieve traffic congestion on California's overcrowded roads, augment the state's mass transit and rail systems and improve the air quality around the busy ports.

Strategic Growth Plan

The Governor's Strategic Growth Plan (SGP) is the first installment of a 20-year investment. Phase One of the Strategic Growth Plan will ensure California's quality of life and foster the state's continued economic growth through significant investments in infrastructure over the next ten years. The Legislature embraced this concept and approved a $115.8 billion SGP package, which includes $37.3 billion in new general obligation bonds approved by voters in November 2006, and $50.1 billion in existing funding, and $28.4 billion in new leveraged funding sources. The transportation portion of the bond package includes $19.9 billion for safety improvements and repairs to State highways, upgrades to freeways to reduce congestion, repairs to local streets and roads, improvements to the seismic safety of local bridges, expansion of public transit, reduction of air pollution, and improvements to antiterrorism security at ports. In addition, the package authorizes State and regional agencies to engage in public/private partnerships to attract billions of dollars in private investment for the development of transportation infrastructure in the State. The package also includes protection of any future Proposition 42 transfers. It would allow the State to borrow the money, but pay it back within three years. It also would restrict the State to only two such transactions every 10 years. Finally, the package includes legislation to streamline the environmental process while safeguarding environmental protections. Most importantly for the San Joaquin Valley, $1.0 billion has been planned for improvements to 400 miles of State Route 99. (It is anticipated that approximately 85% of the $1 billion will be dedicated to the 274-mile in the San Joaquin Valley from Bakersfield to Stockton). The balance of the estimated $6 billion required to improve the corridor will need to be secured from federal, state and local sources.

1.6 Safety

SAFETEA-LU added a new stand-alone factor to "increase the *safety* of the transportation system for motorized and non-motorized users." Each of the eight San Joaquin Valley MPO's are committed to increasing safety, and have long included safety as a primary goal. This valley-wide chapter has included the following Goal, and each of the eight San Joaquin Valley RTP's has held a similar overarching goal:

> "GOAL: Design, develop and maintain a multimodal transportation system that efficiently and **safely** moves people and goods, and also serves the social, economic, and physical needs of Valley residents while enhancing their quality of life."

"Objectives: 1. A multimodal circulation network that is convenient, **safe** and efficient."

Each RTP includes performance measures which have placed safety as a critical factor.

Caltrans recently published the final version of the statewide *State Highway Safety Plan* (SHSP) in September 2006. The SHSP guides safety activities within the State of California regarding all users on all public roadways. The SHSP key points are as follows:

- Highlighting challenges to roadway user safety on California's roads.
- Painting the picture of fatalities experienced on California's roads.
- Proposing high-level strategies to reduce fatalities for each challenge.
- Serves as a guide for the implementation of specific projects and activities through 2010.

The SHSP presented the fatality rates (measured as fatalities per 100 million vehicle miles traveled) in California from 1995 through 2004 as shown below and compared them to the national average. It also identified 16 challenge areas that the State is committed to address to reduce these rates further and improve the safety of the traveling public on the State Highway System.

Exhibit 1-10
State Highway Safety Plan Fatality Rates

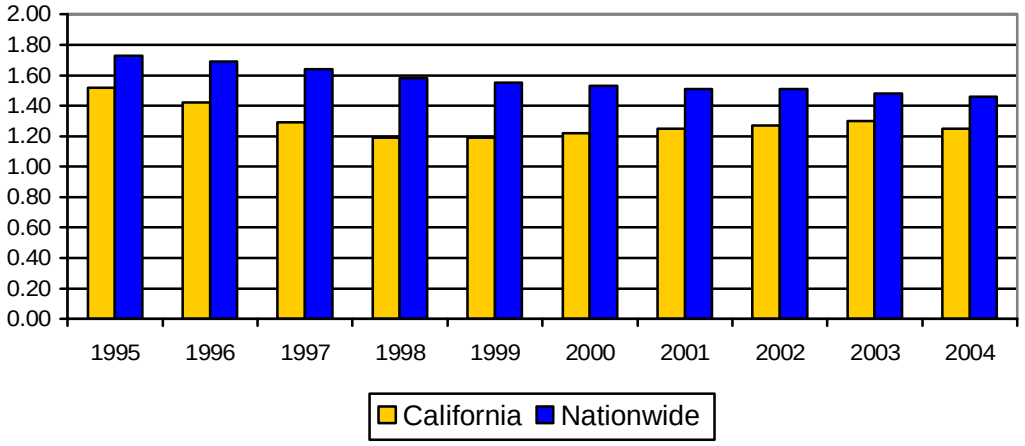


Exhibit 1-11
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Chapter 2
Regional Setting, State and Federal Issues

2.1 Introduction

The Regional Transportation Plan (RTP) is a comprehensive assessment of all forms of transportation available in Fresno County and of needs for travel and goods movement projected into the future until the year 2030. The first RTP was adopted in 1975; this Plan is the sixteenth edition, and is a continuation of a process of intergovernmental cooperation, coordination and long-range planning which has involved the fifteen cities, Fresno County, staff from related local public agencies, the Air District, Caltrans, and the public. This process has been accomplished within the framework of the Council of Fresno County Governments (Fresno COG), which is the Regional Transportation Planning Agency (RTPA) for the Fresno County area. Updated editions are required every four years and are refinements of the original and subsequent plans.

Federal and State legislation mandate that long range transportation planning be done every four years for a period of at least 20 years into the future.

The 2007 version of the Regional Transportation Plan is a reflection of the federal directives embodied in Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) and the Clean Air Act Amendments of 1991. These acts require that Regional Transportation Plans *include only those projects which can actually be delivered with funds expected to be available*, and that *those projects will help attain and maintain air quality standards.*

In 1991 Fresno County was part of the formation of a new regional agency, the San Joaquin Valley Air Pollution Control District (SJVAPCD). The District covers the eight county Central Valley (San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and Kern). Only the San Joaquin Valley portion of Kern County is located within the SJVAPCD. Because of the federal government's approach to cleaning up the air in the nation's cities, and our air basin's non-attainment status, the District and local agencies are working together even more closely on this planning effort and on other traffic management systems specified in federal legislation. Our task in relation to air quality will be to demonstrate that the projects recommended in the Regional Transportation Plan collectively will help attain and maintain federal air quality standards. Failure to do so is to risk the loss of federal transportation funding.

This plan will specify those projects and programs that can be funded throughout the life of the plan, and will evaluate them through a process of computer modeling, to determine their impacts upon air quality. This is called demonstrating "conformity" with adopted air quality targets. Projects will only be evaluated for conformity if they have a strong likelihood of being funded.

The financial element of the plan will advocate for a stable and equitable approach to statewide funding, so that the entire Valley can respond appropriately to the needs of a growing population, environmental quality, and the continuing needs of both maintenance and innovation in transportation systems.

Fresno COG is the Regional Transportation Planning Agency (RTPA) for the Fresno County region, a designation given by the State of California. Under federal legislation, it is also designated as the Metropolitan Planning Organization (MPO). Working with technical advisory committees, interested citizens, and other government agencies, a coordinated effort has been made to develop a multimodal regional transportation system plan for Fresno County. Given the growth anticipated in southern Madera County just across the San Joaquin River from the Fresno-Clovis Metropolitan Area, we are also giving consideration to the potential traffic impacts upon our county, and the needs for connectivity from one county to the next.

2.2 Background

Transportation planning in Fresno County is considered a coordinated and continuous process, involving all local governments, the California Department of Transportation (Caltrans), other interested agencies such as urban and rural transit agencies, the San Joaquin Valley Air Pollution Control District and the public.

The 1994 RTP was based on extensive supportive technical studies and public review and comment. A program level Environmental Impact Report was prepared, presented for public review, and adopted by the COG Policy Board. Subsequent plan updates have built upon that foundation, with environmental assessments recommending the use of the negative declaration as to environmental impacts, implying that no new significant changes to prior plans were included. This position was taken as, 1) land use agencies had continued to plan within established growth areas, 2) the area continued to pursue the implementation of a basic freeway system planned for over thirty years, and 3) no new major regional transportation facilities were proposed which might have needed evaluation. It was also understood that a separate environmental document was required at the project or corridor level, as a major facility moved closer to implementation.

Conditions have changed as we approach the 2007 Regional Transportation Plan. The long desired metropolitan and rural freeway system is now under construction due to the 1986 passage of a local sales tax - Measure “C”. The 2006 extension of Measure C has provided additional funds for the next 20 years. In November 2006, voters approved statewide transportation bonds that will provide funding for a number of transportation projects. As such, the 2007 RTP will be accompanied by a new Environmental Impact Report, building on the analysis of the 2006 Measure C initiative.

Population growth is predicted in a time of limited financial resources. In addition, federal legislation and state air quality requirements require that the RTP be restricted to those new facilities for which funding can be reasonably projected, and that the plan must meet air quality conformity requirements. These new conditions have shifted the focus and working arrangements of those local and regional agencies that participate in this planning effort. The determination of conformity with defined air quality goals necessitates closer consideration of the links between air quality, transportation, and land use than has been attempted in the past.

2.3 Scope of the Plan

The RTP is developed in response to federal and state requirements and it is organized into three separate elements: Policy Element, Action Element, and Financial Element.

The Policy Element provides a general overview of the RTP and the Fresno County region, documents certain trends and assumptions made within the plan, and describes the regional planning process. It also sets forth the Fresno COG's transportation goals, policies and objectives.

The Action Element introduces the multimodal system and then separates the various transportation modes. The RTP's overall goals, policies and objectives are expanded with more specific short- and long-term policies appropriate for each mode. Plan accomplishments are discussed in the following manner: the existing system is described, recent planning activities are noted, improvements made in the past two years are listed, and transportation needs and issues are identified. Proposed short-term and long-term actions for both planning and actual program and project improvements are described. Finally, revenue sources are identified and actual projections of both revenues and expenditures are made.

The Financial Element contains a listing of all projected revenues over the life of the plan, as well as a list of candidate projects that would utilize the funding. Also included as an appendix is a comprehensive list of member agency identified candidate transportation projects. Considerable discussion is given to the need to develop more comprehensive and equitable long-term statewide funding strategies.

Appendices include the RTP Checklist, a listing of Fresno COG committee members, SAFETEA-LU gap

analysis, performance measures, Measure “C” summary, and a listing of supportive documents.

2.4 The Region

Fresno County is the second largest county in the San Joaquin Valley, encompassing approximately 6,000 square miles. As the nation's number one farm county, Fresno County’s gross value of agricultural products is estimated at $4.6 billion annually. The estimated population as of 2006 is 909,000 placing Fresno as the tenth most populous county of the 58 counties in California. There are fifteen incorporated cities and the county contains a federally recognized urbanized area, known as the Fresno-Clovis Metropolitan Area (FCMA), with a population of about 650,000. The City of Fresno is now the sixth largest city in the state, with a population of 475,000. A map of the region’s population distribution is given on Exhibit 2-1.

Along the western boundary of Fresno County are the arid foothills of the Coastal Range. The western and central areas of the county are part of the fertile San Joaquin Valley where almost all of the agricultural production takes place. In the east, one again encounters foothills and the Sierra Nevada Range; most of this area is either part of the National Forest or National Park Service. There are eight neighboring counties, which include: Kings, Tulare, Inyo, Mono, Madera, Merced, San Benito, and Monterey.

2.5 Regional Growth Policies

The RTP was developed to support Regional Land Use Element development policies that were first established in 1980, and to be consistent with the general plans of each of the cities and the county. These development policies are as follows:

- Establish development policies that are directed toward the long-term beneficial use of the region's resources and protection of the public health, safety and welfare.
- Protect productive and potentially productive agricultural land from urban encroachment, and thereby maintain the region's agriculturally based economy.
- Preserve and enhance the character and inherent values of natural, scenic and open space resource land as well as historical features in the region.
- Encourage annexation prior to urban development on the unincorporated fringe, consistent with a city's development program.
- Promote the concentration of urban and other intensive development in and around existing urban centers.
- Encourage development alternatives that maximize energy conservation and promote clean air.

2.6 Regional Planning Forecasts and Assumptions

Several factors are considered in the development of regional planning forecasts and assumptions, including regional population, housing and employment growth. These factors in turn provide the basis for projecting optimum transportation networks, street, highway, and transit loading, and traffic flow. The integration of these regional forecasts and assumptions into local planning policies requires the active participation of all involved jurisdictions. A technical steering committee composed of jurisdictional representatives has been involved in the development of the planning assumptions, which follow.

2.6.1 Overview

Changes in population, housing, and employment alter travel demand and travel patterns that affect transportation facilities. By anticipating the magnitude and distribution of growth and change within the

region, today's decisions can be made to capitalize on the positive aspects of anticipated growth while minimizing the adverse consequences.

2.6.2 Political / Planning Assumptions

- The establishment of development policies which are directed toward the long-term beneficial use of the region's resources and the protection of the public health, safety and welfare will become more critical as population growth pressures increase.

- Protection of productive and potentially productive agricultural land from urban encroachment will continue to be a significant goal in an effort to maintain the region's agriculture based economy.

- Fresno County will continue its policy of encouraging urban development in existing cities and limiting urban growth in areas of prime agricultural land. This will be implemented through referral for annexation.

- The goals of the Local Agency Formation Commission will continue to support logical boundaries for the delivery of urban services.

- The need for the achievement of clean air goals and resource conservation will continue to influence federal, state, and local policy decisions.

- Development alternatives that maximize energy conservation and promote clean air will continue to be valued by society.

2.6.3 Population Assumptions

Countywide population will grow to an estimated 1,402,300 persons by the year 2030 based on the forecast of the Central California Futures Institute. This assumes an average annual growth rate of 1.8% over the planning period of 2007-2030.

In the past, County population has increased at rates of 2.4% a year from 1970 to 1990, and 1.9% a year from 1990 to 2007. During the next two and a half decades or so (2007-2030) 484,000, or 53%, more people are expected to reside in Fresno County.

As shown in Exhibit 2-2, Fresno County's share of California population is expected to increase in the coming years. From 1970 to 1990, the County's population share remained steady at 2.2%. After 1990, the share will gradually increase, so that by the year 2030, Fresno County will capture 2.9% of the state population. The population projection contained in Exhibit 2-2 is the latest prepared by the State of California Department of Finance as of the print date of this Regional Transportation Plan.

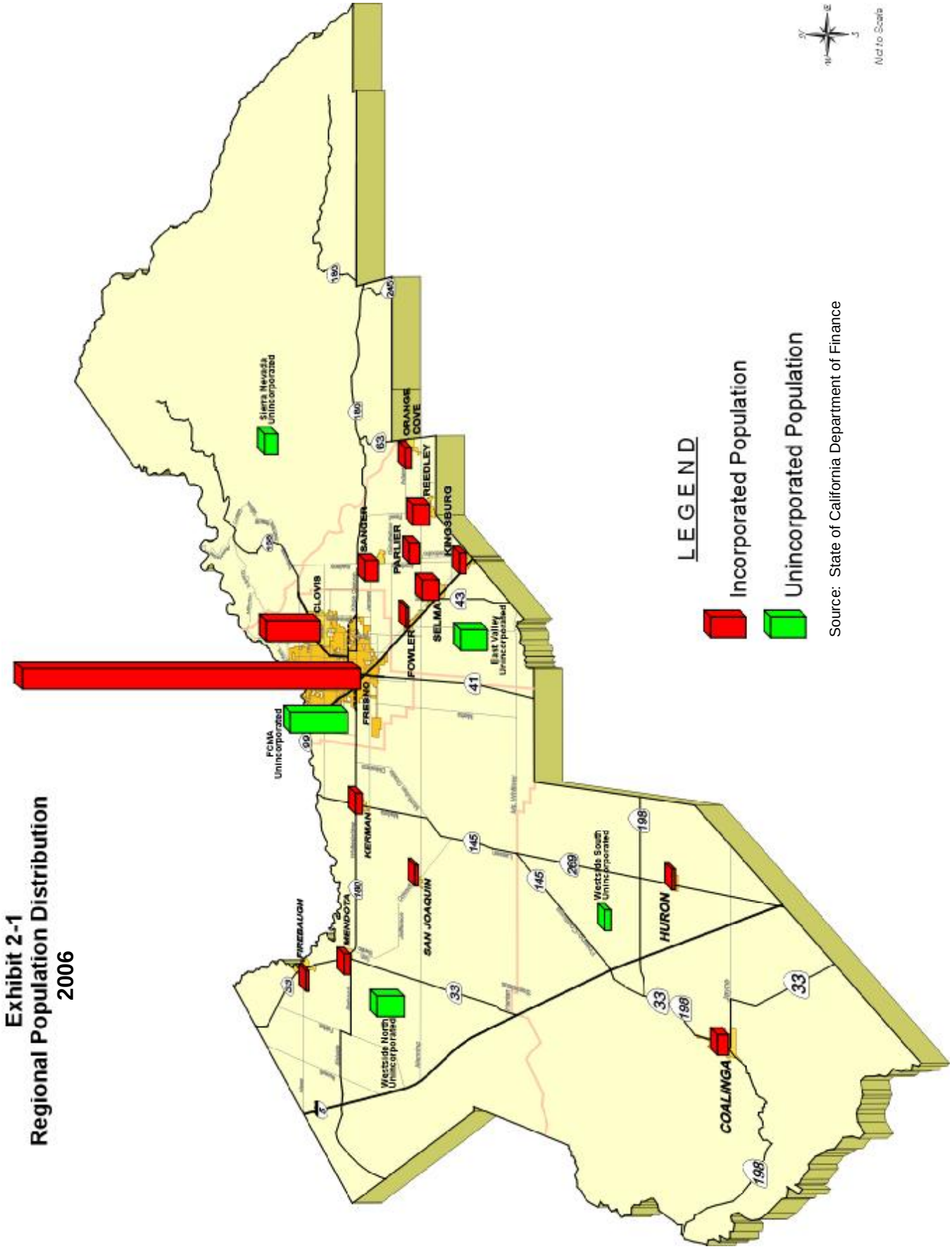


Exhibit 2-1
Regional Population Distribution
2006
Sierra Nevada Unincorporated
ORANGE COVE
REEDLEY
KINGSBURG
SANGER
PARLIER
CLOVIS
SELMA
FOWLER
East Valley Unincorporated
FCMA Unincorporated
FRESNO
KERMAN
FIREBAUGH
MENDOTA
SAN JOAQUIN
Westside North Unincorporated
Westside South Unincorporated
HURON
COALINGA
LEGEND
Incorporated Population
Unincorporated Population
Source: State of California Department of Finance
Not to Scale

Exhibit 2-2
Population of Fresno County
1970-2030

Date	Fresno County	California	Fresno County Share of California Population
April 1970	413,100 [1]	19,053,100 [1]	2.2%
April 1980	514,600 [1]	23,667,900 [1]	2.2%
April 1990	667,500 [1]	29,760,000 [1]	2.2%
April 2000	799,407 [1]	33,871,648 [1]	2.4%
July 2005	899,289 [2]	36,981,931 [4]	2.4%
July 2010	992,351 [2]	39,246,767 [5]	2.5%
July 2015	1,086,435 [2]	41,485,408 [6]	2.6%
July 2020	1,185,150 [2]	43,851,741 [5]	2.7%
July 2025	1,290,255 [2]	45,931,870 [6]	2.8%
July 2030	1,402,349 [3]	48,110,671 [5]	2.9%

Sources:
[1] 1970, 1980, and 1990 U.S. Censuses
[2] Based on Central California Futures Institute forecast
[3] Extrapolation of Central California Futures Institute projection
[4] State of California Department of Finance, E-2 report released December 2006
[5] State of California Department of Finance projection released May 2004
[6] Interpolation of State of California Department of Finance data

2.6.4 Employment Forecasts

The Fresno County employment level will increase during the planning period, 2001-2030, while the unemployment rate will continue to be higher than the California average.

Fresno County employment has always grown steadily from year to year, but the unemployment rate has been consistently higher than that of the state. Since 1990, the unemployment rate in Fresno County has fluctuated between 11.7% and 15.7% with no clear upward or downward trend. At the same time, California's rate has been considerably lower, ranging from 4.9% to 9.4% during the 1990-2000 period.

Much of Fresno County's future employment level and unemployment rates will depend on the agricultural industry, since agriculture plays such a major role in the county's economy. Each year since 1954, Fresno County has led all U.S. counties in the value of agricultural products. Agricultural levels effect agricultural employment as well as employment in traditionally non-agricultural sectors such as wholesale trade; manufacturing; services; and finance, insurance and real estate. Future agricultural activities in the county could be affected by:

- The gradual conversion to more high valued, labor intensive crops
- The intrusion of urban uses on farm land
- Governmental regulations on the use of chemicals
- The continual replacement of farm labor by machinery
- The limits on the amount of cultivable land and water for irrigation
- Potentially reduced yields due to declining air quality

The demand for labor may decline as advances in technology allow farmers to achieve greater production per acre.

2.6.5 Land Use Planning

Responsibility for land use planning within Fresno County lies with each of the fifteen incorporated cities within the County, and with the County of Fresno for development proposed within unincorporated territory. In 1983, the three primary agencies (the Cities of Fresno and Clovis and the County of Fresno) involved in land use planning within the Fresno-Clovis Metropolitan Area (FCMA) negotiated an agreement known as the Joint Resolution on Metropolitan Planning which defined an Urban Boundary coterminous with the Sphere of Influence adopted by the Local Agency Formation Commission (LAFCO) and required that the boundary not be amended without the agreement of the parties affected by the change.

This arrangement ensures that all Sphere of Influence expansions have concurrence of the other impacted public agencies prior to moving forward to LAFCO for approval. In addition, sales tax agreements negotiated between Fresno County and the cities contain land use provisions that required consultation and adherence to certain conditions, or risk the ability to annex, as well as possible legal sanctions. These provisions include measures that assure that annexations are orderly, leapfrog development is avoided, and urban growth is directed to the existing cities' boundaries (meaning that annexation takes place prior to development).

Currently, each of the three above mentioned entities have general plans last updated as follows:

- *City of Fresno* - The City of Fresno formally adopted its General Plan in May of 2002.
- *City of Clovis* - Clovis formally adopted its General Plan Update in April of 1993.
- *County of Fresno* - The County adopted its updated General Plan in October of 2000.

Evolving local land use jurisdictional issues are in flux as this edition of the RTP is being developed. However, it can be safely stated that the metropolitan area is now facing population increases that may require revision of existing boundaries, and at some level may require regional coordination and agreement as to the direction of growth. It is also expected that federal and state air quality requirements may ultimately have an effect upon land use planning in this non-attainment area.

2.7 The Use of Land Use Projections for Traffic and Air Quality Modeling

We are updating the Regional Transportation Plan at a point when many issues dealing with growth are unresolved. Those local agencies involved are in general agreement that, barring unforeseen changes, the area will experience major population growth during the planning period. As described, there is less agreement regarding where that growth will occur within the metropolitan area. We are using available maps and information provided by those agencies actively involved in land use planning. Given federal and state requirements, the Fresno COG is using the best available information to describe growth scenarios in the metropolitan area and throughout the county. These projected land use patterns form the database, which is input to the regional traffic model. By using future population growth and socio-economic information, The Fresno COG regional traffic model can project the traffic on the regional transportation system as it would exist at a given future time. This information is essential to the transportation planning process. However, as the RTP covers sixteen land use jurisdictions, it is unlikely that all planning documents will ever be newly updated at the same time. The fact that we are required to update this document every four years allows it to adapt successfully to changing plans, regulations, and conditions over time.

Exhibit 2-3
Fresno County Population by Jurisdiction
1970-2006

	1970		1980		1990		2000		2006	
Jurisdiction	Population	Percent Share of County	Population	Percent Share of County	Population	Percent Share of County	Population	Percent Share of County	Population	Percent Share of County
Clovis	13,856	3.4%	33,021	6.4%	50,323	7.5%	68,516	8.6%	89,924	10.0%
Coalinga	6,161	1.5%	6,593	1.3%	8,212	1.2%	15,798	2.0%	17,147	1.9%
Firebaugh	2,517	0.6%	3,740	0.7%	4,429	0.7%	5,743	0.7%	6,710	0.7%
Fowler	2,239	0.5%	2,496	0.5%	3,394	0.5%	4,046	0.5%	4,855	0.5%
Fresno	165,972	40.2%	217,346	42.2%	354,091	53.0%	427,652	53.5%	471,479	52.4%
Huron	1,525	0.4%	2,768	0.5%	4,766	0.7%	6,310	0.8%	7,344	0.8%
Kerman	2,667	0.6%	4,002	0.8%	5,448	0.8%	8,548	1.1%	12,633	1.4%
Kingsburg	3,843	0.9%	5,115	1.0%	7,245	1.1%	9,231	1.2%	11,246	1.3%
Mendota	2,705	0.7%	5,038	1.0%	6,821	1.0%	7,890	1.0%	8,777	1.0%
Orange Cove	3,392	0.8%	4,026	0.8%	5,604	0.8%	7,722	1.0%	9,639	1.1%
Parlier	1,993	0.5%	2,902	0.6%	7,938	1.2%	11,145	1.4%	12,895	1.4%
Reedley	8,131	2.0%	11,071	2.2%	15,791	2.4%	20,756	2.6%	23,341	2.6%
Sanger	10,088	2.4%	12,542	2.4%	16,839	2.5%	18,931	2.4%	23,322	2.6%
San Joaquin	1,506	0.4%	1,930	0.4%	2,311	0.3%	3,270	0.4%	3,746	0.4%
Selma	7,459	1.8%	10,942	2.1%	14,757	2.2%	19,444	2.4%	22,931	2.5%
Unincorporated Fresno County	179,275	43.4%	191,089	37.1%	159,521	23.9%	164,405	20.6%	173,525	19.3%
Fresno County	413,329	100.0%	514,621	100.0%	667,490	100.0%	799,407	100.0%	899,514	100.0%

Sources: 1970, 1980, 1990 and 2000 U.S. Censuses and 2006 State of California Department of Finance report

2.8 Regional Planning Process

Regional transportation planning is a dynamic process requiring periodic refinement, monitoring and updating. The planning program for the next three-year period will include extensive evaluation of the Plan itself and the elements of each respective transportation mode. Each component will be studied and modified consistent with Plan priorities in an attempt to achieve an integrated multimodal system.

2.8.1 Current Practices

Fresno COG is a federally designated MPO and a state-designated RTPA. These designations formally establish the Fresno COG's role in transportation planning. The Fresno COG Policy Board is composed of mayors from the fifteen incorporated cities in Fresno County and the Chairman of the Fresno County Board of Supervisors. A Memorandum of Understanding between the Fresno COG and Caltrans also provides for an Areawide Transportation Policy Committee, which consists of the existing Board and a Caltrans representative. Two committees serve as basic support to the Board: 1) the Policy Advisory Committee (PAC) is composed of city managers, the county administrator and Caltrans; 2) the Transportation Technical Committee (TTC) is composed of technical staff from member agencies, other interested agencies, public members, and Caltrans. A series of subcommittees also exists to evaluate and forward recommendations to the TTC on specific regionally significant issues and projects. Public participation is encouraged at every stage of the planning process and all meetings are open to the public. Public hearings are held for formal adoption of major planning documents.

Fresno COG's efforts toward citizen involvement center on public information, education, and citizen

participation in an advisory and decision making process. Efforts include the dissemination of pamphlets, the Fresno COG website, annual reports, newsletters, speeches, and public hearings. From time to time, citizen workshops and conferences are held jointly and coordinated with public and quasi-public agencies.

Fresno COG continues to focus on strengthening our government-to-government relationships with federally recognized tribes and makes every effort to establish regular and meaningful consultation and collaboration with them on matters that significantly or uniquely affect their communities. Fresno COG staff have received training on the requirements of SB18, the California law that requires cities and counties to contact and consult with California Native American Tribes before adopting or amending a General Plan, or when designating land as open space. Consultation and coordination with the Tribes is also encouraged at every stage of the planning process.

Currently, citizens are represented on the following committees: Transportation Technical Committee, Model Steering Committee, Social Services Transportation Advisory Council, RTP Steering Committee, and Environmental Justice Task Force, COG Rail Committee, Association for the Beautification of Highway 99, and the Quad-County Freight Advisory Committee. Reports from these committees ensure that all committee members' viewpoints are reviewed by the Policy Advisory Committee and the Fresno COG Policy Board. Citizens are encouraged to participate in whatever capacity may be appropriate to their cause.

The passage of Measure "C", a local sales tax, introduced a new agency into the transportation planning process, the Fresno County Transportation Authority. Authority staff has been seated on the TTC and works closely with the Fresno COG and Caltrans to implement a highway improvement program which is reasonable and deliverable.

The adopted RTP establishes a basis upon which funding applications at the state and federal level are evaluated. The intended use of any state and federal transportation funds by local governments must conform to the Regional Transportation Plan, the SJVAPCD portion of the State Implementation Plan, and the Regional Transportation Improvement Program.

2.8.2 Title VI and Environmental Justice

Title VI of the Civil Rights Act of 1964 set a standard that authoritatively outlawed discrimination in the conduct of all federal activities. It reads as follows: *"No person in the United States shall, on the ground of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance*." Although considerable progress has been made during the 1990s, individuals both inside and outside government are troubled by the high and adverse environmental impacts of private or governmental actions that fall disproportionately on populations protected by laws such as the civil rights act. The term *"environmental justice"* was created by people concerned that everyone within the United States deserves equal protection under the country's laws. Executive Order 12898 issued in 1994, responded to this concern by organizing and explaining in detail the federal government's commitment to promote environmental justice. Each Federal agency was directed to review its procedures and to make environmental justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on minority and low-income populations.

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) guidance on Environmental Justice (EJ) requires that Metropolitan Planning Organizations ensure that traditionally underrepresented groups are engaged in the regional transportation planning process and demonstrate how their influence and feedback impacted development of the Regional Transportation Plan. Further, the guidance also requires an evaluation of the adopted plan to ensure that there is no disparate negative impact borne by low-income or minority communities. FHWA and FTA have embraced the principles of environmental justice as a means toward improving the transportation decision-making process. Today, effective transportation decision-making requires understanding and addressing the unique needs of many different socioeconomic groups. Early, inclusive, and meaningful public involvement in transportation decision making is a proven means of designing transportation facilities that fit more harmoniously into communities.

There are three fundamental principles at the core of environmental justice:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.

- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.

- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.

Environmental Justice does not end with the RTP; rather it is just one of many arenas where EJ principles apply. EJ is also applicable at the project level when project sponsors are proposing to build a new project in a local community and federal funds are involved. Unfortunately, neither Title VI nor Executive Order 12898 prescribes the specific methods and processes for ensuring environmental justice in transportation planning. States and MPOs are free to explore and devise more effective analytical techniques and public involvement approaches to ensure that transportation plans successfully integrate environmental justice into decision-making.

In order to comply with the federal directives, Fresno COG has established an Environmental Justice Task Force made up of transportation planners, community leaders, and representatives from Environmental Justice/Title VI populations. The Task Force is developing a process with which to assess and ensure compliance of Fresno COG's transportation planning efforts with Environmental Justice requirements of Title VI. The Task Force is playing a key role in the following:

- Evaluating current Environmental Justice and Public Participation efforts and provide guidance on how to achieve the desired results;
- Defining the Environmental Justice populations within Fresno County;
- Reviewing existing COG process for identifying needs of environmental justice populations in Fresno County and providing appropriate feedback; and
- Developing appropriate performance measures for gauging the burdens/benefits of the Fresno COG's transportation system investments on Environmental Justice populations.

Utilization performance measures such as mobility, accessibility, environment, cost effectiveness, reliability, safety, and customer satisfaction provide a broader analytical framework for decision makers. Staff used Geographical Information Systems (GIS) mapping software and Census data to determine the location of Environmental Justice populations within Fresno County and to provide a visual representation of these populations. Fresno COG staff is incorporating the above information into a travel-demand forecast model to assess the benefits and burdens of existing and planned transportation system investments on target populations. The result is in an Environmental Justice Report, which assesses our current efforts at complying with both the spirit and the law of Environmental Justice and also, help guide Fresno COG's future efforts in this area.

Effective Environmental Justice practice requires an agency to reach out to minority and low-income populations as well as other traditionally underrepresented groups to learn about their concerns, needs, and circumstances. This is usually done through some kind of targeted and expanded public involvement process. To complement our existing efforts with Environmental Justice, the Fresno COG Policy Board adopted an updated and expanded version of the Public Involvement Procedures in March of 2003, which included new and enhanced approaches to outreach to Environmental Justice populations with the goal of adequately providing information to and soliciting input from these historically underserved populations in Fresno County (i.e. low-income, minority, Native American Tribes, elderly, and disabled people). For example, the outreach activities included in the Public Involvement Procedures contain provisions for additional public notification tools when applicable, such as culturally adapted community flyers, radio

advertising, a bilingual Fresno COG website, direct mail, and notices in non-English language publications to complement traditional public and legal notices, display ads and workshops. A translator/interpreter for non-English speaking individuals will be available if requested at least 3 working days in advance. Staff will also provide appropriate assistance, auxiliary aids and/or services when necessary to afford disabled individuals an equal opportunity at public meetings and workshops if requested at least 3 days in advance. Staff will obtain a language line as needed for day-to-day public inquiries and all public meetings will be held in locations that can be accessed by public transportation for the transit dependent. By including these outreach activities in the Public Involvement Procedures, Fresno COG is enhancing the public participation process to eliminate participation barriers and encourage minority and low-income populations in transportation decision-making, which is consistent with state and federal guidelines.

Environmental Justice Grants

Since May of 2002, Fresno COG has been awarded four grants through the Environmental Justice Grant Program for Context Sensitive Planning made available through Caltrans. The grants were awarded for the following four projects:

1. Traffic Calming and Urban Revitalization in West Fresno

This project was awarded $75,087 in state funds to work with community residents and businesses in the Fresno West neighborhood through an intensive Design Charrette process, to build a shared community vision for improving the traffic, safety, walking and biking conditions around the Kearney Palm Shopping Center at Fresno Street and Kearney, and for increasing safety, walkability and beautified streetscapes throughout the Fresno Street corridor and its main intersecting streets. The project has been conducted through a partnership of the Fresno COG, the Local Government Commission, the Fresno West Coalition for Economic Development and the consulting team of Walkable Communities, Inc.

A Final Report, titled, “The West Fresno Community Vision Plan” summarizes background information on West Fresno, the charrette process and results, and a vision plan prepared by the consultant team. The COG Policy Board accepted the report at their February, 2004 meeting.

2. Better Access for Low-Income and Minority Residents through Transportation Planning: A Community-based Needs Assessment

This project was awarded $80,000 in State funds, $10,000 from the San Joaquin Valley Air Pollution Control District, and $10,000 from the Fresno COG for a total of $100,000 to gather input from low-income and minority communities about low-cost improvements that will improve transportation and increase transit ridership in Fresno County and also aims at improving air quality, which is a major concern in the Valley. The project will work with the local transit agencies to implement feasible solutions.

This project is a partnership between the non-profit organization Odyssey, Fresno COG, Fresno Area Express, Fresno County Rural Transit Agency, San Joaquin Valley Air Pollution Control District, and Caltrans to improve transportation options by engaging low-income and minority communities in transportation planning. Specifically, the project goals are to:

- Increase ridership on 7 transit routes (FAX and FCRTA systems) through community input processes followed by low-cost marketing.
- Generate community input on low-cost and higher-cost transportation improvements in selected neighborhoods.
- Train community members in selected neighborhoods on how to impact the transportation planning process.

This project was completed in June of 2004.

3. Fresno Yosemite Village Revitalization Plan

Fresno COG as the applicant, and the Housing Authority of the City of Fresno (HACF) as subrecipient, received a $225,000 Caltrans Environmental Justice Grant for fiscal years 2005/2006 and 2006/2007. These funds are designated for further planning activities related to the Edison Village Center area of The

Fresno Yosemite Village Revitalization Implementation Plan, and further planning that was initiated by the West Fresno Community Vision Plan in October 2003.

4. Southeast Asian Transit Ridership Awareness

Fresno COG with the Lao Veterans of America Institute, through a $50,000 Caltrans Environmental Justice Grant are seeking to increase transit ridership in the low income and minority Hmong and Laotian communities by increasing awareness of the service.

Native American Outreach and Consultation

The federal and state governments have long had a unique legal and political relationship with federally recognized tribes and have, through presidential executive orders, transportation authorization acts, state and federal agency guidelines and orders, directed all agencies receiving federal funds to establish government-to-government relationships with federally recognized tribes and to establish regular and meaningful consultation and collaboration with them on matters that significantly or uniquely affect their communities. The Federally Recognized Tribal Governments, of which there are 3 in Fresno County, are considered sovereign nations with governments that have jurisdiction over specific territories and individuals. According to the U.S. Constitution, in court decisions and various laws and regulations, tribal governments must be involved on a *government-to-government* basis in decision-making on issues (such as transportation) that will affect them.

To comply with the above direction, Fresno COG includes the following in our outreach and consultation efforts with the Tribes:

- Establishing and maintaining government-to-government working relationships with the Tribes,
- Establishing clear and open, ongoing communication between the Tribes and Fresno COG,
- Ensuring that Fresno COG's policy and program recommendations, actions, and information having potential effects on the Tribe's land or resources are routinely transmitted to the Tribes in a timely manner.

The three Federally Recognized Tribes located in Fresno County are as follows:

1. Big Sandy Rancheria
2. Cold Springs Rancheria
3. Table Mountain Rancheria

Tribal consultation is *not* the same as public involvement. Tribal governments must be formally notified of agency actions and proposals and should be given the same courtesies and opportunities for participation and review that are given to other governmental entities. U.S. DOT Order 5301.1 also suggests that tribal representation *should* be sought in traditional public outreach efforts such as meetings, negotiations, rulemaking efforts, advisory committees, and focus groups. Individual members of native tribes, as well as tribal officials, can participate in these forums. In addition to these opportunities, DOT and its State transportation partners must recognize the rights of tribal governments to represent their interests as governments.

Senate Bill 18 requires cities and counties to contact, and consult with, California Native American tribes prior to amending or adoption a general plan, or specific plan, or designating land as open space. The California Transportation Commission also developed the Regional Transportation Guidelines that emphasizes the Federal and State requirement to consult with and consider the interests of Indian Tribal Governments in development of transportation plans and programs. Fresno COG makes every effort to consult with the Tribal Governments during the process of reviewing and updating the Regional Transportation Plan and to receive their input on the components of the Plan.

With the preceding information as guidance, Fresno COG has developed its current consultation and outreach efforts to Native Americans to be in line with current state and federal guidance. The current practices utilized by Fresno COG in its outreach to the Tribes include:

- *Government-to-Government Tribal Outreach* - Fresno COG notifies tribal governments of COG activities within Fresno County with particular emphasis on the need to make regular formal contact with representatives of the tribal governments to discuss important issues and to seek their input on tribal concerns and viewpoints. COG has met with representatives from each of the Tribal Governments at their Rancheria locations and at various meetings in Fresno. COG has made continual efforts to meet with the Tribal Councils and Tribal representatives to discuss COG activities, which include, among other things, our Regional Transportation Plan and potential funding opportunities for the Tribes.

- *Regular Contact and Updates* - Fresno COG provides area tribes with information and invitations to regularly scheduled meetings including, but not limited to, our monthly committees and Policy Board meetings, our Regional Transportation Plan Steering Committee meetings and Open Houses, important regional study meetings, and the Environmental Justice Task Force meetings. COG also provides to the Tribes information about funding opportunities, newsletters, special meeting announcements, and opportunities to participate in planning activities and studies that may be of importance to the tribes.

- *Sensitivity to Tribal Cultural Views* - Fresno COG will work towards facilitating an evolving knowledge, awareness, sensitivity, and understanding of tribal concerns and viewpoints.

All COG planning activities are forwarded to the following list of federally recognized Native American tribes located in Fresno County via telephone communication, email, fax, or traditional mail.

Some accomplishments in our outreach efforts include the following:

- Fresno COG has ongoing contact with the federally recognized Tribes. All pertinent information is provided to them via mail, fax, or by telephone.
- Fresno COG has had face-to-face meetings with representatives from the Tribes and has attended tribal functions like groundbreaking ceremonies and cultural workshops.
- Fresno COG attends local and state conferences, workshops, and tribal academy training where tribal issues are discussed and focus is placed on improving government-to-government working relationships with the Tribes and understanding cultural sensitivity. At one of these state conferences, Fresno COG provided a presentation on our successful government-to-government relationship with the Big Sandy Rancheria.
- Fresno COG has a Memorandum of Understanding with the Big Sandy Rancheria that outlines the government-to-government relationship with the Tribe.
- Tribal representatives have attended our monthly Transportation Technical Committee meetings where Fresno COG activities are discussed on a regular basis as well as our Regional Transportation Plan Steering Committee and Environmental Justice Task Force meetings.

Non-Federally recognized tribes are not considered government entities by the federal government, but they are protected under Environmental Justice and Fresno COG does understand the importance of ensuring that these tribes are also receiving adequate information on COG planning activities and are provided with ample opportunities to participate in our planning processes.

The three non-Federally recognized tribes located in Fresno County are as follows:

1. Choinumni Tribe
2. Dunlap Band of Mono Indians
3. Sierra Foothill Wuksache Tribe

The above Tribes receive our monthly committee and Policy Board meeting notices, special meeting announcements, newsletters, and invitations to important regional study meetings to include the Regional

Transportation Plan Steering Committee, the Environmental Justice Task Force, and the Public Infrastructure Study.

In addition to the above, Fresno COG includes on our mailing list the following Native American entities:

North Fork Rancheria
Dumna Tribal Council Heritage Committee
Sierra National Forest
Osa Center for Indian Education
Four Winds Lodge
Dunlap Band of Mono Indians Historical Preservation Society
Picayune Rancheria
Sierra Mono Museum
Haslett Basin Preservation Society
Table Mountain Rancheria Cultural Resource
Central Valley Indian Health Inc.

Fresno COG will continue in our efforts to consult with and outreach to the Native American Indians in our region.

Coordinated Human Service Transportation Plan

SAFETEA-LU requires that projects selected for funding under the Elderly Individuals with Disabilities grant (section 5310), JARC (section 5316), and New Freedom (section 5317) programs be "derived from a locally developed, coordinated public transit human services transportation plan" and that the plan be "developed through a process that includes representatives of public, private, and non-profit transportation and human services providers and participation by members of the public. The goals of the Coordinated Plan are to inventory existing public non-profit and private transit services, determine where service gaps exist, and develop a strategy for meeting identified needs. This process includes asking transit users, transit providers, agency representatives, and the general public about their needs and suggestions for future transit development and funding. In order to apply for grant

Fresno COG is in the process of preparing a consolidated plan for Fresno County that would meet the requirements set forth in SAFETEA-LU. The Plan would be completed with input from a Consolidated Plan advisory group being convened from members of the Social Services Transportation Advisory Council (SSTAC) Once input from the Consolidated Plan Advisory Group has been incorporated into the plan and approved the by the group, the plan will be submitted to the Fresno COG Policy Group for final approval and adoption.

2.9 Making the Transition to Interactive Regional Planning

As discussed earlier, the metropolitan area is experiencing a period of continuing growth amid the realities of air quality and requirements for transportation conformity. Local agencies coordinate within the traditional framework available at the Council of Fresno County Governments. Past Fresno COG efforts have focused primarily on the interactions between transportation and air quality. While the Fresno COG has no land use planning function and fully supports the continuation of independent decision-making by those elected officials most closely related to their communities, under recent federal requirements, this and future RTPs will necessitate a stronger level of coordination, communication, and cooperation in order to achieve air quality conformity.

Three components of comprehensive planning need to be addressed working with those agencies and organizations which have functioned fairly independently in the past:

- *Transportation* **-** Fresno COG, Caltrans, the County, the cities, the Transportation Authority, Madera County agencies, and the Tribal Governments

- *Air Quality* **-** SJVAPCD, the cities, the County, and the Tribal Governments

- *Land Use* **-** Fresno County, Clovis, Fresno, the 13 cities outside the FCMA, Madera County, and the Tribal Governments.

Fresno COG, along with the other seven RTPAs in the San Joaquin Valley, is party to a Memorandum of

Understanding (MOU) with the San Joaquin Valley Air Pollution Control District. This MOU defines a coordinated and cooperative process aimed at maximum effectiveness and compatibility of air quality and transportation plans. While there has been enhanced coordination between the Air District and transportation planning efforts in the past few years, both the District and the RTPAs in the Valley have been reluctant to venture into discussions of land use planning, as the responsibility clearly lies within the jurisdiction of cities and counties.

This orientation has been modified to some extent with the initiation of the San Joaquin Valley Blueprint planning process in 2006. The Valley COGs and the Air District have embarked upon a comprehensive and regional approach for developing a long range vision for the Valley. This vision will address urban and rural form; mobility and connectivity; economic development; environment, open space and resources; as well as affordable housing. The Blueprint will provide policy makers in local jurisdictions with the tools to implement planning concepts at the local level while it continues to acknowledge local land use authority.

In 2006 the eight Valley COGs established another joint venture MOU called the "San Joaquin Valley Policy Council". The Council includes two elected officials from each of the eight counties' Councils of Government. The purpose is to establish a Policy Council of elected officials and to develop a process and framework for establishing formal San Joaquin Valley positions on issues where valleywide consensus exists.

2.9.1 Council of Fresno County Government's Transportation Forum

Beginning in 1995, the COG has hosted the Fresno County Transportation Forum. The Forum is an effort by COG staff to bring together for one day, top public administrators, private sector executives and interested citizens in an effort to discuss and educate citizens on transportation issues and challenges facing Fresno County. Fresno County, like other counties and cities in California, is facing major challenges to its transportation system. The Forum is intended to serve as a first step in developing an informed and educated transportation coalition that can act as an advocate for Fresno County in matters related to transportation. Topics discussed at the Transportation Forums have included air quality conformity, transportation funding, air transportation, goods movement, land use, rail transportation and public transportation. An underlying theme of the Forum is to reinforce the need to integrate land use, transportation and air quality in long range planning endeavors.

2.9.2 The Need for Improved Analytical Tools

The Fresno COG provides a valuable resource to urban planning activities through maintenance of the FCMA Socio-Economic Database. The existing calibrated Countywide traffic model provides the basis for ongoing transportation planning activities. Fresno COG is also strongly involved in valley-wide modeling activities critical to an understanding of the role of the transportation sector in resolving serious air quality problems in the San Joaquin Valley Air Basin. However, our existing technology does not currently allow easy analysis of alternative land use proposals, or of modal alternatives.

Fresno County and the cities of Fresno and Clovis have developed geographic information system (GIS) capacity. The effects of land use growth on transportation infrastructure is generally well documented in both general plans and in previous RTPs. Currently, we are limited in our ability to explore land use/transportation alternatives by the amount of labor required to input land use data. As technology is available to connect the GIS with the Fresno COG traffic and air quality modeling capability, the capacity to provide alternative analysis to local agencies could help considerably with understanding the transportation and air quality ramifications of land use decision-making. It may be most cost-effective to explore developing a land use/transportation modeling capacity which could be used throughout the Valley, with the financial participation of the Air District, other regional transportation planning organizations, and land use agencies.

In addition to the analytical tools listed above, in 2003-04 Fresno COG completed development of a new mode-split, peak period countywide traffic model. The mode-split model differs from the current Fresno COG peak hour traffic model in that it contains complete transit networks and assigns passenger trips to all types of alternative modes of travel as well as to passenger cars. Several agencies have identified projects that would benefit from a mode-split model. Among those identified are: General Plan updates, highway route adoption studies and potential transit corridor studies.

These modeling tools will assist the cities of Fresno and Clovis and the counties of Fresno and Madera in reviewing the urban landscape, considering alternative growth scenarios, and making policy changes to successfully implement their planning documents. The tools will provide information on the land use patterns that could enhance transit, reduce vehicle miles traveled, and address air quality issues. The land use allocation model will consider projected population and employment, future household characteristics, development densities, and other factors. Public officials and citizens will be able to view the likely impacts of alternative growth policies in easy-to-understand maps and tables. The output data would be inputted into the visualization and indicator model. The visualization and indicator model, a GIS-based planning support system, will consider a set of indicators that local decision-makers and stakeholders could use to measure conditions, identify issues, evaluate alternative courses of action, and monitor changes overtime. Indicators could include population and employment, development density, multi-family housing share, share of employees within ¼ mile of transit, vehicle miles traveled, air pollutant emissions, etc. Output data would be further analyzed in Fresno COG's transportation demand model.

2.9.3 Intergovernmental Cooperation on Land Use / Transportation / Air Quality Planning

Ultimately, local agencies need to find ways to work together to solve the air quality and congestion problems inherent in growth, especially in the urban area. Assuming that there is general agreement that multi-modal options must be encouraged, jurisdictional proximity will argue for a heightened level of coordination of transit systems, integrated design of bikeway facilities, cooperation on the reservation and planning for future light rail, other corridors, etc. The Regional Transportation Plan process itself will require that we agree upon priorities for funding on an ongoing basis. If we are unable to achieve air quality conformity, we all will suffer the impacts of severely reduced funding for transit and transportation corridors, and additional air district constraints on our ability to build a healthy economy, attract industry, and develop jobs. The stakes are high and the impacts will be felt in all areas within the county. Recent estimates indicate that approximately $250 million in highway funding may be at risk valleywide should air quality sanctions go into effect.

There is a continuing need to find creative ways to work jointly on areas which have been decided independently or on an incremental basis in the past. Ultimately, there may be a desire to create some structured arrangement to work together on issues that would benefit by shared analysis and decision-making. Approaches that could assist include the following:

The use of available modeling tools for transportation and air quality by land use agencies for general plan development - Information developed for this and future RTPs is available to member agencies to clarify the ramifications of plan alternatives. Improved interactivity between the Fresno COG model and local GIS capabilities could be used at both project and general plan levels.

Integrated staff work groups to frame the questions which need to be addressed - An integrated team of local agency staff could assist the decision-making process through: 1) listing consensus-building goals, 2) framing the questions that need to be addressed and articulating individual agency positions in a neutral manner, 3) making recommendations as to what would constitute the type of issues (i.e. inter-jurisdictional facilities, resource issues such as air and water, economic development) which would benefit from regional planning and decision-making 4) working through a proposal for structured agreement, such as a memorandum of understanding or equally effective mechanism.

Setting up an educational process for staff, the public, and elected and appointive officials - We all need to better understand the linkages between land use, transportation, and air quality. Interactive institutional arrangements and policies may need to be created involving planning commissions, LAFCO, the Air District and legislative bodies at the local level to make the system work.

Technical assistance from the Air District and statewide design and environmental groups - The problems of the Central Valley are gaining wider appreciation and analysis as the state looks to this area for absorption of future population. Local agencies could be pro-active in asking for assistance in working through our land use/transportation/air quality relationships from the Air District, Caltrans, and other resource agencies.

San Joaquin Valley Regional Blueprint Planning Process

As mentioned earlier, in 2006 the Valley COGs and the Air District embarked upon a comprehensive and regional approach for developing a long range vision for the Valley. This vision will address urban and rural form; mobility and connectivity; economic development; environment, open space and resources; and affordable housing. The Blueprint will provide policy makers in local jurisdictions with the tools to implement planning concepts at the local level while acknowledging local land use authority.

Committed to interfacing with the San Joaquin Valley Partnership, the Blueprint effort will provide institutional framework, process development and product creation to support long-range planning for the region.

The following process components will underlie all work during the course of the Blueprint for 2030 and beyond:

- **Thinking Regionally** – Understanding that opportunities and challenges are not bound by jurisdictional boundaries, the Blueprint will engage Valley COGs, elected officials, business representatives, industry, interest and community groups and the public-at-large to develop a vision that recognizes this interdependency.
- **Effective Partnering** – Recognizing the need for the region to compete globally, the SJ Valley Regional Blueprint will work to develop effective and strategic partnerships to advance the regional economy and protect regional resources.
- **Inclusive Participation** – Acknowledging the importance of participation from the diverse constituency of the region, the SJ Valley Regional Blueprint will strive to include representation of race, ethnicity, gender, geography, and profession to help ensure success.
- **Consensus Building** – Working towards a common SJ Valley Regional Blueprint will provide opportunities for constructive conversations and debate to facilitate the melding of multiple needs into a comprehensive regional vision.
- **Information Integration** – Assembling and assimilating currently unrelated datasets into a comprehensive and integrated decision-making tool, the SJ Valley Regional Blueprint will develop scenario planning to assure that resource choices that will determine the future of the SJ Valley are made with the best available regional information.

Throughout the process multiple strategies will be employed to further the development of each component and each component will be utilized to support underlying values and principles. While these values and principles will need to be developed and affirmed by the region, the following are the basic elements that will be built upon throughout the two-year Blueprint Vision process and beyond:

- Broad public outreach & engagement
- Integration of multiple planning tools
- Infrastructure plans to support quality of life
- Efficient land use to accommodate agriculture, industry, business, housing, & resources
- Utilization of technology to optimize regional decision-making & civic engagement

- Optimization of new partnerships
- Commitment to implementation through consensus
- Recognition that "failure to plan is planning to fail"

2.10 SAFETEA-LU Planning Areas

2.10.1 Introduction

On August 10, 2005 President Bush signed into law the Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users (SAFETEA-LU). SAFETEA-LU is the most recent federal transportation bill, having been preceded by the 1998 Transportation Equity Act for the 21st Century (TEA-21) and the 1991 Intermodal Surface Transportation Equity Act (ISTEA).

Federal transportation statutes have for years required multimodal transportation planning by MPOs. Previous federal transportation legislation and now SAFETEA-LU require states to plan as well. Each state must create a long-range plan, which should be a composite of the MPOs' plans combined with the state's plan for the areas outside of the MPOs jurisdiction. SAFETEA-LU provides the framework in its provision of flexible funds so that areas can build the systems that best meet their needs.

Among the factors that states and MPOs must consider in their long-range plans are land use, transit service, and traffic congestion. They must take into account the relationship of transportation, land use, and development decisions. Just as transportation investments can influence land use patterns, so can land use patterns influence transportation needs. The relationship has a definite air quality impact. MPOs must plan to decrease traffic congestion or prevent it from occurring in uncongested areas.

SAFETEA-LU also continues the Congestion Mitigation/Air Quality Improvements (CMAQ) Program, founded in ISTEA. CMAQ can only be spent on Transportation Control Measures, other transportation measures within approved State Implementation Plans, comparable Environmental Protection Agency (EPA) approved programs, and other projects intended to improve air quality.

In addition to reauthorizing the funding levels for the various federal transportation programs, SAFETEA-LU also established new transportation planning and programming requirements that impact the Regional Transportation Plan and Federal Transportation Improvement Program. This section discusses the chronology of developing the 2007 Regional Transportation Plan to addresses these requirements, provides an overview of how Fresno COG and the San Joaquin Valley as a whole coordinated in a good faith effort to comply with the requirements by the statutory deadline of July 1, 2007, and includes several specific discussions addressing SAFETEA-LU requirements that are not included elsewhere in the RTP.

Chronology

Although SAFETEA-LU was signed into law in August of 2005 and federal guidance for implementing the new provisions began trickling out shortly thereafter, it wasn't until the Notice of Proposed Rulemaking (NPRM) was published in the Federal Register in June of 2006 that the large scale efforts to understand the planning impacts of SAFETEA-LU really started.

The June 2006 NPRM was immediately followed by federally-sponsored webcasts and panel question and answer opportunities in a wide variety of forums. Fresno COG staff participated in many these, including:

- Sessions at the California Transportation Planning Conference (June 2006)
- Sessions at the National Association of Regional Councils (NARC) Annual Conference (June 2006)
- Federal webcast Q&A opportunities (June and July 2006)
- Statewide NPRM Workshop sponsored by Caltrans (August 2006)

- NARC conference calls to discuss NPRM comments (August 2006)

In addition, recognizing the significant impact the new SAFETEA-LU requirements would have on San Joaquin Valley COG efforts to update our RTPs and FTIPs, Fresno COG attended the San Joaquin Valley 2007 Regional Transportation Plan Workshop in August 2006. The intent of this workshop was to bring together all of the relevant regional, state, and federal agencies to determine the appropriate course of action for the Valley in achieving SAFETEA-LU compliance by July 1, 2007.

The workshop was well attended, with over 25 people representing the following agencies:

- Federal Highway Administration – California Division
- Caltrans Headquarters – Programming
- Caltrans Headquarters – Planning
- Caltrans District 6 – Planning
- Caltrans District 10 – Planning
- Council of Fresno County Governments
- Kings County Association of Governments
- Madera County Transportation Commission
- Merced County Association of Governments
- San Joaquin Council of Governments
- Stanislaus Council of Governments
- Tulare County Association of Governments
- Cari Anderson Consulting

The discussion at the workshop was productive, focusing on getting through the list of questions identified in the workshop materials and obtaining answers to as many as possible. As a result of the workshop and the followup items that were identified, the San Joaquin Valley COGs added RTP-related issues to the monthly Model Coordinating Committee (MCC) and Programming Coordination Group (PCG) agendas.

Comments on the NPRM were due on September 7, 2006. Fresno COG staff participated in national, statewide, and Valleywide discussions regarding the comments, and submitted comments to the docket by the September deadline.

During the time between the publication of the NPRM in June 2006 and the publication of the Final Rule in February 2007, Fresno COG staff worked towards a SAFETEA-LU compliant RTP and FTIP. Much of the work effort was based on the August 2006 RTP Workshop discussions, SJV Directors Association guidance, and ongoing discussions with State and federal agencies both on an individual basis and within the context of the MCC and PCG conference calls.

2.10.2 Gap Analysis

On November 15, 2006 the California Division of FHWA issued a letter requesting the development of a gap analysis that would compare existing planning and programming activities against the requirements of SAFETEA-LU. The intent of this analysis is to identify SAFETEA-LU compliance items and describe either how they are currently being addressed or how Fresno COG intends to address them. The 2007 RTP and associated documents address many of the SAFETEA-LU requirements. The Gap Analysis attached in Appendix C is the most recent version at the time of the RTP publication. The first version was submitted to Caltrans and FHWA by the Valley COG Directors in January 2007, and was subsequently revised based on comments received from FHWA. The initial versions were submitted for all Valley MPOs; the version in Appendix C applies only to Fresno COG, as FHWA has requested a gap analysis from each MPO.

2.10.3 SAFETEA-LU Planning Areas

SAFETEA-LU identifies eight broad planning areas to be considered in the planning process. Those areas are as follows:

Planning Area #1

Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency.

RTP Response:

The RTP identifies the importance of developing and maintaining a properly functioning transportation system not only within the metropolitan area but throughout the rural areas as well. As the number one agricultural county in the world, it is critical that the movement of agricultural commodities from farm to market remain a high priority for transportation providers in Fresno County.

Planning Area #2

Increase the safety of the transportation system for motorized and non-motorized users.

RTP Response:

Safety and Security are critical components of a properly functioning multi-modal transportation system. As detailed in the Action Element, Fresno COG has developed a long range Intelligent Transportation Systems (ITS) Strategic Plan. ITS makes use of communications technology to more effectively manage the transportation system through means of electronic communications. Several ITS applications (Emergency Vehicle Management, Visibility Warning Systems, Automated Roadside Safety Inspection, etc.) have direct benefits for improving safety and security for the transportation system.

Planning Area #3

Increase the security of the transportation system for motorized and non-motorized users.

RTP Response:

Fresno Area Express has implemented a security system involving the installation of surveillance cameras and the use of police officers to provide security on buses and at bus stops throughout the fixed-route system, at various times of the day. In addition to safety and security as it relates to the streets and highways system, continued development of the region's multipurpose trail and bicycle facilities will also require development of policies by local agencies to promote safety and security for users.

Planning Area #4

Increase the accessibility and mobility options available to people and for freight.

RTP Response:

The enhancement of mobility for people and goods is discussed in the Multimodal, Highways, Streets, and Roads, Rail, and Aviation sections of the Action Element. Policies supportive of this desired outcome are included in comparable sections of the Policy Element. In addition, Fresno COG has established an Intermodal Freight Advisory Committee to discuss goods movement issues.

Planning Area #5

Protect and enhance the environment, promote energy conservation, improve the quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns.

RTP Response:

The overall environmental impacts of transportation decisions are discussed and documented in the Environmental Assessment prepared in conjunction with the RTP. The Policy Element of the RTP reflects specific goals, objectives and policies directed toward energy conservation. The Transportation Systems Management section of the RTP seeks to be responsive to energy conservation goals by implementing traffic and public transit improvements and by encouraging the use of non-motorized forms of transportation

Planning Area #6

Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

RTP Response:

Specific goals, objectives, and policy statements which address the need for connectivity of the transportation system are listed throughout the RTP. Both the urban and rural networks are included in our traffic model, and are given consideration in management of the transportation system. In addition, three long range planning studies have been completed. The Fresno-Madera County East-West Corridor Study (Phases I and II), the Herndon Avenue Specific Study, and the Southeast Corridor Study. In addition, two other long-range planning studies are either underway or scheduled to begin shortly: the Fresno-Madera County Freeway Deficiency Study and the Fresno County Public Transportation Infrastructure Study.

Planning Area #7

Promote efficient system management and operation.

RTP Response:

Throughout the RTP emphasis is placed on more efficiently managing the existing transportation system. The recently completed Fresno County Intelligent Transportation Systems Strategic Plan has identified specific strategies which will allow for more efficient management of the existing transportation system using communications technology.

Planning Area #8

Emphasize the preservation of the existing transportation system.

RTP Response:

The Policy Element of the RTP contains specific goals, objectives, and policies reflecting Fresno COG's commitment to preserving and maintaining the existing transportation system. Local agencies have included anticipated maintenance and reconstruction needs in the countywide network as background to air quality analysis. This assumes that ongoing maintenance of streets and highways, bridges, bikeway facilities, airport facilities, and rail will continue to preserve the safety and efficiencies of the transportation system.

Chapter 3
Policy Element

3.1 Introduction

The 2007 Regional Transportation Plan's goals, objectives and policies have been developed to serve as the foundation for both short and long-term planning. For purposes of the RTP the following definitions will apply.

Goal: A "Goal" is the end toward which the overall effort is directed; it is timeless, general and conceptual. The intent of the overall goals is to provide a framework for subsequent objectives and policies.

Objective: An "Objective" provides clear, concise guidance to obtaining the goal. Objectives are successive levels of achievement in movement toward a goal. They are results to be achieved by a stated point in time. Individual objectives are capable of being quantified and realistically attained.

Policy: A "Policy" is a direction statement that guides present and future decisions on specific actions. Policies should support the attainment of objectives.

3.2 General Transportation Goals, Objectives, and Policies

Goal: **Provide for an integrated multimodal transportation system which serves the needs of a growing and diverse population for transportation access to jobs, housing, recreation, commercial, and community service.**

Objective: Develop an integrated multimodal transportation network.

Policies:

- *Develop a regional streets and highways system that has a balanced mix of high-speed and local corridors which are functional and flexible for intermodal use.*
- *Integrate transportation modes through a coordinated transportation systems management process.*
- *Provide for efficient, multi-destination trips through the coordination of urban and rural public transportation.*
- *Develop bicycle and pedestrian facilities as an alternative to the automobile.*
- *Develop air transportation facilities and services complementary to other modes of transportation.*
- *Decisions on improvements to the transportation system shall take into account the effective use of all modes and facilities.*
- *Encourage and support the development of methods to expand and enhance transit services and to increase the use of such services.*
- *Public transit, ridesharing, carpooling, bicycle and pedestrian access, park-and-ride facilities, and other transportation demand strategies shall be pursued as preferred alternatives where feasible.*

- *Encourage jurisdictions to ensure that the needs of pedestrians, bicyclists, and individuals with disabilities are given special attention in the project review process.*

- *Support the coordination or consolidation (where appropriate) of transit and paratransit services to provide more effective, efficient and accessible transportation services.*

- *Encourage local jurisdictions to provide incentives to encourage transit, ridesharing and bicycling.*

Goal: **Maintain and improve the safety and efficiency of existing facilities as the basic system which will meet existing and future travel demands.**

Objective: Complete and maintain a transportation network which provides operational efficiency in conjunction with meeting the functional requirements of existing and future travel demands.

Policies:

- *Develop a convenient, safe and efficient interface between transportation modes.*

- *Complete the planned freeway system to relieve congestion, and upgrade existing roads commensurate with growth.*

- *Manage the transportation system in a manner designed to increase operational efficiency, conserve energy and space, reduce air pollution and noise, and provide for effective goods movement, safety, personal mobility and accessibility.*

- *Establish a transportation network which provides for the coordination and connectivity of roads within the metropolitan area with roads outside the metropolitan area.*

- *Continue support for the preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing transportation facilities more efficiently.*

- *Promote transportation network design standards which relieve congestion and prevent congestion from occurring where it does not yet occur.*

- *Maintain stringent safety requirements for all transportation modes.*

- *Identify those transportation problems where transportation systems management can be effective.*

- *Identify problem (hazardous) locations and implement counter measures for anticipated problems wherever possible.*

Goal: **Provide support to the maintenance and expansion of transportation modes for the movement of people and goods within and through the region.**

Objective: Develop a multimodal transportation network which facilitates and enhances the movement of people and goods in a manner which is economically beneficial to the region.

Policies:

- *Implement traffic flow improvements, maintenance and rehabilitation on existing*

corridors for efficient movement of people and goods.

- *Pursue development of strategies and methods to enhance the efficient movement of freight through the multimodal network.*

- *Work cooperatively with the private sector to ensure that the collected information accurately reflects existing and forecasted conditions that are of importance from a freight transportation perspective.*

- *Strive to ensure that public and private transportation providers and other interested parties have a "reasonable opportunity" for input into the transportation planning process.*

Goal: **Manage the financial resources which are available from government, the private sector, and users of the transportation system in a cost-effective manner to meet regional needs.**

Objective: Procure and leverage federal, state and local transportation funding to the maximum degree possible, in order to develop a regional transportation network which serves the residents of the region in the most economical, effective and efficient manner possible.

Policies:

- *Pursue additional funding sources for development of major transportation programs and projects. Work with all interest groups to reach consensus and initiate an active public information program regarding transportation funds needed.*

- *Submit applications for any supplemental revenue sources that may become available.*

Goal: **Work with local, state, and federal agencies to promote environmental sensitivity and energy efficiency in the development and management of our transportation system.**

Objective: Development of a regional transportation network which is environmentally sensitive and maximizes energy efficiency wherever possible.

Policies:

- *Evaluate the transportation system for air quality, energy and efficiency impacts.*

- *Strive to avoid or fully mitigate all significant impacts of new transportation facilities on environmentally sensitive areas and natural resources.*

- *Mitigate motor vehicle, railroad and airport-related noise in populated areas.*

- *Encourage energy conservation through alternatives to single-occupancy vehicles, increased auto efficiency and facility design.*

- *Project-level decisions should give priority to safety, air pollution, noise and energy considerations.*

- *Support the implementation of Transportation System Management, Transportation Demand Management, and Transportation Control Measures that reduce emissions on the circulation system.*

- *Continue participation in the transportation/air quality monitoring program for the State Implementation Plan with the San Joaquin Valley Air Pollution Control*

District.

- *Continue to participate in and support a coordinated transportation planning effort between the Regional Transportation Planning Agencies located in the San Joaquin Valley nonattainment air basin.*

- *Endeavor to ensure the consistency of regional transportation planning efforts with applicable Federal, State, and local energy conservation programs, goals, and objectives.*

Goal: **Support cooperative efforts between local, state, federal agencies and the public to plan, develop and manage our transportation system.**

Objective: Establish intergovernmental organizational relationships and lines of communication which foster an understanding and awareness of the overall impacts of transportation/land use/air quality decision making.

Policies:

- *Coordinate with other public agencies to ensure that the overall social, economic, energy and environmental effects of transportation decisions are understood by the general public.*

- *Work closely with local land use agencies to ensure that land use planning is coordinated with transportation planning to fully mitigate the traffic impacts of new development to the greatest degree possible.*

- *Existing and future land use plans of the communities within the region shall be recognized in the formulation of transportation decisions.*

- *Encourage and support mixed land use developments that encourage a jobs/housing balance and that make alternative modes more effective.*

- *Provide safe, efficient travel while supporting growth management policies to discourage premature urban fringe development.*

- *Work together with the appropriate public agencies to preserve rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors and identification of those corridors for which action is most needed to prevent destruction or loss.*

- *Communicate with local land use agencies on the likely impacts of transportation policy decisions on land use and development; and strive for consistency (where appropriate) between transportation plans and programs and applicable land use and development plans.*

3.3 Highways, Streets and Roads

Goal: **Establish an integrated highways, streets and roads network that provides for the efficient movement of both people and goods within Fresno County.**

Objective: Develop and implement an integrated highways, streets and roads network that provides mobility for both urban and rural residents including the movement of goods.

Policies:

- *Improve the urbanized area circulation system including phased completion of the*

urban freeway network.

- *Give priority to transportation improvements that accommodate travel within Fresno County.*
- *Continue development of safety, maintenance and operational improvements on the streets and highways network within Fresno County.*
- *Continue work with member agencies to ensure that the inter and intra county movement of agricultural commodities remains an important priority.*
- *Monitor levels of service on the streets and highways network within Fresno County to ensure safe and efficient movement of people and goods.*
- *Develop a convenient, safe and efficient interface between transportation modes.*

Goal: Make the most efficient use of available transportation revenues to enhance the highways and streets network.

Objective: Procure all possible federal, state and local transportation revenues related to development, maintenance and rehabilitation of the highways and streets network.

Policies:

- *Continue to pursue federal, state and local funding for both local streets and roads and state highways without modification to existing regional transportation planning policy.*
- *Continue close monitoring of the overall transportation financing issues at all levels of government to ensure that Fresno County agencies have the ability to react in a timely fashion to any financing strategies that may emerge.*
- *Continue to work closely with the State of California to develop some form of statewide transportation revenue stream that is equitable statewide.*

Goal: Maintenance of acceptable level-of-service standards for the highways, streets and roads network within Fresno county.

Objective: Provision of levels-of-service on the highways, streets and roads network that will allow for adequate movement of people and goods while at the same time meeting Federal and State Air Quality Conformity standards.

Policies:

- *Enhance communication between Fresno COG and local land use agencies so impacts on the regional transportation system can be adequately analyzed prior to and during the decision making process.*
- *Pursue revisions to legislation that would inappropriately penalize counties and cities located in non-attainment air pollution areas.*
- *Work cooperatively with the private sector to ensure that the mobility needs of the business community within Fresno County are addressed.*
- *Continue to participate in and support a coordinated transportation planning effort between Regional Transportation Planning Agencies located in the San Joaquin Valley as it relates to development of the highways, streets and roads network.*

- *Manage the highways, streets and roads network in a manner designed to increase operational efficiency, reduce air pollution and provide adequate mobility for both people and goods.*

Goal: **Establish compliance with** Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) **as it relates to the streets and highways network.**

Objective: Develop and implement SAFETEA-LU policies as they relate to the streets and highways network of Fresno County.

Policies:

- *Continue preservation of existing transportation facilities and, where practical, ways to meet transportation needs by using existing facilities more efficiently.*
- *Continue work with the appropriate governmental agencies on the National Highway System.*
- *Promote development of a highways, streets and roads network that provides for connectivity of the metropolitan network with the system outside the metropolitan network.*
- *Continue to preserve rights of ways for construction of future streets and highways projects including identification of unused rights-of-way.*
- *Enhance the development of a highways and streets network which will relieve congestion and avoid congestion where it does not yet occur.*

3.4 Mass Transportation

Goal: **Provide public transportation mobility opportunities to the maximum number of people in the region.**

Objective: Continue to pursue expanded federal, state and local funding for both public and social service transportation.

Policies:

- *Provide a transit system that meets the public transportation needs of the service area.*
- *Provide transit services that serve low income, elderly, and disabled communities.*
- *Support the coordination and consolidation of social service transportation.*

Goal: **Provide quality, convenient and reliable public transportation service.**

Objective: Encourage safety, appropriate frequency of bus service, reasonable fares and the provision of adequate service to satisfy the transit needs which are reasonable to meet.

Policies:

- *Provide reliable and convenient public transit service.*
- *Provide clean, attractive and comfortable vehicles and facilities.*
- *Provide a safe system.*

Goal: **Provide an efficient and effective public transportation system.**

Objective: Consider advantages and disadvantages of projects, including economic, environmental and social factors.

Policies:

- *Maximize public transportation patronage.*
- *Minimize operating and capital expenses.*
- *Encourage the private sector to provide service when economically feasible.*

Goal: **Promote public transit's service and image in community.**

Objective: Provide complete and accurate information that makes public transportation "user friendly".

Policy:

- *Create and produce publications that promote the use of public transportation.*

Goal: **Provide for an integrated multimodal transportation system which facilitates the movement of people and goods.**

Objective: Develop a multimodal transportation network.

Policies:

- *Coordinate service to facilitate multimodal and inter-system transfers.*
- *Coordinate fare and transfer policies along with service information programs.*

Goal: **Coordinate public transportation policies with land use and air quality policies.**

Objective: Support transportation investments that work toward accomplishing air quality goals, optimize utilization of land and encourage a stable economic base.

Policies:

- *Provide incentives to reduce dependency on automobile travel without compromising travel mobility.*
- *Evaluate the transportation system for air quality, energy and efficiency impacts.*

3.5 Aviation Goals

Goal: **Develop a fully functional and integrated air service and airport system that is complementary to the regional transportation system.**

Objective: Maintain and improve the airport system in Fresno County.

Policies:

- *Provide for the orderly and timely development of a system of airports adequate to meet the air transportation needs of the region.*
- *Encourage air travel as an energy efficient mode of transportation.*
- *Minimize airport related noise and other environmental problems.*
- *Identify the general location of all public use airports by type, size, and the time frame that will be required to make air transportation reasonably accessible throughout the region, with particular emphasis on the need to minimize airport-*

related land use problems.

- *Coordinate airport planning with the Airport Land Use Commission and with State, County, and other local agencies in the areas of transportation, land use, economic development and resource utilization.*
- *Adopt the Basic Utility Stage 1 classification, as defined by the Federal Aviation Administration, as the minimum standard for public use airports.*
- *Prepare site selection studies for the location of new airports as appropriate.*
- *Maintain Airport Master Plans, Airport Layout Plans, and land use environs area plans for all Fresno County public use airports.*

3.6 Non-Motorized Transportation Goals

Goal: Recognition and integration of the bicycle as a valid transportation mode in transportation planning activities.

Policies:

- *Include bicycle transportation planning as an integral part of the Fresno COG's transportation planning program.*
- *Encourage and assist member agencies to develop new or update existing bicycle transportation plans which are integrated with the regional bikeways system and which provide for bicycle use as an alternative to the automobile for shorter trips.*
- *Encourage member agencies to include a bicycling section in all transportation-related documents including, but not limited to, circulation elements of general, community, specific, and redevelopment plans.*
- *Encourage and facilitate interagency cooperation and coordination in the development and implementation of bicycling plans and projects.*
- *Coordinate Fresno County's bikeways system with those of adjoining counties.*
- *Encourage member agencies to provide for bicycle-friendly development, including bicycle travel in new development or redevelopment plans and projects.*
- *Encourage member agencies to include bicycle parking requirements in all land-use/site development requirements that address automobile parking.*
- *Work with, and participate in efforts of member agencies and other groups and organizations to work with, irrigation districts, railroads, and other owners of linear rights-of-way that have the potential to accommodate bicycle facilities, the development of which would strengthen the Countywide bicycle transportation system.*

Goal: Safe, convenient, and continuous routes for bicyclists of all types which interface with and complement a multimodal transportation system.

Policies:

- *Support the development of a countywide system of designated bikeways that links communities, activity centers and regional recreational destinations and*

provides for all types of bicyclists.

- *Encourage member agencies and Caltrans, to the extent feasible and practical, to maintain the regional bikeways system free of deterrents to bicycling such as debris, gravel, glass, leaves, and any other extraneous materials.*

- *Encourage member agencies to adopt policies or design standards to include accommodations for bicycle travel on all new construction, reconstruction, or capacity increasing projects on major roadways where reasonably feasible. Such accommodations may be made by a separate bike path, by bicycle lanes, or by a shared roadway. A shared roadway would include a wide outside lane or a paved shoulder.*

- *Encourage member agencies and Caltrans to develop, stripe and sign bikeways consistent with state design standards in order to develop a visually consistent, clear, simple and recognizable bikeways system with clearly defined travel areas and boundaries.*

- *Encourage member agencies and Caltrans to install traffic signals that will detect bicyclists in a designated bike lane or in the traffic lane of a road or street without bike lanes.*

- *Encourage member agencies and Caltrans to install bicycle-safe drain grates.*

- *Encourage member agencies and Caltrans to give priority to bikeway projects that will link existing separated sections of the system and that will serve the highest concentration of bicyclists and destinations of highest demand.*

- *Encourage member agencies to provide bicycle parking facilities, including secured storage facilities where appropriate, at public and commercial areas, centers of employment, schools, recreational areas, air and bus terminals, major transit stops, and other places that attract large groups of people.*

- *Encourage member agencies and Caltrans to provide support facilities on appropriate bikeways, including rest stops with restrooms, water, and tables.*

- *Encourage local agencies and Fresno County Rural Transit Agency to establish bicycle-to-transit connections throughout the County, including bicycle park-and-ride facilities at transit centers to serve regional route use and the accommodation of bicycles on public transit.*

Goal: **Improved bicycle safety through education and enforcement.**

Policies:

- *Support the development and promotion of an education plan and program which increases awareness of the rights and behavior of bicyclists within the traffic environment.*

- *Support enforcement of traffic laws related to cyclist behavior and cyclist/motorist conflicts.*

- *Disseminate information to member agencies, school districts, and other appropriate agencies and organizations on model programs to increase bicycle helmet use and bicycle safety.*

Goal: **Increased acceptance of bicycling both as a legitimate transportation mode on public roads and highways and as a transportation mode that is a viable alternative to the automobile.**

Policies:

- *Maintain representation of the bicycling community on Fresno COG's Transportation Technical Committee.*
- *Encourage, through educational and promotional efforts, bicycling as a transportation mode which promotes cleaner air, eases traffic congestion, conserves nonrenewable sources of energy, and promotes health.*
- *Provide information to the public on the regional bikeway system and its support facilities.*
- *Encourage member agencies to work with major employers to provide incentive programs for bicycling including shower facilities, guaranteed ride home programs and mileage reimbursement for work-related bicycling miles.*
- *Publicize planning projects relating to bicycling through the dissemination of articles, newsletters, reports and other appropriate methods.*

Goal: **Increased development of the regional bikeways system and related facilities by maximizing funding opportunities.**

Policies:

- *Identify available bicycle funding sources and their requirements and provide this information to member agencies.*
- *Work with member agencies to define priorities for, and progress towards, implementation of the regional bikeway system.*
- *Disseminate information to member agencies and other interested groups regarding potential new bicycling project funding opportunities.*
- *Provide favorable comments on reviews of grant applications for projects that seek to enhance bicycling facilities.*

3.7 Rail Goals

Goal: **Develop a safe, efficient and convenient rail system which serves the passenger and freight needs of the region and which is integrated with and complementary to the total transportation system.**

Objective: Promote the growth of rail passenger and freight usage.

Policies:

- *Seek ways to move all mainline Burlington Northern Santa Fe passenger and freight rail traffic to the Union Pacific alignment through the City of Fresno to assure smoother, faster and safer service.*
- *Consider development of a multimodal transportation terminal facility in, or in close proximity to, the Central Business District.*

- *Give high priority to grade separation construction programs.*
- *Close grade crossings of main lines with minor streets and alleys wherever possible to avoid unnecessary conflict.*
- *Protect grade crossings of main lines with automatic gates.*
- *Seek legislative changes to rail abandonment procedures to require that all lines proposed for abandonment be brought under public ownership as a precondition to abandonment.*
- *Consider all advantages and disadvantages of projects, including economic, environmental, and social factors.*
- *Endorse the following passenger rail service improvements:*
- *Additional train service for the San Joaquin route.*
- *Improved station facilities servicing the San Joaquins.*
- *Additional direct train service to Sacramento.*
- *Provision of direct train service to Los Angeles.*
- *Additional direct train service to the East Bay Area.*
- *Incorporate design awareness of multimodal transportation facilities in development of highway systems.*
- *Support planning for rail services at a similar level of detail as is currently done for roads.*
- *Support the planning and construction of a High Speed Rail System in the San Joaquin Valley which directly connects the major population centers within the Valley.*

Goal: Provide a transportation system that efficiently and effectively transports goods throughout Fresno County.

Objective: Increase the use of air and rail transportation and encourage an efficient truck transportation system.

Policies:

- *Encourage the multimodal movement of goods through Fresno County where possible.*
- *Recognize freight rail service in Fresno County as a significant transportation mode, providing service to industry.*
- *Special consideration should be given to transportation projects that improve the operational efficiency of goods movement and air quality..*

3.8 Air Quality Goals

Goal: Attain and maintain national and state air quality standards as set by the Environmental Protection Agency and the California Air Resources Board.

Objective: Implement all appropriate Transportation System Management, Transportation Demand Management, and Transportation Control Measure strategies as necessary to meet mandated state and federal clean air legislation.

Policies:

- *Implement all strategies recommended in the 1991 Air Quality Attainment Plan and the State Implementation Plan as feasible.*
- *The goals, objectives, policies, and implementation measures of the Regional Transportation Plan, the Transportation Improvement Program, the State Implementation Plan, and the 1991 Air Quality Attainment Plan, shall be consistent.*
- *Continue to implement the Reasonably Available Control Measure (RACM) commitments approved as part of the Air District's Amended PM-10 plan.*

Objective: Integrate land use planning, transportation planning, and air quality planning to make the most efficient use of public resources and to create a more healthy and livable environment.

Policy:

- *Consider air quality when planning transportation systems to accommodate expected growth in the community.*

Goal: Support regional planning efforts in addressing air quality issues.

Objective: Participate and support a coordinated transportation planning effort between the eight Regional Transportation Planning Agencies, Caltrans, the San Joaquin Valley Unified Air Pollution Control District, the Federal Highway Administration, Federal Transit Administration, the California Air Resources Board, and local agencies charged with land use planning.

Policies:

- *Coordinate air quality planning at the technical and policy level.*
- *Participate in the transportation/air quality modeling program for the State Implementation Plan with the San Joaquin Valley Air Pollution Control District.*

Objective: Coordinate local air quality programs with regional programs and those of neighboring jurisdictions.

Policy:

- *Work with neighboring jurisdictions and affected agencies to address cross-jurisdictional and regional transportation and air quality issues.*

Objective: Educate and involve community members, especially those in the environmental justice community, in discussions of air quality programs and issues.

Policy:

- *Work with community members and organizations to provide outreach and involvement in relevant air quality issues.*

Goal: Provide for improved air quality through local planning and enforcement efforts.

Objective: Adopt and implement appropriate land use, transportation, and air quality plans and strategies.

Policies:

- *Support the efforts of the San Joaquin Valley Air Pollution Control District to integrate appropriate policies and implementation measures identified in the Air Quality Guidelines for General Plans into local general plans.*
- *Support the air pollution enforcement efforts of the San Joaquin Valley Air Pollution Control District.*

Objective: Create a transportation system that will encourage people to walk, bicycle, or use public transit for a significant number of their daily transportation trips.

Policies:

- *Consider air quality and mobility when reviewing any proposed change to the transportation system in the community.*
- *Encourage projects proposing pedestrian or transit oriented designs at suitable locations.*
- *Plan park and ride lots at suitable locations serving long distance and local commuters.*

Goal: Improve transportation mobility and operations by improving and utilizing transportation system management strategies which coordinate travel modes through operating, regulating, and service policies to achieve maximum efficiency and productivity for the whole circulation system.

Objective: Plan for a multimodal transportation system that meets the mobility needs of the community and improves air quality.

Policies:

- *Pursue and use state and federal funds earmarked for bicycle and transit improvements.*
- *Ensure that upgrades to existing roads (widening, curb and gutter, etc.) include bicycle and pedestrian improvements in their plans and implementation where appropriate.*
- *Encourage preservation of abandoned railroad right-of-way with no potential for use as light rail lines for use as bikeways and pedestrian paths.*
- *Work with cities to identify potential light rail corridors and ensure protection of the right-of-way from incompatible development.*
- *Support the use of suitable freeway and expressway right-of-way for light rail.*
- *Consider and implement measures to more fully utilize existing road networks prior to constructing more capacity.*

Objective: Improve vehicular flow and efficiency of the region's circulation system.

Policies:

- *Encourage traffic signal installation and synchronization programs in urbanized areas.*
- *Encourage removal of on-street parking in heavily congested areas where*

practical.

- *Support installation of adequate left and right-turning pockets, as necessary.*
- *Encourage the improvements of geometrics at signalized intersections to improve turning for large vehicles and circulation flow.*
- *Support the installation of grade crossing improvements.*
- *Support freeway message signs and ramp metering programs.*

Goal: **Improve transportation mobility and operations by improving and utilizing transportation demand management strategies which consist of managing human behavior regarding how, when, and where people travel.**

Objective: Encourage use of alternate transportation modes, flex hours, and mixed land uses resulting in a jobs/housing balance.

Policies:

- *Support rideshare outreach and public information programs.*
- *Encourage employers to utilize flex hours, van pools, and telecommuting measures.*
- *Support mixed land use developments which encourage a jobs/housing balance.*
- *Plan for appropriately located transportation nodes to support public transit facilities.*
- *Encourage the development of bicycle and pedestrian circulation systems.*

Goal: **Improve transportation mobility and operations by improving and utilizing transportation control measure strategies which consist of reducing vehicle trips, vehicle miles traveled, vehicle idling, traffic congestion, and increasing average vehicle ridership, to reduce motor vehicle emissions.**

Objective: Encourage the reduction of vehicular trips traveled resulting in reduced emissions, impacts, and fuel consumption.

Policies:

- *Support the development of transportation management associations to coordinate small and large business rideshare programs*
- *Support greater use of public transit systems through the provision of efficient and effective services.*
- *Increase inter-city rail ridership through the addition of Amtrak services on the San Joaquin Route.*
- *Support carpool and vanpool programs that reduce the use of single-occupancy vehicles.*
- *Support Caltrans and local agency development of park-and-ride lots and referrals to public transit.*

Goal: **Reduce the consumption of and critical dependence upon non-renewable energy resources used in transportation.**

Objective: Conserve fuel for mass transportation purposes by influencing personal travel behavior and by encouraging the development of alternative fuel sources.

Policies:

- *Support transportation programs which have the lowest feasible levels of energy consumption while meeting reasonable mobility needs.*
- *Promote ongoing voluntary fuel conservation actions which are economical and publicly acceptable.*
- *Encourage the development of alternative fuel sources that will decrease vehicle emissions through the use of cleaner burning fuels for internal combustion engines, or through the use of electricity as an alternative energy source.*
- *Encourage automobile manufacturers to improve auto technology to increase the fuel efficiency of new cars, buses, and trucks.*

Chapter 4
Needs Assessment and Action Element

4.1 Introduction

The purpose of the Needs Assessment and Action Element of the Regional Transportation Plan (RTP) is to establish a plan for addressing identified needs and issues consistent with the goals, policies, and objectives stated earlier in this plan. The first chapter attempts to show the relationship between transportation modes, linking the more specific elements that then follow. Each mode available for the movement of people and goods in and through Fresno County is addressed along with transportation/air quality strategies, as listed below:

- Multimodal: Section 4.2
- Highway, Streets, and Roads: Section 4.3
- Urban Mass Transportation: Section 4.4
- Rural Area Public Transportation & Social Service Transportation: Section 4.5
- Aviation: Section 4.6
- Pedestrian and Bicycle Transportation: Section 4.7
- Rail, Rail Consolidation, and Goods Movement: Section 4.8
- Congestion Management: Section 4.9
- Air Quality: Section 4.10
- Environmental Mitigation: Section 4.11

Each mode or transportation strategy will be presented in a separate section which will include an inventory of the existing system, an assessment of needs, and proposed actions. The latter will be divided into short-range (0-3 years) and long-range (4-24 years). Proposed actions will be based upon projected travel demand and appropriate policy. The agencies responsible for taking a lead in implementation will be identified. The short-range measures will then form the basis for the Regional Transportation Improvement Program (RTIP) and the Federal Transportation Improvement Program (FTIP).

Federal transportation legislation requires that long-range transportation plans must include only those projects which have a “reasonably available” source of funding. This financially “constrained” list will define those projects which are programmed, most likely in the period 2006/07 to 2009/10. The RTP also defines projects which are deemed necessary, but do not have identified funding sources, in order to show a complete picture of transportation systems which are needed for the future vitality of the region.

4.1.1 Conformity with the Clean Air Act Amendments of 1990

The Federal Clean Air Act (FCAA) requires states to improve coordination between transportation and air quality planning and set a firm schedule for attainment of air quality standards. Federal transportation legislation strengthens the reforms of the Federal Clean Air Act Amendments (FCAAA) by requiring that local and state plans in nonattainment areas, such as the Valley, be consistent with the State

Implementation Plan (SIP) for clean air. The financially constrained projects listed in the action plan elements below, have been analyzed to assure that their implementation will contribute to the attainment of improved air quality consistent with the SIP.

4.2 Multimodal Element

4.2.1 Overview

Transportation planning has relied heavily in the past upon the analysis of separate and discrete transportation modes. However, as we try to deal with congestion and the problems of air pollution, there is a growing awareness that solutions must be evaluated within the context of an integrated system, rather than by individual mode only. This systematic look at our capabilities encourages analysis and planning which look at transportation systems that can be brought to the resolution of a need for travel or movement of goods. This approach is helped by looking at the characteristics of our County which may affect travel demands, including but not limited to those which follow:

- Fresno is the major population center for the Valley.
- Fresno County contains Sequoia National Park and two national forests.
- Route 41 north out of the Fresno-Clovis Metropolitan Area (FCMA) is the primary corridor to Yosemite, one of the two most visited national parks in the nation.
- As the largest producer of farm commodities in the world, Fresno County has a strong “farm to market” travel demand affecting local roads and the state highway system. Movement of goods occurs throughout the County, as farm and other commodities are brought to market and to inter-regional routes.
- The county is crossed by two north-south corridors, Freeway 99 and Interstate 5. Each of them is key to the statewide network.
- Recreational trips are served by several state highways: Routes 33, 41, 168, 180, 99, and 5.
- Fresno is served by Amtrak which has experienced increasing ridership, even though continuous rail service to Sacramento is limited and to southern California is yet to be developed.
- While the distances between destinations and generally low densities have encouraged automobile usage, there is a large rural and urban population in need of public transit service. The systems that are in place are in need of more stable financing.
- Fresno-Yosemite International Airport provides a hub airport service to its service area of six counties.
- The climate and terrain are compatible with bicycle use for short commutes and recreational trips.
- Existing rail lines offer potential for an expanding share of commodity movement.

Achievement of some ultimate state of multimodal transportation service would be a system in which a traveler could make a “seamless” journey; with connections between modes, taking minimum effort and involving little delay. Currently, such an ideal state can be reached only in the country’s largest and most advanced cities. In these areas, land use densities and developed systems of commuter rail lines, subways, transit buses, trolleys, airport shuttles, and taxis offer a variety of choice and scheduling flexibility that make travel times and accessibility reliable. In the Central Valley, where cities have experienced much of their

growth since the invention of the automobile, residential densities tend to be comparatively low, with streets and land uses designed to facilitate the use and storage of the personal automobile.

During the hot summer days when upper temperatures can remain around the 100 degree mark, the attractiveness of the air-conditioned car is strong. It will require even stronger commitment to the goals of air quality and the quality of life in this County to make the changes needed to implement the "seamless" multimodal system. It involves people making conscious choices to use alternative transportation modes, and the provision of those alternate systems in a manner which encourages their use. To succeed, those efforts would have to focus on long-term changes:

- Increasing land use intensity and residential densities, particularly along corridors used for transit or planned for future light rail systems;
- Facilitating the development of mixed land use districts which promote living, working, shopping and recreation accessible by foot or bicycle, and which are served by centrally located transit routes (the Tower District in Fresno, Clovis' Old Town, and many of the County's small cities serve as examples built more than 40 years ago);
- Expanding transit systems and the frequency of services;
- Developing connecting bikeway systems and facilitating and encouraging their use;
- Improving connectivity between transit and rail, transit and air travel, cycling and transit, etc.;
- Reservation of future "park and ride" opportunities;
- An organized public education effort; and
- Appropriate financing, including both operations and capital investment.

4.2.2 Accomplishments

Although transportation systems planning encourages us to look at the many ways in which trips can be made, only a select group of our trips as Californians are truly multimodal in the sense that we use more than one mode for a particular journey. These could include "park and ride" commuting trips where a private automobile or bicycle is driven to a vanpool site, or taking a car, bus or shuttle to the airport or train. Transportation corridors where rights-of-way can be preserved and developed to accommodate more than one form of travel are also being evaluated. Most commonly, efforts are directed to improve existing facilities, maintain those options, and work to create the potential to make connections between systems in a manner that allows and facilitates a change to more environmentally favorable patterns of travel.

Exhibit 4-1 shows the intermodal network, illustrating mode options which frequently exist over the same corridor, as with transit and the regional roads, or in the State Route 99 corridor, which has adjacent rail lines. In the period since the adoption of the last RTP, progress has been made on further implementation of the planned regional transportation system, due largely to the resources provided through the passage of a local sales tax, Measure "C".

Through the use of this local funding source, which has been extended for a twenty-year period, and federal and state participation, Caltrans continues to work on the completion of a metropolitan freeway system which will include Freeways 41, 168, and 180. Major improvements have been made to overcrossings and interchanges. Maintenance and improvements to the rural street system, connecting Fresno County to adjacent counties, have also come about through Measure "C."

The transit system continues to work to improve service to its existing ridership and to expand that ridership in spite of constrained funding. Ridership and marketing surveys show that there is a high level of satisfaction among Fresno Area Express (FAX) riders in all areas except for those related to waiting time and overcrowding. Changing attitudes about the environment, traffic congestion and population growth seem to be creating a marketplace of consumers who are more aware and more accepting of mass transit benefits.

Fresno Yosemite International Airport (FYI) has been expanded and improved and a new baggage facility has been constructed. The main runway has been reconstructed, and the general aviation runway lengthened to 7,200 feet to allow the shifting of operations when needed. Terminal roadways have been reconfigured and the size of the parking lot has been doubled. A new concourse building has been completed, featuring a second level holdroom facility with four new aircraft gate positions equipped with passenger loading bridges, as well as airline and airport operations space at ground level. The new building also includes locations for two future loading bridges, allowing for a total of six second-level holdrooms/gates. The Airport has completed a FAR "Part 150" Airport Noise Compatibility program, and continues to purchase adjacent residential properties as funding allows.

Fresno Chandler Downtown Airport (now called Fresno Chandler Executive Airport), the City of Fresno owned general aviation facility, has constructed new T-hangers, maintenance facilities, runway improvements, an Automated Weather Observing System (AWOS), and a satellite-link weather reporting interface with the National Airspace Data Interchange Network (NADINE). In 2003, Chandler completed the largest airfield construction project in its history, the recently completed $3.9 million reconstruction of the main runway and ramp areas. Runway 30L/12R has recently been extended to 3,626 feet. Both FYI and Fresno Chandler Downtown Airport are served by transit. Access is currently available from local streets and Freeways 168 and 180. Completion of the planned extensions to Freeway 180 west and east will expand and improve access to the two airports.

Daily Amtrak service has increased to six round-trip trains, and can be expected to increase further if passenger train service is provided to Los Angeles. The historic Santa Fe Depot has been rehabilitated and functions as the new passenger rail station. Freight rail service is provided by the Burlington Northern Santa Fe and Union Pacific Railroads, both Class 1 railroads, and the San Joaquin Valley Railroad, a short-line railroad. Retention of abandoned rail corridors for bikeways and future light rail options is under consideration by member agencies. FAX transit lines and an off-ramp from Freeway 41 offer easy connections to the Amtrak station in downtown Fresno.

4.2.3 Needs Assessment

Corridor Preservation

- A concerted effort between the local jurisdictions, the regional transportation planning agency, Caltrans, and the public is needed to ensure the dedication of rights-of-way to facilitate the planned ultimate corridors of State Highways, including interchanges, as well as major local arterial and collector streets. A region-wide approach is necessary for corridor preservation of transportation facilities, which cross jurisdictional boundaries.

- Clovis "Inner and Outer Beltways" are shown on the adopted Clovis General Plan, as a method of planning for the circulation needs of growth. As proposed, the outer beltway would approximate an alignment following and connecting Academy and Copper Avenues; the inner beltway would follow and connect McCall and Shepherd Avenues.

- Metropolitan agencies have encouraged the reservation of abandoned rail lines for either non-motorized trail or bikeway systems, or for retaining the options for eventual conversion to public transit or light rail systems.

- Eastside and Westside cities with an agricultural base need to maintain rail service options for the movement of crops to market.

- The State continues to plan for high-speed rail in California. Given population projections and air quality constraints, this RTP supports the corridor alignment that provides service to major population centers within the Central Valley.

Ultimately, transit service must be extended to new growth areas, if we are to offer travel options for those residents and workers. Funding limitations continue to focus transit routes to those corridors in highest demand, for cost-efficiency.

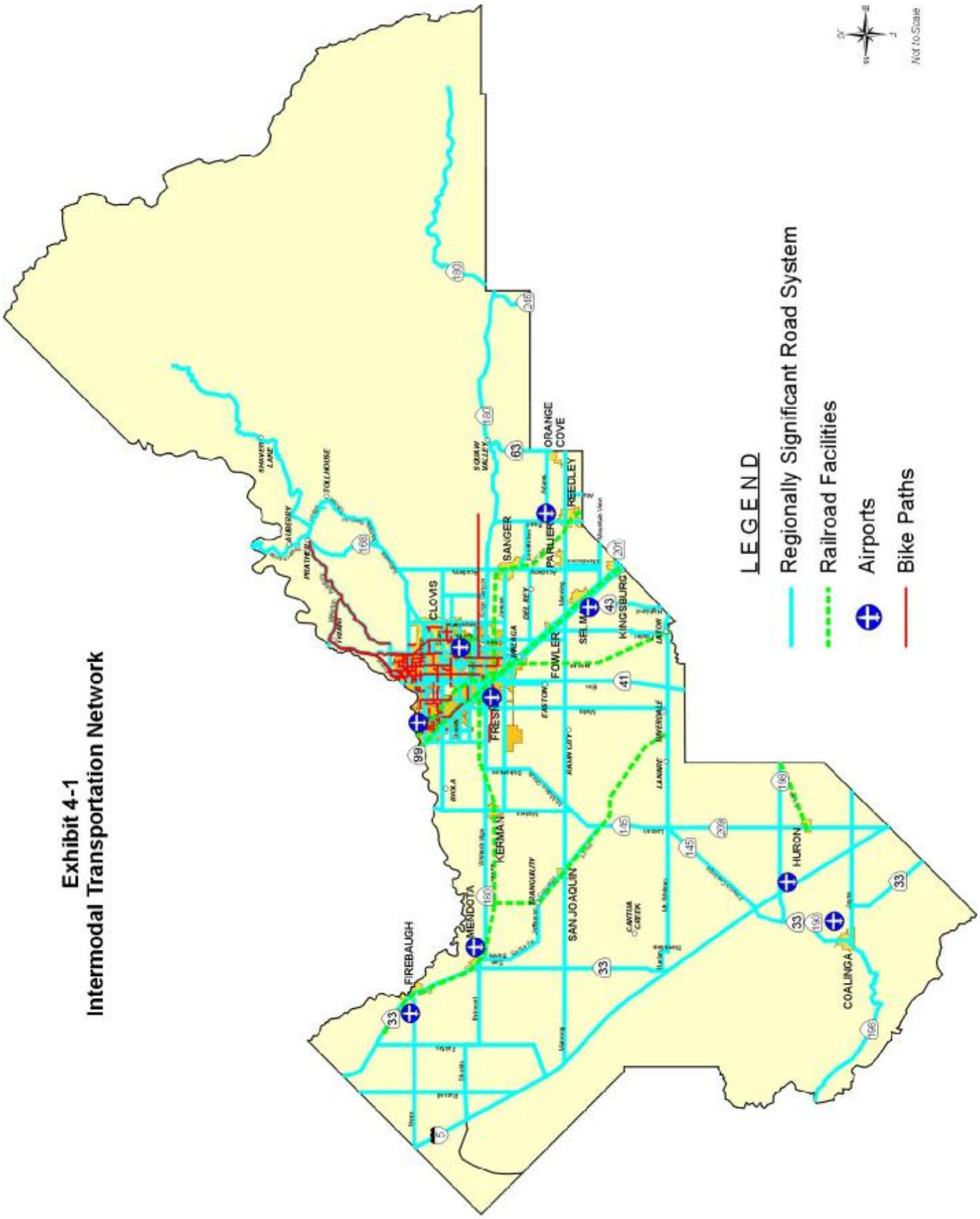


Exhibit 4-1
Intermodal Transportation Network

Goods Movement

Shipment of raw materials and finished goods is a central feature of any economy. While the majority of freight is carried by the trucking industry, commodity movement can occur by road, rail, air and pipeline. Throughout the state, freight movement over State Highways has grown faster than capacity; Fresno County is no exception to this trend.

In its role as a federally designated Metropolitan Planning Organization (MPO), Fresno COG is charged with shaping public policy to facilitate the movement of both people and goods in Fresno County. In order to accomplish that objective, COG staff has established a Quad-County Freight Advisory Committee. This committee consists of Regional Transportation Planning Agency (RTPA) staff from Madera, Kings, Tulare, and Fresno counties working in collaboration with both the users (trucking industry, rail carriers, shippers, receivers, etc.) of the transportation system and the providers of that system (Caltrans, local agencies). The primary purpose of the Freight Advisory Committee is to identify problems and build consensus among public and private sector freight interests for improving the safety and efficiency of freight movement in the region. The Freight Advisory Committee meeting schedule varies. The importance of this Committee is expected to increase over the coming years as the ability to move an ever-growing amount of freight becomes more challenging and as state and federal governments devote more attention and funding to the issue. Some of the primary objectives to be accomplished with the Freight Advisory Committee include:

- Advise the COG and other public agencies about specific freight concerns, issues and priorities;
- Allow the Freight Advisory Committee to participate in COG's transportation planning and investment decision processes;
- Help identify, support and implement promising and effective strategies to improve freight mobility in the region.

The high volume of truck traffic within the Central Valley raises issues of highway maintenance, capacity, and safety, and has led Valley RTPAs to share a goal of finding ways to encourage a shift of some larger market share of commodity movement to rail. While the truck volumes on County roads and regional streets will still be a major factor to be addressed, highway systems would be relieved. This would allow the use of existing capacity on that system, freeing up comparable capacity on State highways and lowering maintenance costs for the highway system. Exhibit 4-2 shows routes with high truck volumes in Fresno County.

As discussed in Chapter 1, a goods movement study for the San Joaquin Valley was completed in 2000. This study was the result of a State Planning and Research Program grant being awarded to the eight Regional Transportation Planning Agencies within the San Joaquin Valley and Caltrans Districts 06 & 10.

Phase One of the SJV Goods Movement Study focused on three primary objectives:

- Characterize current freight movements in terms of commodities, modes, origin and destination patterns, and traffic volumes;
- Identify major trends, issues and problems in the freight transportation system that can be addressed through public sector action;
- Make recommendations for future data collection and analytical tool development to aid in the planning process.

An additional State Planning and Research Grant was awarded for Phase II of the study. Phase II of the study, completed in 2004, built on the data gathered for Phase One and focused on developing a San Joaquin Valley truck model to provide an analytical basis for evaluating the benefits of transportation investments that impact the movement of goods in the Valley.

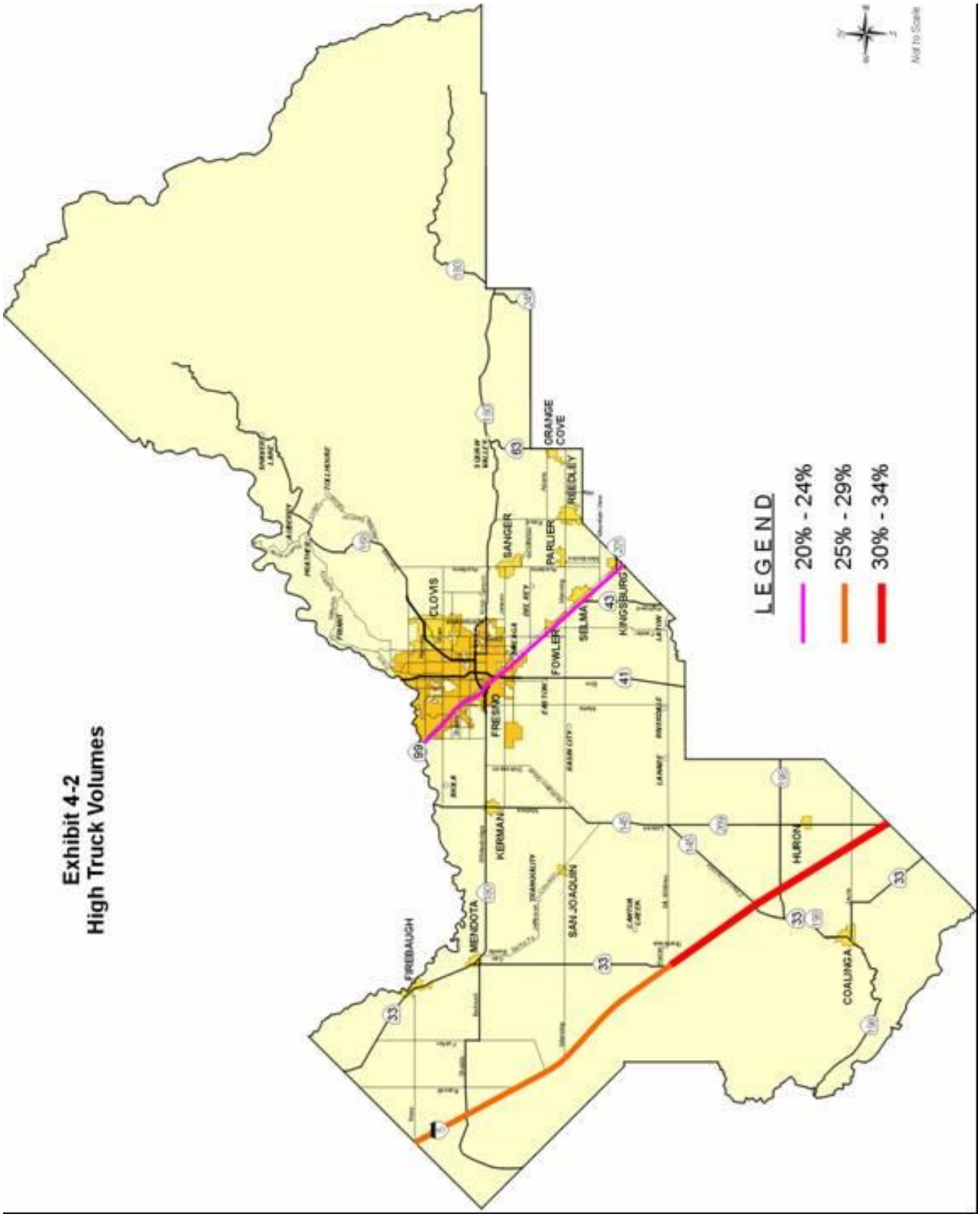


Exhibit 4-2
High Truck Volumes

In addition to the San Joaquin Valley Goods Movement Study, Fresno COG served as the project manager for a Caltrans-funded study focusing on the potential for a short-haul rail intermodal service that would connect the San Joaquin Valley with the Port of Oakland. The study, known as the California Interregional Intermodal Service (CIRIS), analyzed the potential for developing alternatives that would reduce the amount of truck traffic in the region by diverting some of the goods between the Valley and the Port of Oakland from the current truck operations to rail.

Recreational Travel

Fresno County contains many recreational destinations of regional significance, and includes routes to others in adjacent counties. Trips are made both by county residents and by travelers throughout the State for vacations and recreation to the following sites:

- Yosemite National Park
- Kings Canyon National Park
- Sequoia National Park
- John Muir Wilderness Area
- Millerton Lake Recreation Area
- San Joaquin River
- Kings River
- Shaver Lake
- Huntington Lake and the Kaiser Wilderness Area
- Pine Flat Reservoir
- Mendota Wildlife Area

The metropolitan area also contains the Fresno Convention Center, and is the destination point from outlying communities for theater, musical events, the Fresno County Fair, sports and other special interest events, and regional shopping. California State University, Fresno is a major attractor for football, baseball, basketball, track, and cultural events. The University itself currently serves approximately 20,000 students and employs approximately 950 faculty and 980 support staff. The State Center Community College has campuses in Fresno and Reedley, and has recently opened a third campus in Madera County north of the Fresno County border near State Route 99. The City of Fresno maintains two regional parks: Roeding and Woodward. Fresno County maintains Kearney Park and Lost Lake Park, which is sited along the San Joaquin River.

Transportation is one of the major issues facing many of the national parks today. This is particularly evident in Yosemite National Park, which has had as many as 4 million visitors in one year. The Yosemite Area Regional Transportation System (YARTS) is a regional joint powers authority formed among the counties of Mariposa, Merced, and Mono to implement transit service for visitors and employees into Yosemite National park from gateway communities. YARTS entered into a Cooperative Agreement with the National Park Service for the purposes of coordinating the new transit service with in-Park shuttle transportation, cooperative transit planning, transit service visitor and employee education, and funding support. YARTS began providing transit service throughout the Yosemite Region on May 19, 2000 on a demonstration basis and has since been converted to a permanent transit service.

YARTS is comprised of an Authority Advisory Committee and a Board of Commissioners, comprised of a member of the Board of Supervisors of each of the three YARTS counties. YARTS contracts with the Merced County Association of Governments for staffing to administer and manage the transit service.

The mission of YARTS, to provide a positive alternative method of access to Yosemite National Park, is of particular interest to the Fresno COG. Fresno County's proximity to Yosemite, the location of FYI here and the fact that State Route 41 is the busiest Park entrance during the peak season, all contribute to our interest in YARTS. In fact, the YARTS project includes elements that are directly related to our mission as a metropolitan planning organization.

4.3 Highways, Streets, and Roads

4.3.1 Overview

Fresno County has an extensive planned system of streets and highways. The system is intended to provide an adequate level of traffic service within Fresno County in an effort to satisfy the transportation needs of the system users. The transportation system also plays an important role in the region's economy as it provides mobility for both people and goods within the region. As the number one agricultural county in the world, Fresno's economy is dependent upon efficient movement of agricultural goods from farm to market. In most cases, the first leg of the farm to market route is via the street and road network. In addition, while recognizing federal transportation legislation's shift to a more balanced multi-modal approach to transportation planning, the reality is that the majority of people and goods trips within Fresno County are made by trucks and the automobile and thus on the streets and highways network. Therefore while recognizing and embracing the multi-modal approach it is important that a focus on the improved efficiency of the streets and highways network be maintained.

The purpose of this section is to identify the existing system and note streets and highways of regional significance and to describe the future streets and highways network noting both short-term improvements and the envisioned long-range system. In addition, this chapter will identify the various planning efforts taking place with regards to the regional transportation network. Within this process, policies, needs and major issues related to the highways, streets and roads network in Fresno County are addressed.

While the needs assessments and the planned highway improvements to meet those needs are presented in this document, a major remaining issue to be addressed is the financing required to implement the needed improvements. The people of Fresno County made a commitment in 2006 to the future transportation system by choosing to continue a sales tax over a 20 year period (Measure "C") aimed at providing funding for improvements to the regional and local transportation network. Unfortunately, this anticipated revenue still is not sufficient to finance the requisite long-range transportation improvement needs of Fresno County. A comprehensive discussion of the various alternative strategies for financing the regional transportation network is examined in the Financial Element of this Plan.

4.3.2 Existing System Inventory

Regionally Significant Road System

The COG in conjunction with its member agencies and Caltrans has developed a "Regionally Significant Road System" for transportation modeling purposes which is based on the Federal Highways Administration (FHWA) Functional Classification System of Streets and Highways plus additional facilities of regional significance. Exhibits 4-3 and 4-4 show the Regionally Significant Road System for the Fresno County region.

Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. Rather, most travel involves movement through a network of roads. It becomes necessary to determine how this travel can be channelized within the network in a logical and efficient manner. Functional classifications define the nature of this channelization process by defining the part that any particular road or street should play in serving the flow of trips through a highway network. Exhibit 4-5 provides functional classification system definitions.

In general, the regionally significant system was selected to maintain and improve access between cities, accommodate a high level-of-service access to and within the Fresno-Clovis Metropolitan Area, and to link regionally significant commercial, educational, industrial and recreational facilities. The criteria used to establish the regionally significant system included factors such as functional classification, service to regional facilities, connection of regional facilities, and amount of current and projected use. Environmental

Protection Agency (EPA) regulatory guidance is very clear that all facilities shown on the regionally significant system require specific discussion and analysis as it relates to air quality conformity.

The Regionally Significant System in Fresno County functions to serve the travel needs of all county residents and not just the needs of urbanized areas. The rural highway system accommodates not only the movements of people but is a particularly vital aspect of the movement of goods. As one of the prime agricultural counties in the nation, the intra-county road linkage of goods to processing plants and inter-county linkage of finished goods to other regions is essential.

4.3.3 Accomplishments

The COG, Caltrans and various local entities have made major efforts to understand the strengths and weaknesses of the streets and highways system throughout Fresno County. The County has a formally adopted Road Improvement Program (RIP), 2003-2007, which they utilize for transportation planning and implementation. Methodologies and strategies to expand, enhance or maximize the existing system given current financial constraints have been examined. This process has required coordinated planning activities and careful programming of road projects between the COG, its member agencies and Caltrans. The following text will itemize current planning activities that the COG is involved with.

Measure "C" Expenditure Plan

Voters in Fresno County recently reauthorized Measure "C" a 1/2 cent sales tax collected specifically for transportation purposes. The Fresno County Transportation Authority (FCTA) is responsible for overseeing all Measure "C" program expenditures. Upon passage of Measure "C" the COG, in its role as the Regional Transportation Planning Agency, became legislatively responsible for preparing an Expenditure Plan for use of the revenues. It is estimated that Measure "C" will generate approximately $1.7 billion in revenues over its life which will be used to construct and implement the multi-modal projects and programs contained within the measure.

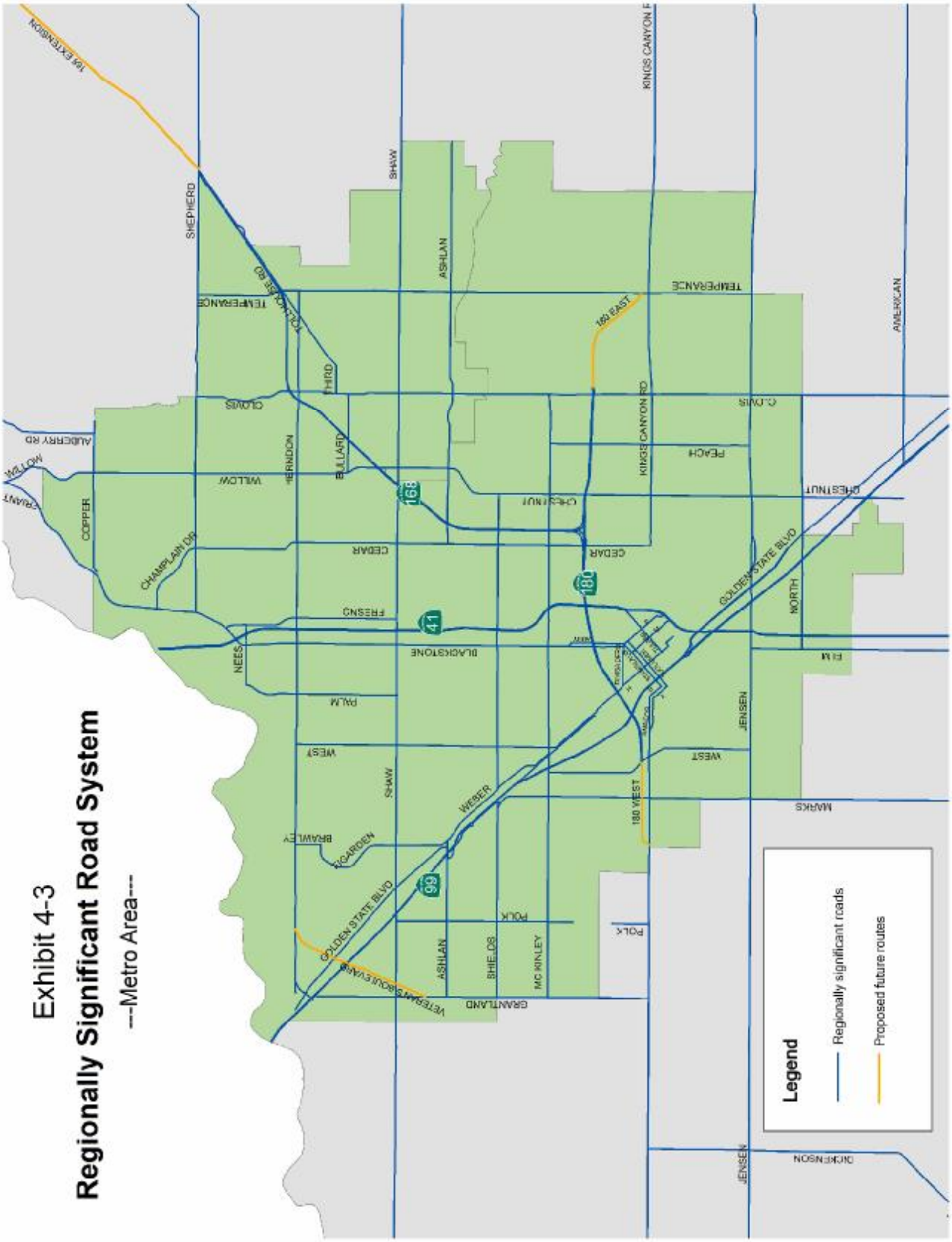


Exhibit 4-3
Regionally Significant Road System
---Metro Area---
Legend
Regionally significant roads
Proposed future routes
SHEPHERD
SHAW
ASHLAN
KINGS CANYON R
TEMPERANCE
AMERICAN
168 EAST
CLOVIS
THIRD
KINGS CANYON RD
PEACH
ALDERRY RD
WILLOW
HERNDON
BULLARD
CHESTNUT
COPPER
CHAMPLAIN DR
CEDAR
GOLDEN STATE BLVD
NORTH
FRESNO
41
BLACKSTONE
NEES
PALM
FIR
JENSEN
WEST
WEBER
180 WEST
MARKS
BRAWLEY
HOARDEN
99
POLK
SHIELDS
MC KINLEY
GRANTLAND
DICKENSON

Exhibit 4-4

Regionally Significant Road System

---Rural Area---

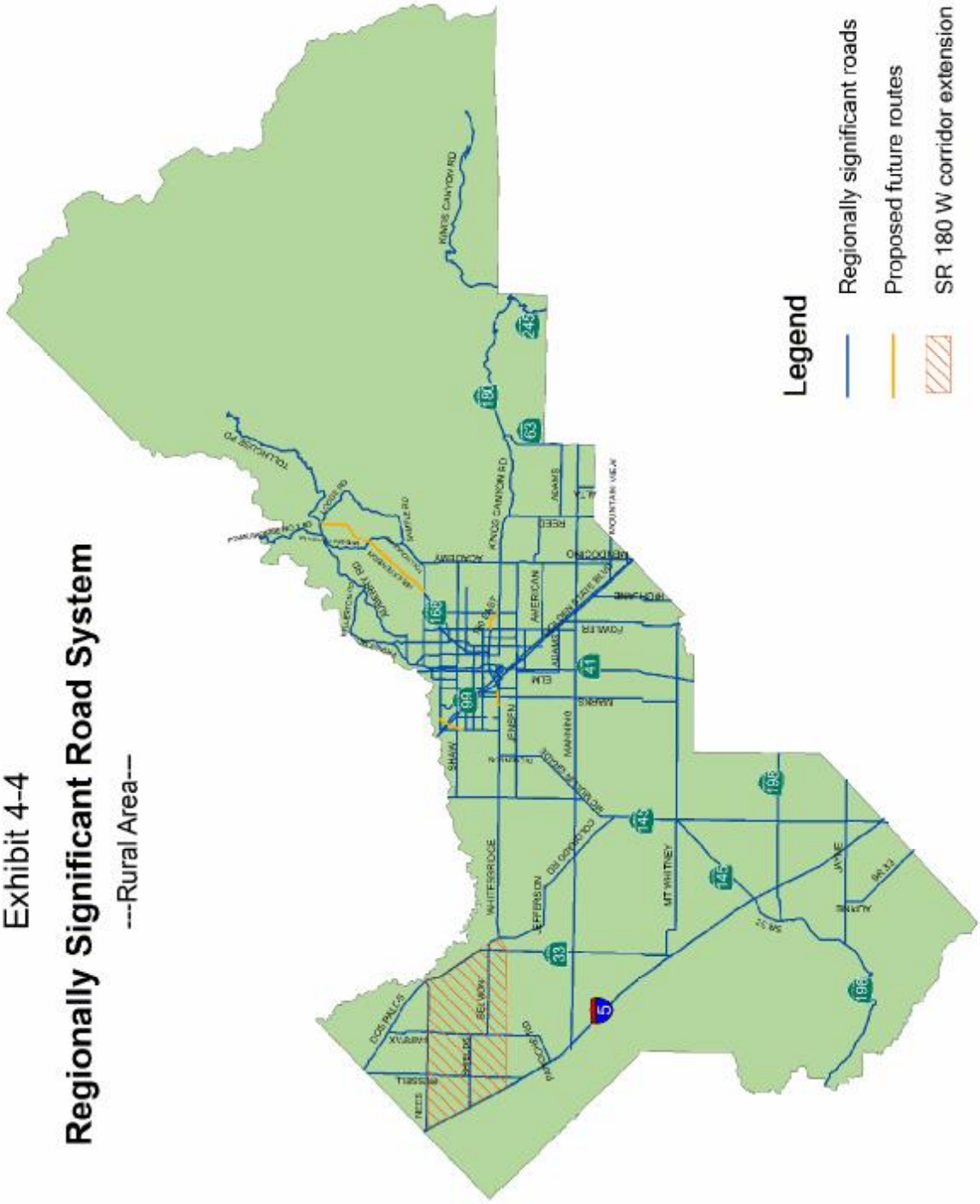


Exhibit 4-5
Functional Classification System Definitions

Classification	Primary Function	Direct Land Access	Speed Limit	Parking
Freeway/Expressway	Traffic Movement	None	45-55	Prohibited
Primary Arterial	Traffic Movement/ Land Access	Limited	35-45	Prohibited
Secondary Arterial	Traffic Movement/ Land Access	Restricted	30-35	Generally Prohibited
Collector	Distribute Traffic between Local streets and Arterial System	Safety Controls, limited regulation	25-30	Limited
Local	Land Access	Safety Controls Only	25	Permitted

The Authority is charged with implementation responsibility and is required to coordinate its actions to secure funding for the completion and improvement of highways with high regional priority. The basic highway system being planned for implementation is a long-standing (20-year) plan which sought completion of an urban freeway system, tied into a rural system providing easy access to neighboring counties. The Measure "C" improvements (shown in Exhibits 4-6 and 4-7) reflect this system.

The COG is charged with specific planning responsibilities, including development of a highway expenditure plan which considers not only Measure "C" dollars, but also other federal, state and local revenue available for improvements. As a first step in the process, the COG must assess the need for highway improvements and consult with Caltrans, the cities, and the county for candidate projects. All projects are then evaluated and, if appropriate, scheduled based upon a locally adopted procedure. Currently there are more project nominations than identified revenue. Updates are a necessity in order to remain responsive to changing costs, revenues, and delivery schedules. The plan is intended to serve as the base upon which future plans and strategies are built. It also assumes consistent state financial participation for the life of the 20-year program.

Caltrans' District System Management Plan

The State of California (through Caltrans) employs a long-range system planning process known as the District System Management Plan (DSMP). The DSMP planning process provides Caltrans with a periodic and uniform method of assessing the State's transportation system, district by district. It is intended as an objective assessment of transportation statewide irrespective of mode or jurisdiction, and considers the entire transportation system as a network including facilities, vehicles and operators. The DSMP process was established to aid decision making in Caltrans' management of the State's transportation system, to guide future development of the system and to represent Caltrans' input into the Regional Transportation Plan of each Regional Transportation Planning Agency.

The Caltrans DSMP places emphasis on state highways with statewide significance (i.e., State Highway 99 and Interstate 5). The priorities were established by the limited funding available from state and federal sources. The region's priorities are toward the highways that serve the regional needs (i.e., State Highways 41, 168, 180 and 198). These differences are recognized and taken into consideration whenever programming of funds for projects occurs.

The DSMP is one tier of a two-tier Caltrans planning process which identifies current and potential system deficiencies and proposes realistic alternatives for resolving these deficiencies. The other tier is the Transportation Corridor Reports (TCRs) formerly known as Route Concept Reports.

Transportation Concept Reports

Transportation Concept Reports (TCRs) are refinements of the DSMP and represent the next level of system planning done by Caltrans. TCRs serve as tools to analyze prospective transportation service areas,

establish twenty year transportation planning concepts and identify modal transportation opportunities and applications needed to achieve the twenty-year concept. A basic tenet of the TCR is that it should only outline affordable multimodal alternatives and these should be both politically and environmentally realistic. TCRs must also be consistent with the policies and strategies of the DSMP.

COG Regional Traffic Model

Since the mid 1980's, the Council of Fresno County Governments, its member agencies and Caltrans have jointly developed and maintained a microcomputer-based traffic simulation model. The current model contains 1,575 discreet socio-economic analysis zones (commonly called traffic analysis zones or TAZ's) and approximately 17,000 road segments or network links. The model provides information for both traffic and air quality issues. The modeling software used is TP+.

In essence the COG traffic model is used extensively to:

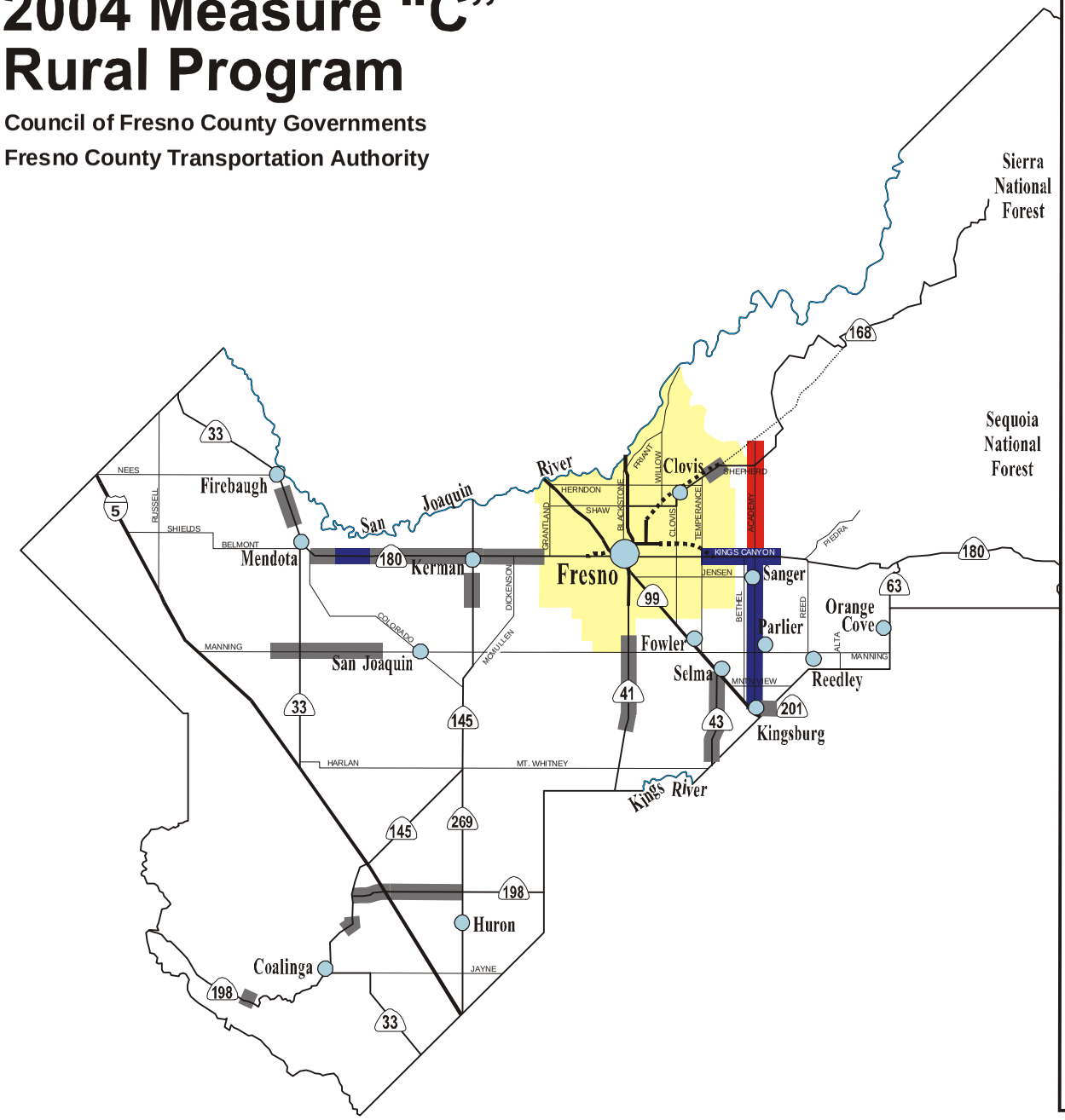
- Evaluate the traffic circulation system of the Fresno-Clovis metropolitan area and Fresno County.
- Provide basic traffic information for environmental analysis and preliminary design work on the Measure "C" highway projects.
- Evaluate the traffic impacts of large-scale development proposals
- Develop transportation source emission inventories for regional air quality modeling and planning activities.

Exhibit 4-6

2004 Measure "C" Rural Program

Council of Fresno County Governments

Fresno County Transportation Authority



Programmed Rural Projects

Route	Construction Limits	Cost/ Millions	Miles	Project Description
33	Los Gatos - Palmer	$ 6.60	4.6	AC overlay/widen to 40'
	Bass - Helm Canal Rd.	$ 9.80	7.1	AC overlay/widen to 40'
41	Elkhorn - Adams	$ 36.65	10.0	2 lane expressway
43	Kings County - Nebraska	$ 2.04	8.3	AC overlay/widen
	Nebraska - Arrants	$ 5.53	1.1	4 lane highway
145	Lincoln - Church	$ 2.11	4.5	AC overlay/widen to 40'
168	Temperance - Shepherd	26.59	2.1	4 lane expressway
180	Whtsbrge - 4 Mi. Slough	$ 10.39	4.1	AC overlay/widen to 40'
	4 Mi. Slough - Yuba	$ 6.24	5.2	AC overlay/widen to 40'
	Yuba - First St.	$ 6.54	5.9	AC overlay/widen to 40'
	First St - Vineland	$ 0.23	0.4	AC overlay/4 lane facility
	Vineland - Grantland	$ 10.41	7.5	AC overlay/widen to 40'
	Passing Lane	$ 5.08	4.7	Kerman - Mendota
	Temperance - Academy	$ 56.75	6.0	4 lane expressway
	Academy - Trimmer	$ 33.94	3.4	2 lane expressway
	Trimmer - Frankwood	$ 11.65	3.2	Row & support
198	Min. Sprngs - Parkfield	$ 1.60	2.5	AC overlay/widen to 28'
	Rte. 33 - Lassen	$ 3.23	11.9	AC overlay/widen to 32'
201	Rte. 99 - Tulare Co. Line	$ 5.70	1.3	3 lane highway
Academy	Mtn. View - Rte. 180	$ 30.62	14.0	2 lane highway (Rte. 99 - Manning) 4 lane highway (Manning - Rte. 180)
Academy	Rte. 180 - Rte. 168	$ 15.85	9.5	4 lane highway (Rte. 180 to Shaw) 2 lane highway (Shaw to Rte. 168)
Manning	Ormsby - Contra Costa	$ 5.88	12.9	2 lane highway
Misc.	Projects not shown	$ 0.27	N/A	N/A
	Total	**$ 293.70**	**130.2**	

NORTH
Not to scale

L E G E N D

- Existing System
- Complete or Construction in 03-04
- Construction Start in 04-05 or 05-06
- Construction Start in 06-07
- See Urban Area Map

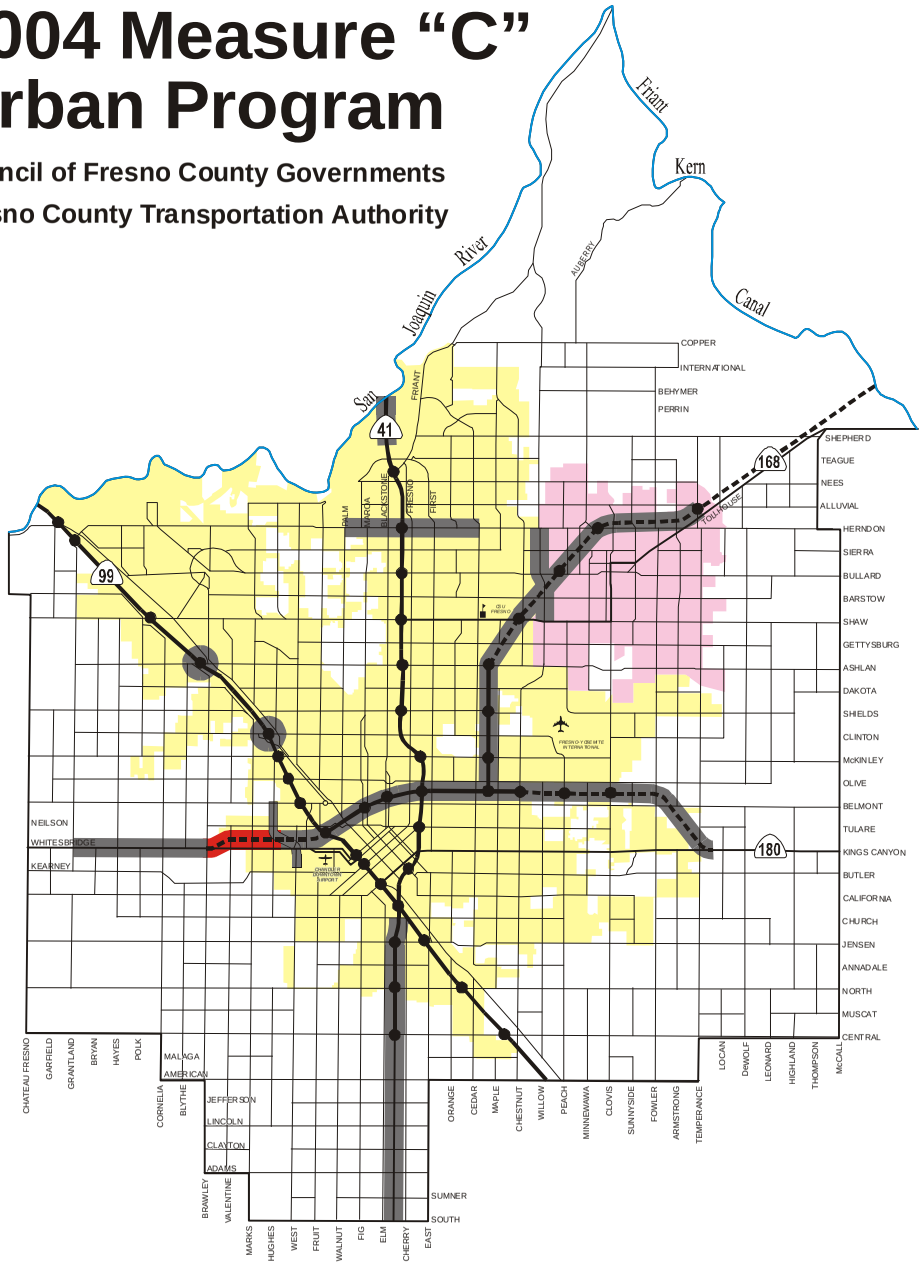
2004 Measure "C" Programmed Projects

Exhibit 4-7

2004 Measure "C" Urban Program

Council of Fresno County Governments

Fresno County Transportation Authority



Programmed Urban Projects

Route	Construction Limits	Cost/ Millions	Miles	Project Description
41	Jensen - Fwy 99	$ 32.73	1.4	4 lane freeway
	Adams - Jensen	$ 30.95	4.6	4 lane freeway/4 lane expressway
	Audubon - Madera Co. Line	$ 18.16	1.1	4 lane freeway
99	At Clinton & Ashlan	$ 8.77	N/A	Widen overcrossing
168	Fwy 180 - Shields	$ 76.05	1.9	6 lane freeway
	Shields - Gettysburg	$ 43.70	1.5	6 lane freeway
	Gettysburg - Bullard	$ 69.41	1.9	6 lane freeway
	Bullard - Temperance	$ 94.19	4.0	4 lane freeway
180	Grantland - Brawley	$ 5.64	3.3	AC overlay/widen/passing lanes
	Brawley - Hughes/West	$ 46.80	1.7	4 lane freeway
	Hughes/West - Fwy 99	$ 48.74	1.4	4 lane/6 lane freeway
	Fwy 99 - Fwy 41	$ 72.35	2.2	6 lane freeway
	Fwy 41 - Chestnut	$ 79.50	2.6	6 lane freeway
	Chestnut -Fowler	$104.76	2.9	6 lane freeway/ROW to Fowler
	Clovis - Temperance	$ 59.85	4.0	4 lane freeway
Herndon	Palm - Cedar	$ 7.85	3.0	Widen to 6 lanes
Willow	Shaw - Herndon	$ 5.04	2.0	New 4 lane facility
	Total	**$804.49**	**39.5**	

NORTH
Not to scale

L E G E N D

- Existing System
- Complete or Construction in 03-04
- Construction Start 04-05 or 05-06
- Construction Start 06-07
- City of Fresno
- City of Clovis

2004 Measure "C" Programmed Projects

In summary, the COG traffic model represents over twenty years of development by local agencies, Caltrans and the COG. It is regionally recognized as the finest available source of information on area traffic and projections of future conditions. Modeling activities are monitored by the Model Steering Committee. This committee includes representatives from local agencies, private consultants, and others interested in application of the model to local traffic analysis issues. The committee provides a focused forum for presentation of traffic related issues to local agency planning and traffic engineering staffs as well as project proponents. Since being formed in 1986, the committee has developed into a valuable resource to both monitor modeling applications and to provide ongoing direction for continued model development.

Intelligent Transportation Systems Strategic Deployment Planning

In September of 1999, the Council of Fresno County Governments Policy Board adopted the Fresno County Intelligent Transportation System (ITS) Strategic Deployment Plan (SDP). The plan was funded by a federal planning grant and is intended to provide a framework for the planning, programming, and deployment of advanced transportation systems for Fresno County over the next twenty years. The ITS SDP represents a comprehensive effort to build consensus on the application of advanced technologies to allow public agencies to better manage the existing transportation system.

In Fall 2006, staff from the eight Valley COGs met to review the status of the ITS SDP to determine if an update was justified. After a review of ITS projects within Fresno County, Kern County, Kings County, Tulare County, Madera County, Stanislaus County, San Joaquin County and Merced County, staff from the eight Valley COGs unanimously concluded that an update was not necessary, as no new projects had been completed since the approval of the ITS SDP in 1999. This recommendation was forwarded to the eight Valley COG Directors in January of 2007, where the recommendation not to update the ITS SDP was accepted.

Over the past decade, ITS has become a recognized tool for improving the operation and efficiency of the transportation system. Individual agencies in the Fresno County Region have already undertaken several ITS deployment efforts ranging from traffic signal system improvements to transit management systems and from enhanced emergency service Computer Aided Dispatch to freeway surveillance projects. However, these projects have largely been independent efforts focused on improving the capabilities of a single agency without major consideration for larger regional needs and issues.

The development of the Fresno County ITS Plan followed the required federal ITS planning process. As the lead agency, the Council of Fresno County Governments initiated the creation of an ITS Subcommittee to provide input into and oversee the development of the ITS Plan. This Subcommittee included representatives from all Fresno COG member agencies, as well as the Federal Highway Administration (FHWA), Caltrans Headquarters, and the private sector. Within this Subcommittee several meetings were held that separated representatives into their specific areas of interest (traffic systems, incident management, transit, etc.) in order to provide for more focused input at key points in development of the Plan. In general, the development of the SDP followed a combined planning and broad level systems engineering approach. This approach included:

- Identification of problems and needs
- Definition of an ITS vision and goals for the region
- Selection of a preliminary set of ITS functions or capabilities (known as “market packages” in the national architecture) along with the development of a series of preliminary project concepts.
- Development of a regional system architecture based on national and statewide ITS architecture efforts

- Refinement of the project concepts, in combination with the market packages and system architecture, into a set of refined project descriptions including preliminary timelines, cost estimates, and deployment concepts

- Identification of potential funding approaches and opportunities

- Development of a series of suggested policies and an institutional structure to support ITS deployment in the region.

In order to assess the types of ITS projects best suited to Fresno County, the ITS Subcommittee identified the priority transportation problems and ITS user needs. This identification occurred through responses to surveys and a series of workshops and meetings. The following chart identifies the priority problems identified by the Subcommittee. The problems were ranked based on scoring criteria applied by transportation stakeholders in a series of exercises.

Exhibit 4-8
Priority Transportation Problems and ITS User Needs

Rank	Priority Problem	Score
1.	Lack of Integration/Coordination/Common Communications	33
2.	Signal Coordination (Needed)	22
3.	Emergency Response Time	19
4.	Air Quality	18
5.	Funding	15
6.	Lack of Traveler Information	12
7.	Staffing	9
8.	Red Light Running	7
9.	GIS Mapping/Mapping Standards/Old Maps	5
10.	Visibility Related Incidents (Fog/Dust)	3
11.	Lack of Surveillance	2
12.	Data Needs (Data needed for transportation planning & evaluation purposes)	1
13.	Incidents (General)	1
14.	Lack of Known Standards	1

Once the priority problems were identified, the Steering Committee identified a number of projects to address those problems. For the purpose of the Fresno County ITS Strategic Plan, ITS projects have been categorized into five major areas known as program areas: These areas and the projects identified within them include:

1. Traffic/Freeway Management Systems Program Area

These projects focus on improving traffic and safety, as well as reducing delays along freeways and arterials. ITS projects have had considerable success in this area. The cities of Fresno and Clovis, as well as Fresno County, are deploying enhanced signal and traffic management capabilities to reduce travel times and better manage congestion. The projects identified within this category include:

- *Ramp Metering & Communications Gap Closure*

  Deployment of additional ramp metering and freeway management capabilities within the region, including an interim solution for the Caltrans Automated Traffic Management Systems (ATMS) software

- *Multi-jurisdictional Interconnects*

  Deployment of the communications and enhanced signal systems necessary to further improve inter-jurisdictional signal coordination

- *Integrated Smart Corridors*

  Deployment of enhanced surveillance and management systems along SR 41/168/180 to better manage traffic conditions and incidents

- *Railroad Highway Interface Technology for RR Crossings*

  Deploy equipment to increase safety and provide delay information to motorists at key crossing locations

- *Communications Interties*

  Provides for the communications and systems necessary to allow enhanced interagency communications, sharing of resources and information, and development of a Regional Integrated Workstation (RIW)

- *Integrated Surveillance Stations/Callbox Deployment*

  Deploys remote surveillance equipment to provide incident detection and field device support in outlying areas of the region. Also includes establishment of a regional motorist-aid system

- *Regional Intersection Safety Systems*

  Deploys equipment at high incident intersections to enhance the safety of motorists and pedestrians though increased visibility and automated red-light enforcement

- *Incident Management/Emergency Services*

  Focuses on saving lives through decreasing incident response and clearance times. Several emergency service agencies in the Region have deployed improved computer aided dispatch and fleet management systems to improve incident coordination and response. Identified projects include:

  - Weather/ATMS Integration
  - Variable Speed System
  - Remote Surveillance and Incident Scene Management
  - Computer Aided Dispatch Integration
  - Integration and Communications Channels
  - Incident Management Task Force

2. Transit Systems Program Areas

The Fresno Region is already realizing the benefits from Fresno Area Express' ITS transit management system. The Strategic Plan focuses on improving transit coordination and real–time information provided to transit patrons. FAX uses information from their system to make decisions on service options, as well as to improve day to day service.

- *Coordinated Transit District Operations*

- *Coordinated Transit Operations/Dispatch Centers*
- *Transit Information System*
- *Transit Management System Completion/Expansion*
- *Common Fare Equipment Deployment*

3. Transportation User Information Systems

Focuses on providing improved real-time transportation information to the traveling public. This information is useful to commuters as well as tourists, allowing them to make informed travel decisions. So far the Region has deployed some simple information systems that the public relies upon everyday.

- *Regional Transportation User Information System*
- *Valleywide/Statewide Transportation User Information System Connections*

4. Regional ITS Configuration Management Coordination/Planning Program Area

These projects provide for the overall coordination and integration of the ITS deployment effort in the Fresno County region.

- *Valleywide/Statewide Communications Linkages*
- *Regional Configuration Management*
- *Common/Standard Regional/County Map*

5. Institutional Structure and Suggested Policies Program Area

In addition to the identified ITS projects, the Fresno County ITS Strategic Deployment Plan defined a potential institutional structure and supporting policies to help facilitate deployment of ITS strategies. The identified supporting policies include:

- *Cooperate to program, deploy, and operate common ITS resources and systems;*
- *Incorporate or allow for communications infrastructure during the development of regionally significant transportation infrastructure;*
- *Adopt the regional, statewide, and national architecture to support the exchange of transportation related information and integration of systems between agencies:*
- *Utilize regional standards for communications, transportation management and/or information, and emergency services systems;*
- *Seek institutional arrangements where the joint deployment of ITS promotes economies of scale, avoids duplication of effort, and/or promotes regional integration of systems;*

- *Funding preference should be given to projects that are a cooperative effort between two or more agencies, all other factors being equal;*
- *Cooperate at local and regional levels to establish common and/or seamless transportation operations across jurisdictional boundaries;*
- *Agencies should always retain the ability to "take control" of their respective components of integrated system(s);*
- *Incorporate ITS elements as part of major transportation projects during the project development process;*
- *Deploy ITS to enhance the accuracy and extent of transportation user information provided to the traveling public.*

San Joaquin Valley Intelligent Transportation Systems Strategic Deployment Plan

In addition to developing its own ITS plan for Fresno County, Fresno COG has also been a participant, along with the other seven Regional Transportation Planning Agencies in the San Joaquin Valley, in development of a overall ITS deployment plan for the entire San Joaquin Valley. The purpose of the San Joaquin Valley ITS Plan is to help guide the implementation of ITS in the San Joaquin Valley and also to fulfill a requirement by the Federal Highway Administration for a region to have a plan that conforms to the National ITS Architecture, thus ensuring that funding from the federal Highway Trust Fund for all future ITS projects, or projects that have an ITS element will be honored by FHWA. By participating in the development of the San Joaquin Valley ITS Plan, the county is now connected to the Valleywide system architecture and will have access to those federal funds that may become available for Valleywide ITS projects.

Regional ITS Architecture

The COG accepts the San Joaquin Valley regional architecture as its common structure for development of ITS throughout the region. All ITS projects funded with highway trust funds will be based on a systems engineering analysis. The COG along with the other seven Regional Transportation Agencies in the San Joaquin Valley has established a maintenance plan to support the regional architecture in compliance with federal deadlines.

4.3.4 Needs Assessment

Upon examination there are a number of issues and needs related to the streets and highways network which require the attention of the COG. Among these issues are financing for maintenance, rehabilitation, reconstruction and construction, modification of travel demand, capacity problems, general plan circulation element inconsistencies and transportation corridor needs. The following text will analyze each of these issues/needs in further detail.

Financing of the Regional Transportation Network

Development of financing mechanisms to implement the planned transportation network remains a primary concern not only in Fresno County but throughout the entire State of California.

Transportation funding in California experienced a significant shift in recent years. Increasing operational and maintenance costs increased much more rapidly than the relatively flat growth of gas tax revenues. Due to increased auto fuel economy a reduction in revenue per mile traveled materialized. The combination of higher construction costs, higher design standards, environmental mitigation, and increased repair and rehabilitation requirements on aging freeways basically reduced state transportation investments to essentially a maintenance program.

To address this concern in 2006, voters of Fresno County reauthorized a ½ cent local sales tax, Measure "C," for transportation purposes. The 20 year tax is projected to generate $1.7 billion to be expended through the Fresno County Transportation Authority. Fresno COG and the Authority are currently in the process of developing a Strategic Implementation Plan to facilitate expenditure of those funds.

Transportation Corridor Needs

Pursuant to federal direction, all new regional transportation projects are required to take a "Multimodal Transportation System Corridor" planning approach. In keeping with this federal direction, the COG is working in partnership with Caltrans, local jurisdictions and the private sector to identify transportation corridors and projects which will provide maximum utilization of a multimodal system for the citizens of Fresno County.

Fresno-Madera East-West Corridor Study

In the urban area, east-west travel demand in the northern Fresno-Clovis Metropolitan Area is perceived as a major transportation planning concern. In order to address the future east-west travel demand needs of northeast Fresno County and southeast Madera County, the COG, the Madera County Transportation Commission (MCTC), and Caltrans District 6 participated in a regional transportation corridor study known as the Fresno-Madera County East-West Corridor / Sub- Area Study. Using funding primarily from a State Planning and Research Grant, a consultant (Valley Research and Planning Associates) was hired to conduct the study under the guidance of a Project Development Team consisting of planning and public works officials from each of the five affected jurisdictions (the counties of Fresno and Madera, as well as the cities of Fresno, Clovis, and Madera). The basic intent of Phase One of the study was to identify logical long-range transportation infrastructure needs within the project study area.

Phase One of the study focused on examining Fresno and Madera Counties' long-range transportation needs within the study area by considering various future land use plans together with circulation element policies and engineering and environmental constraints. Phase Two focused on the preliminary engineering analysis and detailed environmental analysis associated with potential river crossings between the State Route 41 San Joaquin River Bridge and approximately one mile north of the Alternative #3 corridor. See Exhibit 4-9.

Southeast Corridor Study

In addition to the Fresno-Madera County East-West Corridor / Sub-Area Study, a corridor route alignment study known as the Southeast Corridor Study was completed in 1996. The study's purpose was to analyze various modal alternatives, route alignments, and environmental issues facing development of a north-south regional route through the southeastern portion of Fresno County (Exhibit 4-10). Consultant work on the project has been completed with the project currently under construction through the Measure "C" program.

Herndon Avenue Specific Study

In its role as the Regional Transportation Planning Agency for Fresno County, Fresno COG served as the lead planning agency for the Herndon Avenue Specific Study (Exhibit 4-11). The $100,000 study, which began in December of 1999, was conducted by TJKM & Associates, a traffic-engineering firm from Pleasanton, CA. The overall direction for the study was provided by a Project Development Team consisting of planning and public works staff from affected local agencies and Caltrans. The basic purpose of the Herndon Avenue Specific Study was to analyze future travel demand in the northern Fresno-Clovis metropolitan area (including State Routes 99, 41, and 168) and determine the appropriate type of transportation improvements beyond those already planned that would be needed on Herndon Avenue in order to accommodate projected population growth and the resultant vehicle trips.

Exhibit 4-9
Fresno-Madera East-West Corridor Study

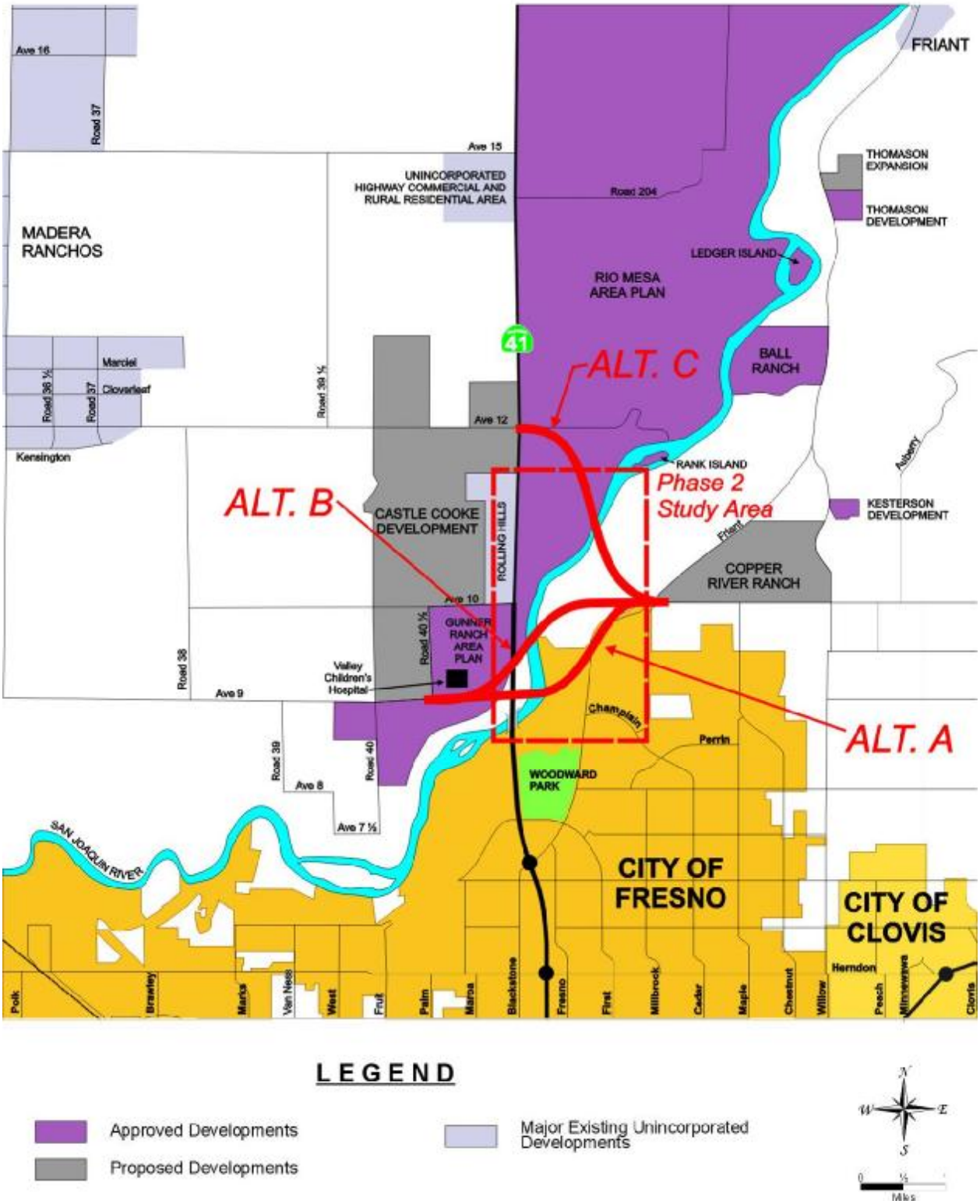
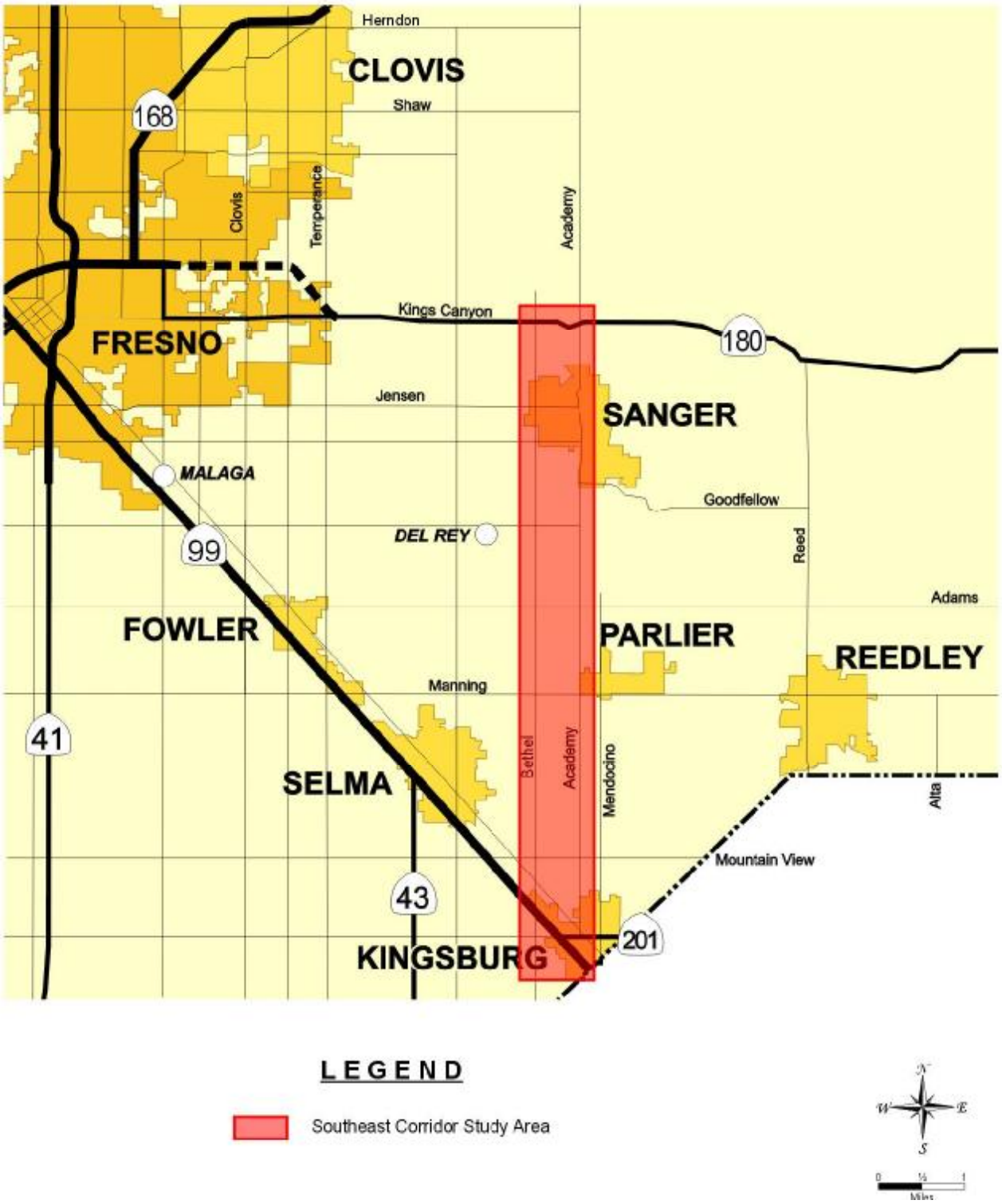


Exhibit 4-10
Southeast Corridor Study



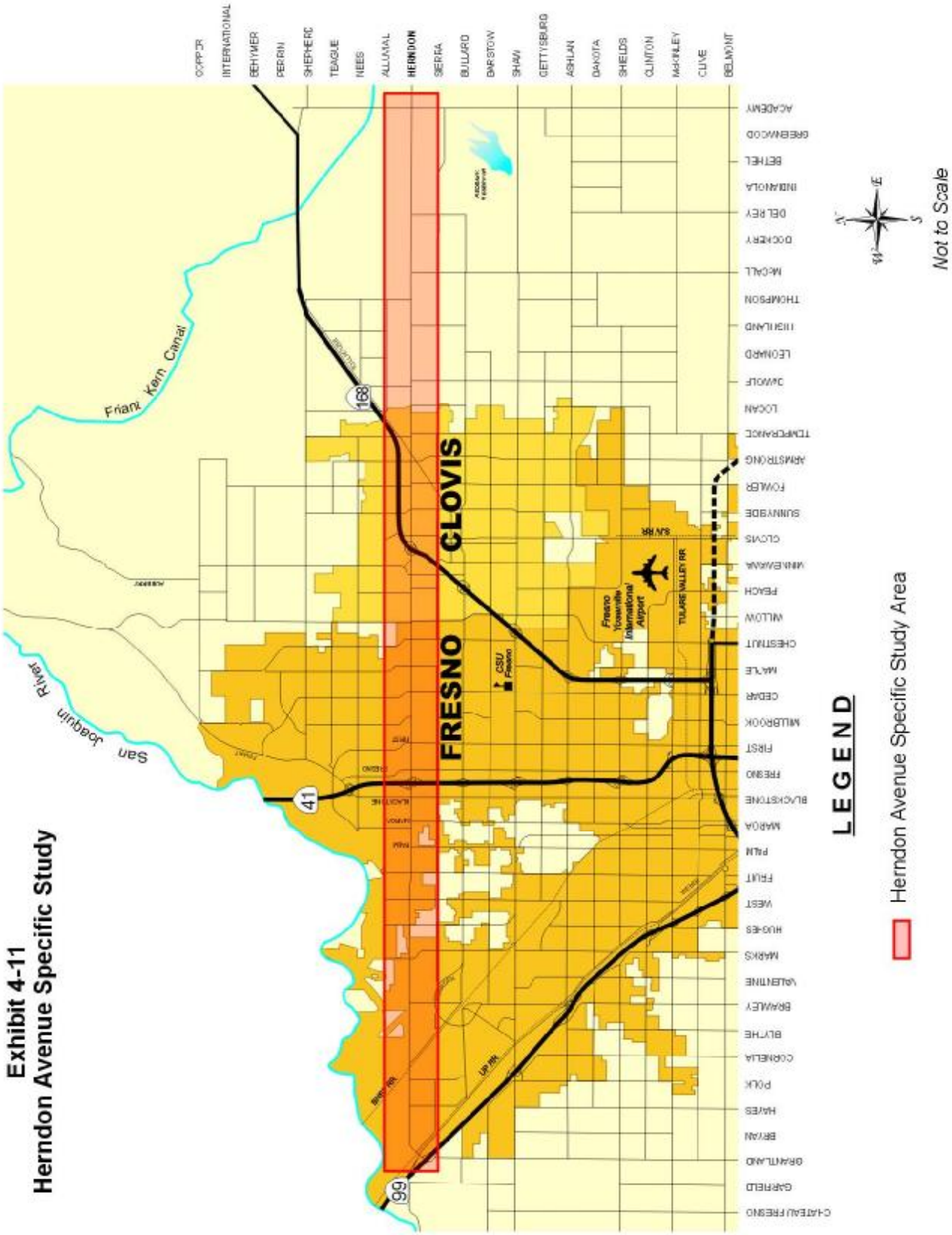


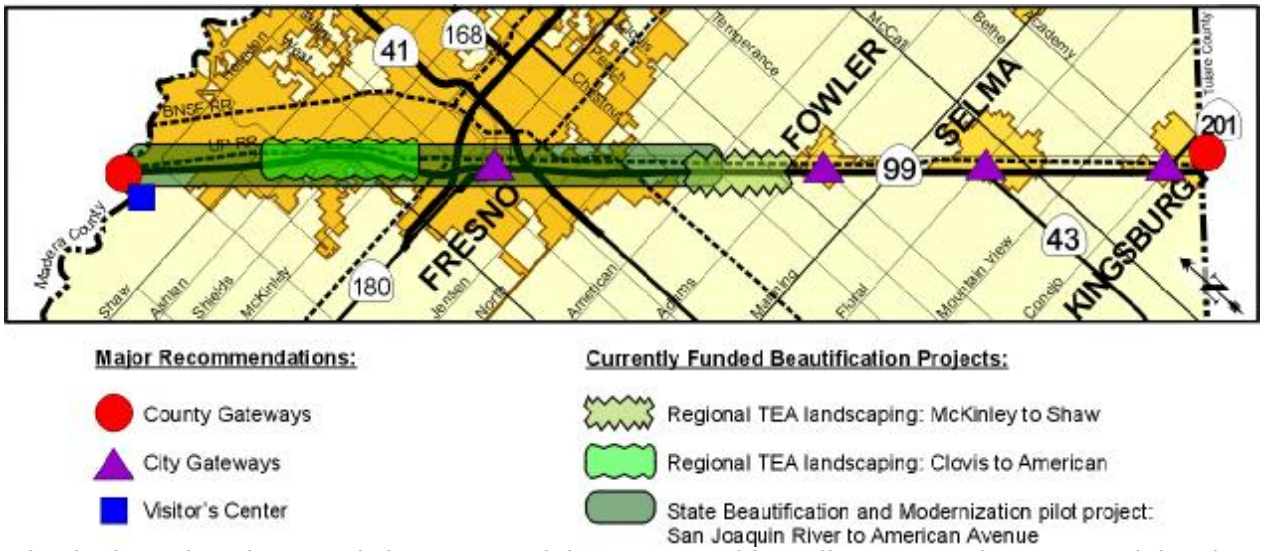
Exhibit 4-11
Herndon Avenue Specific Study

Highway 99 Beautification Master Plan

In 1998 concerned policy makers and citizens began meeting regarding the appearance of Highway 99, which is one of the region's main north-south routes and one of the main connections to other areas of the state such as the San Francisco Bay area, the Sacramento area, and southern California. The feeling among the policy makers and citizens was that Highway 99's appearance, both inside and outside of the State right-of-way, was poor. They felt that this stifled economic development in the area and gave Fresno County a poor image.

Their efforts resulted in an MOU between Caltrans, the County of Fresno, and the cities of Fresno, Fowler, Selma, and Kingsburg creating the Association for the Beautification of Highway 99. The Association consists of eleven members: one from Caltrans, one elected official from each city and the county, and one private sector representative from each city and the county. In 2007 the Fresno Chamber of Commerce was added as a member of the committee.

Exhibit 4-12
Highway 99 Beautification Master Plan



After its formation, the Association requested that COG provide staff support to the group and that they fund a beautification plan for the corridor. COG agreed. After a thorough review and selection process, RRM Design Group was selected to assist in the preparation of the plan. Completed in July of 2000, the plan addresses the visual resource management, landscape development, highway maintenance, public service operations issues, and inter-governmental relations that will be required in the effort to beautify the Highway 99 corridor through Fresno County. It also offers a program that will preserve and enhance the natural scenic beauty of the corridor while recognizing and incorporating the commercial activities adjacent to the corridor necessary for the social and economic well being of the related communities. In addition, this plan strives to identify and enhance the unique regional character of the Highway 99 corridor through Fresno County and how it influences, and is influenced by, elements and activities beyond the immediate planning area.

The *Highway 99 Beautification Master Plan* was adopted by the COG in July of 2000 and by October of 2000 it had also been adopted by all five land use agencies along the corridor. At the request of the Association, the COG has now taken the lead in the implementation of the plan. The Association continues to meet bimonthly and work with the COG on making the plan and its vision become a reality. The plan has already begun to have a positive effect on the corridor. Below is a brief summary of some of the early results of the plan:

- Almost $1.5 million dollars has been awarded in regional Transportation Enhancement Activities (TEA) grants for landscaping of the corridor.

- Fresno County has constructed a "Welcome to Fresno County" monument signs on the north end of the county. A southern monument for Fresno County is in the development phase, which includes identifying a funding strategy and potential location sites.

- The Association has formed a subcommittee to develop a zoning overlay ordinance to be adopted in the five land use jurisdictions. This document will address landscaping, sight lines, billboards, and land use.

- Due in large part to the *Beautification Master Plan* and the work of the Association and COG, Caltrans selected Highway 99 through Fresno for the pilot project for its new Beautification and Modernization program, which represents a $6 million investment in the corridor.

In addition to the corridor needs identified above, there are also several planning efforts underway to determine what type of long range transportation improvements are going to be necessary in order to provide adequate levels of service and overall mobility within Fresno County. The transportation corridors being analyzed are as follows:

Fresno-Madera County Freeway Deficiency Study

In 2003, COG was awarded a $240,000 Caltrans Partnership Planning grant to undertake a Freeway Interchange Deficiency Study in Fresno and Madera counties. The primary purpose of the project was to analyze planned land uses and transportation projects within the counties and determine which interchanges will be deficient by the year 2025. Phase II of the study is currently underway with a continued focus on the deficient interchanges as well as an assessment of financing options.

State Route 180 Western Extension Corridor Study

Caltrans and COG are also conducting a route adoption study for the extension of State Route 180 West from SR 33 to the I-5 corridor. The study will be looking at the appropriate future route alignment which would best serve the mobility needs of western Fresno County, as well as providing a "direct" state highway route for travelers and goods movement from I-5 to the City of Fresno.

Exhibit 4-13
Western Extension of SR 180 Study Area for Potential Corridors

State Route 99 Widening

As mentioned earlier, SR 99 throughout the Central Valley will be facing increasing congestion as the population of the state continues to grow. Congestion along SR 99 within Fresno County is of particular concern. To address this concern, Caltrans in partnership with various transportation stakeholders is looking at strategies to provide more capacity along SR 99 within the Fresno County. Currently only a portion of the SR 99 corridor within Fresno County is six lanes, while the remainder is only four lanes. It is anticipated that in order to address future congestion, all of SR 99 through Fresno County would need to be 6 lanes.

<u>Travel Demand</u>

Modifying travel demand is a critical issue. It is becoming increasingly apparent that financial, energy, and environmental resources are slowly being overburdened by the need to satisfy ever increasing demand for

travel. Over time it will be necessary to develop and implement a variety of measures to reduce this demand. The measures range from the provision of various incentives to promote multi-occupancy vehicle use (i.e. rideshare and transit), alternative modes such as non-motorized and rail, and trip reduction through various land use planning mechanisms.

Managing travel demand is expected to play an increasingly important role in future transportation planning and related energy and air quality planning activities. Given the seriousness of this region's air quality problems, lack of implementation of traffic demand strategies will likely lead to the implementation of more stringent measures to reduce future vehicle travel.

COG will continue to monitor the regional transportation network with regards to the possible use of HOV lanes and the resultant impacts as they relate to air quality, congestion management and overall mobility. The HOV analysis and additional travel demand strategies will continually be analyzed as more system improvements are constructed and their impact evaluated as a whole.

4.3.5 Proposed Actions

Future Planning Activities

The Council of Fresno County Governments will continue to work with its member agencies, Caltrans, and the federal government in the development of a comprehensive multi-modal regional transportation network designed to provide maximum mobility for both the movement of people and goods throughout Fresno County. To the greatest extent possible, the COG intends for its state highway planning process to complement that of Caltrans. Thorough consultation is anticipated to resolve any of the scoping inconsistencies currently noted between the two agency's plans.

In the short-term, the COG will continue to work with its member agencies to address general plan circulation element inconsistencies. The assumption is these inconsistencies can be resolved, and that computerized modeling runs will be one of the tools used to aid in the decision-making process. In addition to the inconsistencies, the TP+ model will be used to evaluate alternative land use and circulation system assumptions, reflecting the Circulation Elements of Fresno County and the Fresno-Clovis Metropolitan Area. Modeling of the "existing" and "full build" freeway development scenarios will allow analysis of the full range of traffic assignments to networks and related impacts against which other network alternatives can be compared.

Updated traffic monitoring counts on selected corridors will also serve as key input to future metropolitan and rural streets and highways analysis. The COG publishes an annual Fresno Regional Area Traffic Monitoring Program. Also, the COG has the responsibility for annually coordinating the collection of sample system performance data within Fresno County. This data collection responsibility was assigned by the Federal Highways Administration who initiated a Highway Performance Monitoring System process designed to provide them with a means to assess and monitor the performance of federally-funded highway systems. COG will also remain involved in what is commonly known as Transportation Systems Management techniques. These are traditional strategies which are designed to ease congestion and improve the flow of traffic.

Short-Term Improvement Program (2007 through 2010)

The various jurisdictions within Fresno County have completed numerous projects over the last several years, while highest priority has been given to maintenance of the existing street and road system. Special emphasis has also been given to the optimization of the existing system through traffic signal improvements and operational improvements.
The following are the top priorities in the region for the short-term (2007 through 2010):

1. Maintenance and rehabilitation of the existing state highway and local streets and roads network;

2. Complete construction on segments of the long planned freeway network;

3. Provide necessary further operational improvements; and

4. Promote the implementation of transportation systems management actions where possible. Improvements on the local street network will focus primarily on safety, maintenance and rehabilitation projects.

5. Continued implementation of Transportation Control Measures such as improved public transit, traffic flow improvements, additional bicycle facilities, park and ride lots and voluntary ridesharing.

Long-Term Transportation Improvement Program (2007 through 2030)

Given the population projections for the Fresno-Clovis Metropolitan Area in conjunction with those of the other incorporated cities and incorporated areas of Fresno County it is anticipated that in the year 2030 approximately 1,402,349 people will inhabit Fresno County. This tremendous influx of people will place a tremendous strain on the transportation network in terms of movement of people and goods. The top priorities for the long-term in Fresno County will continue to be the maintenance and rehabilitation of the existing network, construction of the planned freeway network, provision of necessary operational improvements, and continued promotion of the implementation of transportation systems management improvements.

COG worked with its member agencies and Caltrans to identify and prioritize projects for the long-term program.

4.3.6 Unfinanced Needs

As stated previously in this section, state highway funding has decreased dramatically over the past 25 years. Unfortunately, local streets and roads funding, available from statewide fuel subventions, has decreased even more dramatically. Although this reduction is partially attributable to reduced state funding, Proposition 111 exacerbated the decline by adjusting the allocation formula and shifting an additional percentage of transportation resources derived from fuel taxes away from local streets and roads to state highways. While new transportation systems are certainly required to meet the State's mobility needs into the next century, it is also vital that California's investment in the existing transportation system be protected. In order for California to remain economically competitive in the future it must maintain its existing transportation system (at the local level as well as the state level) in good operating condition to maximize the return on its huge investment. Maintenance of the existing transportation system limits the cost of future repairs and minimizes delay or interruptions of service for travelers, commuters and delivery of goods. Failure to adequately maintain the system will significantly burden the State's economy due to increased travel times, delays and increased cost of goods.

Recognizing the need for additional transportation funding, the voters of Fresno County passed a half-cent sales tax Measure "C" in 1986 and extended the sales tax in November 2006. These dollars are used by the local jurisdictions for capacity increasing projects, as well as maintenance and rehabilitation needs. Despite this additional revenue, Fresno County and the cities of Fresno County are still faced with an unmanageable backlog of rehabilitation needs.

It is estimated that the county of Fresno alone has an approximately annual shortfall of upwards of $50 mil. annually in the areas of maintenance and rehabilitation and reconstruction. These shortfalls, in conjunction with the existing shortage of transportation funding available for projects which would expand capacity, creates a scenario which has the potential to threaten the mobility of both people and goods in Fresno County. Due to the age of the rural transportation network, Fresno County's more than $4 billion dollar a year agricultural industry (which relies heavily on the rural streets and highways for movement of agricultural commodities) is particularly at risk.

The COG will continue to work closely with the appropriate federal, state and local governmental entities in pursuit of a strategy to address the unfinanced needs of Fresno County, both in the areas of maintenance of the existing system and construction of new facilities. One area which needs closer analysis and addressing is the area of truck impacts on the system. Additional discussion of transportation funding from a statewide and county perspective is included in the Financial Element (Chapter 5) of this document.

4.3.7 Consistency with the Strategic Highway Safety Plan

This section documents Fresno COG's consistency with the State's efforts to develop and implement the Strategic Highway Safety Plan. The Safe, Accountable, Flexible, Efficient Transportation Equity Act – Legacy for Users (SAFETEA-LU) amended Section 148 of Title 23 to create a new, core Highway Safety Improvement Program that replaces the Hazard Elimination Safety Program (23 U.S.C §152). The purpose of the highway safety improvement program is to achieve a significant reduction in traffic fatalities and serious injuries on public roads.

To ease implementation of the new program, SAFETEA-LU included a transition period that allows states to fund projects that were eligible under the old HES Program until such time that a Strategic Highway Safety Plan (SHSP) has been developed and implemented by the state.

As required under SAFETEA-LU, the California Department of Transportation led the effort to develop the statewide Strategic Highway Safety Plan (SHSP) to identify key safety needs of the State as well as strategies to address those needs. California's SHSP was approved by the Secretary of the Business, Transportation and Housing Agency (BTH) on September 26, 2006.

As of February 2007, there are 300 safety stakeholders representing 80 different agencies and organizations working together in a collaborative effort to develop the Strategic Highway Safety Implementation Plan (SHSIP). The SHSIP is scheduled to be completed during the Summer of 2007. The SHSIP will contain the most effective behavioral and infrastructure strategies and countermeasures for each of the following 16 Challenge Areas:

- Reduce Alcohol and/or Drug-Impaired Roadway Users
- Reduce the Occurrence and Consequence of Leaving the Roadway and Head-on Collisions
- Ensure Drivers are Licensed and Competent
- Increase Proper Use of Safety Belts and Occupant Protection
- Improve Driver Decisions about Rights of Way and Turning
- Reduce Young Driver Crashes
- Improve Intersection and Interchange Safety for Roadway Users
- Make Walking and Street Crossing Safer
- Improve Safety for Older Roadway Users
- Reduce Speeding and Aggressive Driving
- Improve Commercial Vehicle Safety
- Improve Motorcycle Safety
- Improve Bicycling Safety
- Enhance Work Zone Safety
- Improve Post Crash Survivability
- Improve Safety Data Collection, Access, and Analysis

Information about the SHSP, its implementation timeline, and the list of safety partners, are downloadable from Caltrans website at http://www.dot.ca.gov/hq/traffops/survey/SHSP/index.htm

To effectively develop and implement the strategies outlined in SHSP, it is important to understand how the SHSP links to other safety plans and programs. Statewide Transportation Plans, Regional Transportation Plan, Transportation Improvement Programs (TIP), Statewide Transportation Improvement

Programs (STIP), as well as the Highway Safety Improvement Plan (HSIP), Commercial Vehicle Safety Plan (CVSP), and other State and local plans are all critical to the success of an SHSP.

Safety is identified as part of one of eight overarching goals in the 2007 RTP that guide the development of the Fresno County region's transportation system, and safety projects are identified as a top priority for the region. Fresno COG will continue to track its progress to maintain consistency between the State's efforts and those undertaken at the regional level.

4.4 Urban Mass Transportation

4.4.1 Overview

Mass transportation is an economical mode of moving large numbers of people to designated places by bus or train. Mass transportation in Fresno County consists of both public transit and Amtrak rail passenger service.

Public transportation may be operated by either the public, private or non-profit sector of the economy. Service may be provided in either a conventional manner, such as, fixed-route, scheduled service, or as a "demand-responsive" service. Public transportation may take the form of shared-ride taxis, car and van pools, subscription bus services, and specialized accessible service for disabled persons.

Although basic public transportation service within both the metropolitan and rural areas of Fresno County have been implemented, as those services exist today, public transit is little more than a safety net for transit dependent riders. In most cases, poor service frequency, short service hours, and multiple transfers create long travel times making public transit a distant last choice for travel.

Past funding constraints have made efforts to maintain reliable and accessible transit service commensurate with reasonable needs difficult. However, the recent reauthorization of Measure "C", Fresno County's ½ cent sales tax for transportation purposes, has established a stable funding source for Fresno Area Express. Measure "C" is expected to provide an estimated $235 million dollars over the next 20 years. It is the goal of FAX to improve the level of public transit within the Fresno-Clovis Metropolitan Area. FAX will utilize the 2006 Measure "C" Extension Expenditure Plan, as well as Customer Satisfaction Surveys and route analysis to determine future improvements. Attention will continue to focus on the needs of transportation disadvantaged populations including low income, elderly and disabled persons; however, effort must also be directed towards other mass transportation challenges including improving air quality, reducing congestion, and expanding service for an ever-increasing population. If public transportation is to play an effective role in addressing these issues, a greater emphasis must be placed on providing attractive alternatives to the ubiquitous private automobile.

Legislative mandates including the Americans with Disabilities Act (ADA) of 1990, the federal Clean Air Act Amendments (CAAA) of 1990, the California Clean Air Act and the California Air Resource Board's (CARB) Transit Fleet Rule have had a profound impact on public transit. The ADA brought about many changes for transit operators including requirements to provide accessible buses, trains and facilities for the disabled. The ADA mandated the provision of comparable paratransit service by fixed-route operators, and assurances that transit facilities will be constructed using accessible features.

The 1990 Federal Clean Air Act Amendments significantly strengthened the linkage between transportation and air quality regulations. The Act requires substantial emission reductions from the transportation sector and establishes conformity requirements to ensure that reductions are achieved. From a transportation perspective, the California Clean Air Act requires air pollution control districts to adopt and implement regulations to reduce emissions from indirect and area-wide sources and to encourage ridesharing, vanpooling, flexible work hours and increased multi-passenger trips through mass transit or other measures to reduce vehicle usage.

The CARB Transit Fleet Rule requires transit buses to meet stringent emissions standards that outpace other heavy-duty vehicle fleets. Transit bus emissions will be reduced nearly 90% by the end of 2007. In most cases, these rules have forced transit fleet operators to switch from diesel to alternative fuels such as Compressed Natural Gas.

As a result of these legislative mandates, both the public and social service transportation systems have modified fleet replacement programs to include clean fuel and alternative fuel vehicles. The cleaner vehicles are more expensive to purchase, and more expensive to maintain. Operators have also made significant service changes in order to comply with legislated requirements, including service designed to meet the mandates of the ADA. The ADA has required significant capital and operating outlays in order to meet compliance for accessible transportation services.

The Personal Responsibility Work Opportunity Resource Act of 1996 and California's CalWorks Program have brought to focus the need for public transportation to provide an important and necessary link to job training and development. Transit operators continue to work with the Fresno County Department of Employment and Temporary Assistance to assess transit services for CalWorks recipients.

Social service transportation in Fresno County is being guided in a direction consistent with the Social Service Transportation Improvement Act of 1979 (AB 120). The primary goal of the legislation is to improve transportation service provided by social service agencies through coordination and consolidation of their transportation services. The COG designated three Consolidated Transportation Service Agencies (CTSAs) within Fresno County. They include: the Clovis CTSA, The Fresno Metropolitan CTSA, and the Fresno County Rural CTSA. The CTSAs are responsible for promoting, among social service agencies, the consolidation of their existing services in order to achieve cost savings. Notwithstanding the social service agency consolidation efforts, the CTSAs are also to coordinate their services, to the maximum extent possible, with existing public and private transportation providers.

The purpose of the Regional Transportation Plan's Mass Transportation section is to review the existing and planned transit services and determines those improvements that will provide the greatest benefit while maintaining a high level of system efficiency. This section will focus on the following topics:

- Existing System
- Needs Assessment
- Unfunded Needs
- Accomplishments
- Proposed Actions

Where appropriate, the discussion will distinguish between the services of Fresno-Clovis Metropolitan Area Public Transportation, the Fresno County Rural Area Public Transportation, and Social Service Transportation.

4.4.2 Existing System

Fresno-Clovis Metropolitan Area

The major provider of urban public transportation in Fresno County is Fresno Area Express (FAX), a department of the City of Fresno. FAX provides two types of public transportation service in the FCMA: the fixed-route service for general public riders, and Handy Ride, a demand-responsive service designed for individuals who, because of an impairment or disability, are unable to use the regular fixed-route bus service. The fixed-route network follows a modified grid pattern with intersecting north-south and east-

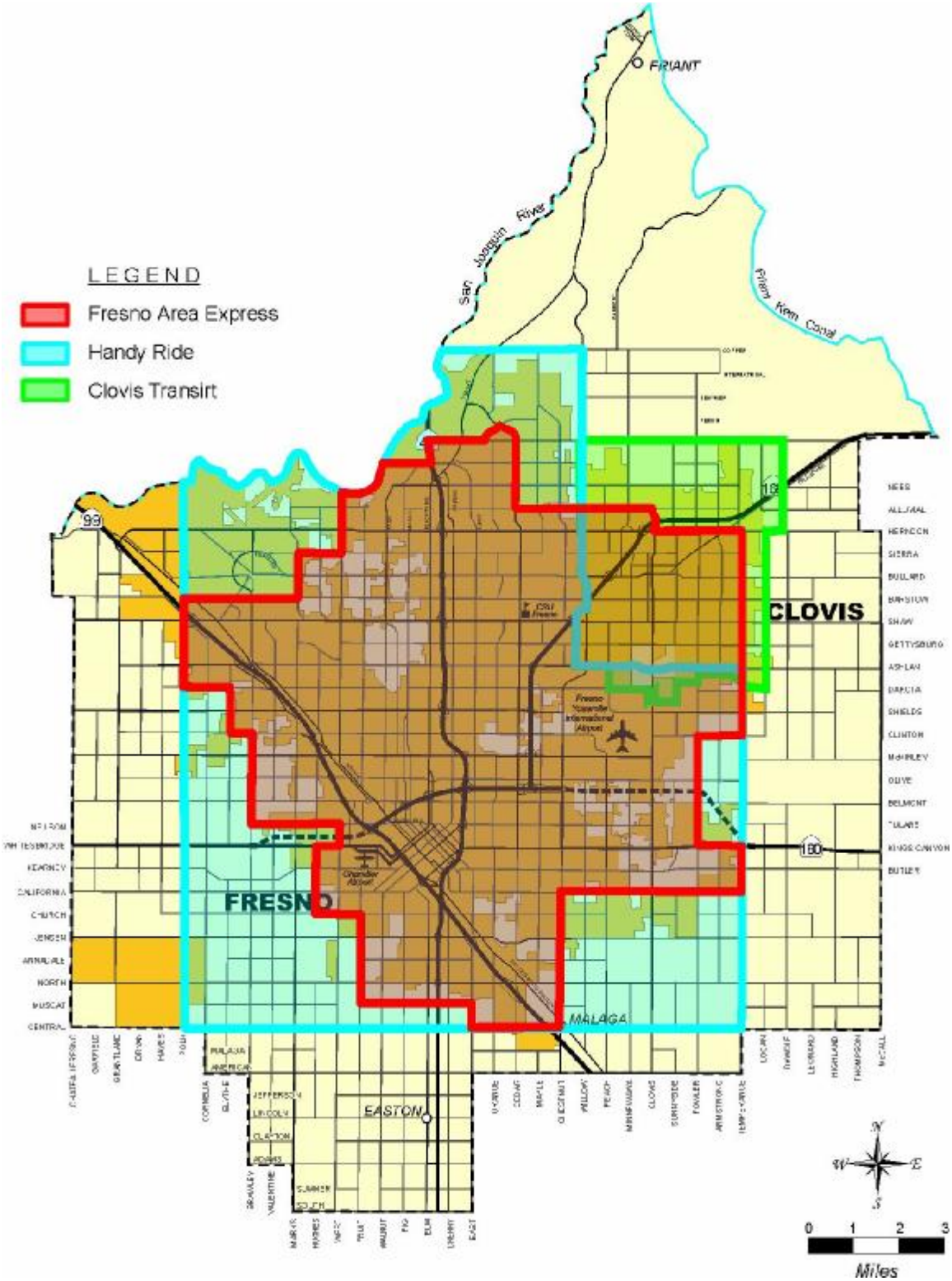
west bus lines. The Handy Ride demand-responsive system provides complementary paratransit service as required by the Americans with Disabilities Act (ADA) of 1990 to paratransit certified disabled persons.

The City of Clovis also provides public transportation in the FCMA. Clovis operates two types of service: Clovis Stageline, a general public fixed-route service, and Round-Up, a demand-responsive paratransit service. Stageline operates on three routes, each on 30-minute headways. The routes are scheduled to coordinate with FAX service whenever feasible, in order to facilitate transfers between Stageline routes and FAX routes.

Clovis Round-Up provides demand-responsive transportation service for the elderly and disabled persons within the city's existing sphere of influence. The City of Clovis and the County of Fresno also contribute funds to FAX through formal contracts to provide fixed-route and paratransit services to and within Clovis and to unincorporated County areas with the FAX service area. Clovis provides fixed-route services weekdays and demand-responsive service Monday through Friday in Clovis and Fresno and seven days a week within Clovis using wheelchair lift-equipped vehicles. The City of Clovis designated its Round-Up services as a 100 percent CTSA function. Measure "C" local funding dollars are used to augment fare revenue to provide the necessary funds to match Transportation Development Act Article 4.5 dollars. Fresno Handy Ride and Clovis Round-Up have agreed to refer riders to each other if either system is unable to accommodate a trip request, providing space is available on to the other system.

Service areas for FAX and Clovis are shown on Exhibit 4-14.

Exhibit 4-14
Urban Transit Services



Inter-city Ground Transportation

Amtrak

Amtrak, with financial support from Caltrans, operates six round-trip trains daily, linking Fresno with Hanford, Corcoran, and Bakersfield to the south and Madera, Merced, Riverbank, Stockton, Antioch, Martinez, Richmond, Berkeley and Emeryville to the north. One of the five trains continues on to Sacramento.

Amtrak augments the *San Joaquin* trains with an extensive system of Thruway Buses that offer guaranteed connections at train side. At Bakersfield, a total of eight buses fan out to cover 40 destinations all over Southern California and Nevada, including Las Vegas, Palm Springs, San Diego, Orange County, Los Angeles, Ventura and Santa Barbara. At Stockton, Thruway Buses connect to 30 destinations, including South Lake Tahoe, Reno, Sacramento, Davis, Chico and Redding.

Greyhound

Greyhound provides frequent daily service from Fresno to a variety of points within California. Destinations served north of Fresno include Hayward, Sacramento, San Francisco, San Jose and Stockton. Destinations south of Fresno include Visalia, Bakersfield and Los Angeles. Connecting service is available to San Diego (via Los Angeles) and Yosemite National Park (via Merced).

Transportes Intercalifornias

Transportes Intercalifornias provides two daily round trips from Fresno to Los Angeles, with connecting services onward to Santa Ana, San Ysidro and Tijuana.

Orange Belt Stage Lines

Orange Belt Stage Lines provides daily service linking Fresno with Visalia, Paso Robles and San Luis Obispo. Orange Belt also connects several cities within the county, stopping at both Amtrak and Greyhound Stations in order to provide access to extensive travel networks. Inter-city and countywide transportation services are shown on Exhibits 4-15 and 4-17, respectively.

Exhibit 4-15
Interregional Transit Servicing Fresno County

4.4.3 Accomplishments

Fresno Area Express

During the past decade, limited funding has constrained service improvements by FAX. As such, FAX has had to balance the demand to provide service into new and unserved areas with the demand to provide reliable service within the existing system. During the 10-year period from 1996 to 2006, actual revenue service miles increased from 3.1 million to 4.1 million, a 24% increase. During that same period, total ridership rose from 9.1 million in 1996, to 11.6 million in 2006, an increase in ridership of 27 percent. The increase in service miles is primarily driven by the addition of night service in 1999. Although night service improves opportunities for some individuals to access work, education and recreation, those improvements are limited to persons who live and work where and when service is available.

Efforts to coordinate services among transit systems for maximum delivery of service throughout Fresno County continue, including coordination and/or consolidation of transportation services for social service agencies. However, during recent unmet transit needs processes (see Unmet Needs Process below), comments have been received identifying concerns with transit services between Fresno, Clovis and other cities in Fresno County. Many participants expressed an interest in the development of a countywide transit district which they believe will improve service between municipal boundaries. Fresno County Policy makers including the Fresno County Board of Supervisors and the Fresno City Council have also raised this concern. In 2006, the Council of Fresno County Governments (COG) took the lead in a study to evaluate potential transit coordination opportunities through the creation of a countywide agency such as a Joint Powers Authority (JPA) or a transit district.

Some of the major accomplishments for FAX during the past two years have occurred in conjunction with efforts to improve service coordination and address air quality, accessible service objectives, and pursue Intelligent Transportation Systems technology for public transportation. These accomplishments include:

- In October 2004, Fresno Area Express and Clovis Transit teamed up to introduce the Metro Pass. The Metro Pass is a monthly pass that allows unlimited rides on either system. Clovis Transit and FAX have established a revenue sharing agreement to facilitate this program.

- FAX is continuing on the path of Intelligent Transportation Systems (ITS) by adding additional electronic displays at various locations, including Caesar Chavez Adult School and the intersection of Fresno and Shaw in central Fresno. These electronic display signs inform waiting passengers of real time bus arrivals or delays and are now being used to provide other public service announcements such as upcoming holiday schedules.

- The Handy Ride demand-responsive service reservation policy has been changed to allow next day reservations. Since the policy change was implemented in 2003, no ADA Certified request for service has been denied, and total trips have increased by nearly 30%.

- FAX purchased an additional 25 40-foot CNG buses, 2 Gasoline/Electric Hybrid buses and one trolley-styled CNG bus bringing its alternative fueled fleet to 56 vehicles. In addition, FAX has completed the retrofit of its older diesel fleet with new compliant engines and a variety of aftermarket equipment that will reduce Ozone emissions by 25% and Particulate Matter by 85%.

- FAX has expanded the commuter vanpool program. The initial 7 vanpools have been increased to 18 and will transport over 200 commuters. The project has been funded through a variety of sources including CMAQ, Measure C, a Valley CAN grant, and the San Joaquin Valley Air District.

- Beginning in October 2005, FAX increased frequencies on two of its most heavily traveled routes. These routes were identified by the Long-Range Transit Plan as the preferred corridors for high capacity transit.

- The City of Fresno completed the construction of the largest compressed natural gas refueling facility in the San Joaquin Valley which is currently being used to support the Department of Transportation's conversion to CNG buses. This facility has been utilized by other public fleets such as Fresno County Rural Transit Agency (FCRTA) and Fresno County Economic Opportunities Commission (FCEOC)

Clovis Transit

Over the past two years, Clovis Transit has accomplished many of its goals including:

- Ridership increase on both Stageline and Roundup has been significant. Over the past two fiscal years, Stageline has experienced a 44% increase in riders and Roundup ridership had increased by 21.4%. With the population of Clovis expanding, further demands for service are expected.

- Clovis Transit entered into a contract with Vista Media for exterior bus advertising. The contract guarantees the City of Clovis a minimum of $30,000 per year. The revenue has been used to off-set the farebox revenue

- Route 70 has expanded to a total of seven buses per day to serve the Reagan Education complex. The service operates once in the morning and once in the afternoon to provide service for peak school times.

- Two used trolley buses were purchased from a local vendor who was going out of business. The trolleys were repainted and refurbished and are now used as rentals for weddings, tours, charity events and parking lot shuttles. The revenue from the rentals help pay for the repairs made to the vehicles and keeps them in good operating condition.

- Clovis Transit coordinated with Fresno Area Express (FAX) to provide the Metro Pass. The Metro Pass is a monthly pass that is valid on both FAX and Clovis Stageline buses. The pass allows for easier transfers for passengers who regularly travel using both Clovis and Fresno systems. The cities have a revenue share agreement for Metro Pass sales.

- The City of Clovis hosted the University of the Pacific's Transit/Paratransit Management Course. The 10-session course covers all aspects of transit operations including budgeting, operations, ADA law, personnel practice, marketing and system design. The course was attended by transit managers throughout the central valley including the City of Clovis Transit Supervisor.

Urban Transit - Safety and Security

FAX customers value safety and security when using the transit system; FAX addresses these concerns:

(1) Transit Security Plan
FAX security plan provides a highly visible security presence for our transit customers and employees. FAX uses City of Fresno police officers to deliver system wide protection. Customers see uniformed patrol officers on buses and at transit facilities. As a result of the police presence, passengers feel safer, and public property has been protected from vandalism and graffiti. Since the introduction of the police officers, the number of crimes has been reduced.

(2) Video Surveillance System
In an effort to prevent graffiti and vandalism on buses, FAX identified the need for an On Board Video Surveillance program. It is believed that the presence of the video surveillance cameras serve as a deterrent to vandalism and other crimes.

(3) Emergency Exercises
(a) SPRING EX 2003 was a full scale exercise conducted on May 1, 2003, funded and supported by the Federal Transit Administration for the purpose of testing and evaluating a transit agency's

(Fresno Area Express) internal and external notification procedures, emergency response procedures, interagency communications, and operations at the command post and incident scene when dealing with an event of a deliberate nature. The exercise also fulfilled Federal Aviation Administration annual requirements for Fresno Yosemite International Airport. It identified the value of training and exercises in improving the preparedness of Fresno Area Express and federal, state and local emergency response personnel.

(b) FAX EX 2002 was designed by the City of Fresno Emergency Preparedness Officer (CFEPO) in conjunction with Fresno Area Express (FAX) staff to focus on transit security, both at Fresno Area Express and City of Fresno Chandler Downtown Airport, field level response actions, specific operations, interagency communication, and incident command center effectiveness. Participants included the Fresno Police Department (FPD), the Fresno Fire Department (FFD), and Fresno Yosemite International Airport Public Safety (FYIAPS). Participants' actions were governed by their respective policies, protocols and standard operating procedures. Each agencies testable material was coordinated by an assigned exercise coordinator. The City of Fresno operates under the State of California "Standardized Emergency Management System" (SEMS) which was designed to standardize responses to emergencies involving multiple jurisdictions or multiple agencies. SEMS requires emergency response agencies to use basic principles and components of emergency management, including the "Incident Command System" (ICS). The CFEPO monitored the flow of the exercise and made adjustments, as necessary.

(4) City of Fresno Emergency Operations Plan
The Department of Transportation/Fresno Area Express (FAX), is included in the City's Emergency Response Plan. This plan addresses the response to extraordinary emergency situations with natural disasters, technological incidents and national security emergencies in or affecting the City of Fresno.

4.4.4 Needs Assessment

Unmet Transit Needs Process

Each year the COG holds "Unmet Transit Needs" hearings consistent with Section 99401.5 of the Transportation Development Act. The Act governs the administration of the Local Transportation Fund (LTF). The referenced section of the Act clarifies that the Regional Transportation Planning Agency (Fresno COG in the Fresno County Region) must make a finding, after a public hearing, that there are no unmet public transportation needs within a jurisdiction which can be reasonably met before it may approve LTF claims for streets and roads.

The COG Policy Board adopted the following definition of Unmet Transit Needs in 1984:

> *"Those public transportation or specialized transportation services that are identified in the Regional Transportation Plan and that have not been implemented or funded."*

The adopted definition also sets forth the criteria by which "reasonable to meet" is determined. Since the RTP is the guiding document for the provision of transit services, any service implementation should be consistent with the RTP. In fact, the Transportation Development Act requires that prior to claim approval, an RTP consistency finding must be made. This definition does not prohibit new proposals, but simply requires that, prior to implementation, the proposal be incorporated within the current RTP, if necessary, by amendment.

Prior to making a finding, an annual assessment and analysis of the existing and proposed transportation system is prepared. This report is the foundation for the public hearing process each year.

The Social Services Transportation Advisory Council (SSTAC), was established by the COG in 1988 to comply with 1987 legislation (SB 498). Primarily composed of persons representing the elderly, disabled, and persons of limited means, the SSTAC's purpose is to:

- Annually participate in identification of transit needs
- Review and recommend appropriate action by COG for a jurisdiction which finds that a) there are no unmet transit needs, b) there are no unmet transit needs that are reasonable to meet, or c) there are unmet transit needs that are reasonable to meet.
- Advise COG on any other major transit issues, including the coordination and consolidation of specialized transportation services.

The SSTAC was thoroughly educated as to the first step in its participatory role. With this solid foundation, it has now become an integral part of the COG transit planning process. Emphasis is placed on the responsibility for recommending findings pursuant to the unmet transit needs process. Within Fresno County, there are currently no adopted findings of unmet transit needs that are reasonable to meet.

Public Transit-Human Services Transportation Coordination Planning

With the authorization of SAFETEA-LU, Fresno COG is required to develop a Coordinated Public Transit-Human Services Transportation Plan. The provisions of this plan are to improve transportation services for persons with disabilities, older adults, and individuals with lower incomes by ensuring that communities coordinate transportation resources provided through multiple federal programs. The establishment of this plan is required by the FTA to qualify for funding from the following programs: Section 5310 Elderly Individuals and Individuals with Disabilities, Section 5316 Jobs Access and reverse Commute and Section 5317 New Freedom. Fresno COG and FAX anticipate completion of the plan by the end of 2007.

4.4.5 Proposed Actions

Short-Range Transit Plan

Fresno Area Express

The most recent Short-Range Transit Plan (SRTP) for the Fresno-Clovis Metropolitan Area was adopted on June 30, 2005. The Plan represents a short-range evaluation of transit needs and proposes specific recommendations for implementing the long-range objectives of the RTP. The Plan guides the provision of transit services in the FCMA over a five-year period, and sets forth an action plan commensurate with reasonable needs and available funding. The SRTP and this RTP are being amended to reflect the findings and recommendations of the Long-Range Transit Master Plan that was competed February 2002.

In order to achieve the goal of maintaining financial stability, FAX must continuously seek improvements in service productivity and cost effectiveness. Since the majority of FAX's budget is spent to provide service on the street, it is critical that service be regularly monitored to ensure these resources are being utilized to the fullest extent possible. FAX has addressed system productivity by instituting an ongoing program of service evaluation to identify inefficient use of resources and respond with corrective measures.

The primary assessment of transit service is accomplished by measuring individual route performance using FAX's route evaluation process. When appropriate, corrective action is taken to modify route alignments, change the service schedule to ensure that resources are used in the most productive manner. There are many methods for evaluating the efficiency and effectiveness of public transportation

service. Because each method has unique strengths and weaknesses, FAX employs several service evaluation methods. Among the methods used are: peer review analysis, system minimum/maximum standards assessment, and passenger surveys.

Peer Review Analysis uses standard service measurement criteria to compare one agency's system performance against another. This kind of analysis is most valuable when standard, well controlled data sets are available, and when the systems being evaluated have similar operating environments.

The System Minimum/Maximum Standards Assessment uses standards that are established both through legislation and local effort. From a legislative perspective, Federal and State regulations require public transit operators to provide and maintain service in some very specific ways. The Federal Transit Administration has regulations governing the provision of "Charter Service." Also, Title VI of the Civil Rights Act of 1964 states the following:

> *"No person in the United States shall, on the grounds of race, color, or national origin be excluded from participation in, be denied the benefits of, or be subjected to discriminations under any program or activity receiving Federal financial assistance."*

As part of the Title VI regulations, FAX must provide a Title VI Evaluation Report every three years. There are two sections to this report. The first section, *General Reporting Requirements*, contains information concerning active lawsuits and complaints, a description of any pending applications for Federal financial assistance, a summary of civil rights compliance review activities, FTA civil rights assurances, and fixed-facility impact analysis. The second section, *Program Specific Requirements*, contains information regarding the Title VI internal review process for service delivery, the internal monitoring process, the service standard policies, and a description of service changes specific to the Fresno Area Express fixed-route transit system and its impacts on the minority population. The Title VI assessment is designed to ensure that FAX provides its services equally among various population groups. Specifically, census tracts designated as "Minority Census Tracts" must be evaluated and compared to Non-Minority Census Tracts to determine whether any discriminatory practices are evident.

The State Transportation Development Act (TDA) regulations require FAX to maintain a minimum 20 percent farebox recovery ratio. The TDA also places restrictions on the use of State Transit Assistance (STA) Funds. Regulations require transit agencies to keep cost increases under the State Cost of Living Index (CPI). If cost increases exceed the State CPI, transit agencies are not allowed to use STA Funds for operating expenses. Finally, local and regional concerns are used to develop minimum productivity standards. For FAX, these standards are developed through a coordinated, comprehensive, continuous process carried out by the Council of Fresno County Governments (COFCG). The COFCG's Regional Transportation Plan (RTP) and Short-Range Transit Plan for the Fresno-Clovis Urbanized Area (SRTP), set guidelines for service evaluation. Additionally, each year the COFCG prepares the Annual Transit Productivity Analysis. This document assesses all public transit operators in Fresno County, and reviews the most recent Triennial Audit recommendations.

In 1981, a Transit Corridor Analysis was completed which evaluated the efficiency and effectiveness of service on a route-by-route basis. At that time, service measures were developed to assist in evaluating individual route performance in relation to the system-wide performance. Those minimum performance measures continue to be the basis of local service evaluation. At a minimum, an individual route should exceed 60 percent of the system-wide average for a number of key passenger productivity indicators. The 60 percent figure is an overall industry standard that assumes a transit system may tolerate some low performing routes if they provide an important component of the system, and especially if the component helps meet the needs of the transit dependant riders. Cost performance measures should not exceed 140 percent of the total system average, with 140 percent representing the system maximum.

Passenger surveys allow public transit operators to include human aspects of service in the evaluation mix. Measurements of satisfaction, friendliness, and of opinions about services provided are most appropriately collected through customer surveys. Additionally, customer surveys provide an effective

way to measure customer expectations and needs, and provide valuable information for quality decision making.

FAX utilizes a variety of survey methods including inexpensive self-administered surveys that are provided in every schedule guide, and more detailed and expensive on-board interviews. These surveys are used to collect information that is required by Federal and State agencies including passenger demographics, origin/destination information, and travel habits. This data also provides FAX with insights into the concerns of our passengers. For example, it was one of these passenger surveys that allowed FAX to prioritize service improvement options and select night service in 1999.

Clovis Transit

Clovis Transit has also been affected by limited funding, which necessitated changes with an added emphasis on efficiency. Route changes will be implemented based upon demand, reducing transfers and elimination of unproductive routes or portions of routes. Increased emphasis will continue to be placed on peak-hour service.

Clovis Transit will continue to monitor existing services for productivity and internal efficiencies. Efforts to coordinate services among transit systems for maximum delivery of service throughout the region will also continue. Ongoing coordination and consolidation of all Clovis transportation service for social service agencies will continue to be the focus of Clovis' specialized services.

Long-Range Improvement Plan

Fresno, like other Central California cities, is expected to continue experiencing a high rate of growth and development over the next twenty years. This growth will bring both opportunities (new jobs, new housing and increased prosperity) and problems (increased traffic congestion, air pollution and general over-crowding).

The Fresno urban area is no stranger to some of these problems. Fresno has experienced explosive growth, especially in the northern neighborhoods abutting Herndon Avenue. On one hand, this growth has been good because it has increased the stock of affordable housing and created thousands of jobs in construction and related industries. On the other hand, the increase in automobile traffic associated with this growth is having an effect on both traffic congestion (collector streets and arterials) and air pollution.

Will things get worse? The population of the FCMA, according to the State Department of Finance, is expected to surpass 1 million within the next twenty years. According to the COG Travel Model, traffic congestion throughout the FCMA will reach a ‘significant’ level by 2010 and ‘serious’ level 2020.

Increased congestion impacts not just cars but buses as well. How? An increase in congestion increases the time it takes for a bus to make a round-trip, which, in turn, increases the number of buses, needed just to maintain the current level of service. In other words, it ends up costing more to keep doing the same thing. Even a small decrease in the average speed along a corridor can translate into the need to one or two extra buses on a route. This in turn can increase annual operating costs by several hundred thousand dollars. In the near future as much as 25% of a bus’ total round-trip time could be spent waiting at red lights or creeping along in stop and go traffic.

Public transit operators and policy makers must give serious consideration to how competitive transit can or should be with private automobiles. If FAX, or any other transit operator, is expected to play an earnest role in economic development, environmental justice or improving air quality, then it will be necessary to offer a system which is competitive with the private automobile. If so, that system will look vastly different from the system on the street today. The question then becomes, is the community ready to commit the resources needed for transit to be a viable alternative to the ubiquitous automobile?

The Fresno Area Express (FAX) Long-Range Transit Master Plan (FAX LRTP) provides a vision of what public transit might/should look like in twenty years based on adopted regional and local goals and objectives. The Plan presents an evaluation of current and future transit needs and issues, plus recommendations for creating a system to address those needs in an effective and efficient manner. The Plan has two primary components: A long term (2020) vision for public transit, and a five-year short-term plan that supports the longer term vision.

The current FAX system, as with many other areas around the county including those within Fresno County, is one that primarily addresses social service transportation needs. The typical FAX passenger tends to come from a transit dependent household and has few, if any options other than riding the bus. If public transit is going to play a role in addressing mobility and air pollution challenges, the system will need to be structured, or restructured, in a manner that can attract choice riders. It must become competitive with the automobile.

With limited resources, shifting the service objectives of the FAX system could result in the need to make some difficult trade-offs. A system that is designed to be competitive with the automobile is not always appropriate for serving social service needs. This could become an issue for current riders and social service agencies. The question is, how limited resources will be distributed between competing needs. The FAX LRTP identifies two short-term scenarios as well as long-term strategies that build upon these scenarios.

> *(1) Short-term scenario A* focuses all resources toward maximizing system-wide ridership. This scenario reduces service in areas that currently generate low ridership, while increasing the frequency of service to every 15 minutes all day in areas of high ridership. The service assumes a 25 percent increase in resources and suggests that ridership growth in the range of 35-50% is conceivable.
>
> *(2) Short-term scenario B* retains coverage to all areas now served, and even expands the coverage area to include most developed parts of the city. Relatively few improvements are made to increase productivity, although some frequencies are improved. This scenario is likely to increase the growth rate in ridership slightly, but at a rate below that of Scenario A. To date, this has been the scenario of choice for FAX and other Fresno County service providers.

For long-term growth, the service plan recommends the implementation of either of the short-term scenarios, and then to grow service only as funding resources permit. The approach presumes that the 30% growth in travel projected for the region will occur overwhelmingly in the form of single-occupant auto trips. The long-term recommendations urge Fresno to aggressively seek funding for a major expansion and “reinvention” of the rubber-tired transit system, as well as for major high capacity transit projects.

The FAX LRTP identifies four corridors that could potentially support high capacity transit to be considered in a future Federal Major Investment Study (FMIS). The corridors include Ventura/Kings Canyon, Shaw Avenue, Cedar Avenue and Blackstone Avenue. Data collected during the preparation of the FAX LRTP including residential and employment densities, current and planned land uses, and current FAX ridership travel demand analysis showed these corridors to be the most viable within the FCMA. As recommended in the Plan, the City of Fresno completed an *Alternative Mass Transportation Pre-Major Investment Study*. (PreMIS). This study was completed in two phases. Phase one of the study, “Developing a Vision for High Capacity Transit”, conducted the outreach necessary to inform the public and key stakeholders about the realistic potential for high capacity transit service within the study areas. This phase also developed a set of policy and strategy recommendations that will enhance transit supportive development. The second phase of the study focused on the choice corridor for more detailed cost, ridership and mode-split projections.

In addition to the Pre MIS, several other regional studies of concern to public transit are currently active. The California Department of Transportation is conducting the San *Joaquin Valley Growth Response Study*. The overall focus of this multi-phased study is on methods for integrating land use and

transportation planning and on the critical issues that can be addressed using the newest transportation and land use planning tools. When completed, the study will provide a set of modeling tools that can be used to evaluate long term effects of land use and transportation planning decisions.
The COG has three other studies underway: *The Public Transportation Infrastructure Study* (PTIS), The Downtown Transportation Infrastructure Study (DTIS), and the *Regional Pubic Transportation Coordination/Consolidation Study*. These studies are aimed at countywide public transportation systems and the downtown business area. The purpose of the PTIS is to evaluate mobility needs and opportunities, and identify strategies for public transportation and transportation infrastructure development that will result in wider acceptance and use of public transportation as a mobility option. In concept, the study will evaluate existing and planned land uses; map residential and employment densities; identify primary travel corridors; and determine the feasibility of various mass transit options. Additionally, the study will develop a set of strategies for increased transit effectiveness. The study will evaluate route alignments and provide estimates for capital and operational costs as well as ridership projections. The results and recommendations of the study can then be used by policy makers to determine how best to pursue a public mass transportation system for Fresno County.

The Public Transportation Coordination/Consolidation Study will evaluate potential transit coordination opportunities through the creation of a countywide agency such as a JPA, or transit district. As discussed earlier, the Fresno City Council and the County Board of Supervisors as well as the Fresno County Grand Jury expressed interest in forming a regional transit agency. The COG has also received similar requests through the annual Unmet Transit Needs Process. The study will include parts of neighboring counties as well as an evaluation of the feasibility of providing public school transportation as part of a regional transit agency.

The Downtown Transportation Infrastructure Study is to define and evaluate transportation alternatives that will make the study area more accessible and attractive to visitors and downtown residents, with an emphasis on providing mobility appropriate for a major city. Transportation modes will be evaluated as they relate to parking, transit facilities, streetscape design and street network community.

Discussion

Coordination of Fares and Schedules

Management and staff from FAX, Clovis Transit, Fresno County Rural Transit Agency, and Fresno County Economic Opportunities Commission meet regularly to discuss ongoing planning projects and reports, service issues, and connectivity among systems. Coordination of fares and schedules is an ongoing topic at these meetings. FAX now includes Clovis Roundup schedules with the FAX Schedule Guide, and in October 2004, Clovis Roundup and FAX initiated the Metro Pass, a new regional pass that is accepted on both systems. Information for both systems is available by phone at 559-621-RIDE.

In addition, a regional farebox system that could facilitate a regional pass program was included as part of the COG's "One Voice" program. FAX is the lead agency in the procurement of a new Automated Fare Collection System that will accomplish many of the benefits of forming a regional transit agency without the necessity of forming a new regional political structure.

Transit Interface

COG continues to publish the *Fresno County Transportation Guide*. The Guide is a bilingual (English/Spanish), user friendly booklet which describes in detail the availability of mass transportation services throughout the county. The Guide includes information on regional, inter-city, and local transportation providers; information on transportation services to many popular destinations; and clear direction on how to plan trips and make connections within and between systems and modes. The document includes several colored maps. The COG continues to revise the document each time it is published.

Public/Private Sector Coordination

FAX continues to contract with the private sector for many services which can be provided more reliably and economically. The maintenance department contracts to private firms for a variety of services including major overhauls and vehicle painting. FAX also contracts with private firms for special studies, surveys, marketing projects, technical training and administrative equipment servicing. Planning and related services are now contracted with the Council of Fresno County Governments. Many administrative support services such as legal, personnel, communications, finance, data processing and purchasing are performed by other city departments. Municipal code and labor contracts preclude some outside service contracting.

Inter-city Rail

Amtrak currently provides inter-city passenger rail service for six round trips daily. Freight is carried along both the Burlington Northern Santa Fe and the Union Pacific railroads.

Passenger Rail Project Priorities:

Passenger rail priorities currently facing Fresno include:

- Preservation of abandoned railroad right-of-way and trackage
- The California High Speed Rail Project
- Assessment of future light rail potential

A more detailed discussion of rail issues can be found elsewhere in this document (Section 4.8) under the heading *Rail*.

4.4.6 Unfunded Needs

Maintaining Service Consistent with Growth

Consistent with the rapid rate of growth occurring in the Fresno-Clovis Metropolitan Area is the demand for additional public transportation service. Due to funding constraints, FAX service has been unable to keep up with the growth in population and service area over the last decade. This is illustrated in some detail on Exhibit 4-17. During the period between 1986 and 2006, the population in the City of Fresno grew by 58.6 percent. The geographic area within the city's boundaries grew by 15 percent during that same period. During this period, FAX service miles increased by 29 percent, primarily due to the addition of night service in September 1999, and total passengers increased by 49.2 percent.

Funding limitations have restricted the ability of FAX to provide many important services. Among those necessary services, the Short-range Transit Plan for the Fresno-Clovis Metropolitan Area identifies the need for third shift service on weekdays, second and third shift service on weekends, and service to currently unserved areas of the FCMA. These services are vital to transit dependant populations seeking jobs, education, recreation and other essential services.

Transit ridership consists largely of disadvantaged populations including seniors, disabled, youth, and minority groups. These groups also comprise the residents of our cities who suffer the highest unemployment rate. In many cases, the lack of necessary transportation is the primary barrier between finding and keeping jobs.

Given the desire on the part of many policy makers and residents for pubic transit to play a meaningful roll in improving air quality, promote mobility among transit dependant populations, and support economic

development in our community, the need to secure a dedicated and increasing source of funding becomes imperative.

Americans with Disabilities Act (ADA) Compliance

Fresno Area Express is continuing to refine Handy Ride service in order to maintain compliance with both the letter and the spirit of the ADA. Service hours and service miles increased in fiscal years 2003 through 2005, but were relatively flat for fiscal 2006 with a slight decrease of 1.1 percent. FAX has increased the Handy Ride service area to include newly developed areas not currently served by fixed-route service.

The demand for paratransit service requires constant service evaluation, and FAX is working closely with the FAX ADA Advisory Committee to improve on the provision of paratransit service.

Exhibit 4-16
Fresno Area Express Performance History

Year	Total Passengers	% Change	Total Service Miles	% Change	Square Miles	% Change	City Population	% Change
1986*	7,912,631		3,275,000	3.0%	94.60	1.0%	297,230	3.7%
1987	7,419,684	-6.6%	2,981,923	-9.8%	97.57	3.0%	310,224	4.2%
1988	8,218,737	9.7%	2,979,980	-0.1%	99.16	1.6%	322,299	3.7%
1989*	8,585,876	4.3%	2,996,568	0.6%	99.38	0.2%	335,205	3.9%
1990	8,981,596	4.4%	2,994,049	-0.1%	99.38	0.0%	350,700	4.4%
1991*	9,067,499	0.9%	2,983,202	-0.4%	99.38	0.0%	366,200	4.2%
1992	8,477,432	-7.0%	3,051,916	2.3%	99.42	0.0%	379,900	3.6%
1993	8,283,499	-2.3%	3,025,476	-0.9%	100.53	1.1%	389,200	2.4%
1994	7,950,970	-4.2%	3,017,917	-0.3%	101.01	0.5%	395,700	1.6%
1995	8,552,797	7.0%	3,053,058	1.2%	101.03	0.0%	401,400	1.4%
1996	9,225,096	7.3%	3,048,962	-0.1%	102.11	1.1%	406,400	1.2%
1997	9,545,574	3.4%	3,050,894	0.1%	102.11	0.0%	410,900	1.1%
1998	10,399,087	8.2%	3,061,294	0.3%	102.44	0.3%	414,700	0.9%
1999**	11,021,716	5.6%	3,281,329	6.7%	102.89	0.4%	419,800	1.2%
2000	12,419,412	11.3%	3,966,338	17.3%	104.56	1.6%	426,900	1.7%
2001*	13,178,495	5.8%	4,277,175	7.3%	104.85	0.3%	434,948	1.9%
2002	11,905,195	-10.7%	4,289,968	0.3%	105.10	0.2%	442,279	1.7%
2003	11,213,049	-6.2%	4,026,408	2.6%	106.04	0.9%	448,453	1.4%
2004*	10,854,859	-3.2%	3,957,463	-1.7%	106.70	0.6%	458,170	2.2%
2005	11,241,838	3.6%	4,101,325	3.6%	107.35	0.6%	464,784	1.4%
2006	11,808,724	5.0%	4,229,020	3.1%	108.82	1.4%	471,479	1.44%
Total % Change		**49.2%**		**29.1%**		**15.0%**		**58.6%**

Notes:
Sunday bus service reinstated in 1985
Base cash fare increased to $0.50 per trip in 1986
Base cash fare increased to $0.60 per trip in 1989
Base cash fare increased to $0.75 per trip in 1991
FAX began operating night service until 10 PM on weekdays (September 1999)
Base cash fare increased to $1.00 per trip in 2001

Air Quality and Transit

As a non-attainment area for air quality standards, ways to increase transit's market share will continue to be a major focus of transit planning. However, transit's inability to expand service into new areas, provide service during non-traditional work hours, and improve on the frequency and convenience of service, prevents transit from increasing market share. This makes transit's real impact on congestion and vehicle miles traveled (VMT) nominal.

Stable Funding Source

Measure "C" has provided local jurisdictions with additional local funds to be used for local transportation purposes. However, in the past those funds have not been dedicated to transit and are also balanced against the local street needs of the various jurisdictions. This is evidenced by the fact that FAX did not receive any Measure "C" funding in its operating budgets for fiscal years 1998, 2000, and 2001.

With the passage of the reauthorization of Measure "C" in November 2005, funds generated by the ½ cent sales tax will be dedicated for transportation and transit purposes. This funding is currently estimated to be $235 million dollars over the next 20 years.

4.5 Fresno County Rural Area Public Transportation & Social Service Transportation

4.5.1 Existing Systems

The Fresno County Rural Area is served by a combination of providers: common carrier; general public and social service agencies.

Rural Inter-City Ground Transportation

The rural transportation network utilizes the limited services provided by regional common carriers. They include Greyhound, Orange Belt Stage Lines, and Transportes Intercalifornias. Their services generally utilize portions of state highways and provide very limited services to a few of the County's incorporated cities. Their routes are shown on Exhibit 4-17.

Rural General Public Transportation

The primary provider of rural general public transportation is the Fresno County Rural Transit Agency (FCRTA). The Joint Powers Agency was formed in 1979 to address transit needs of the rural incorporated cities including: Coalinga; Firebaugh; Fowler; Huron; Kerman; Kingsburg; Mendota; Orange Cove; Parlier; Reedley; Sanger; San Joaquin; Selma; and Fresno County. The FCRTA provides fixed-route services which link communities with each other and with the Fresno-Clovis Metropolitan Area. Intra-community public transportation service (fixed route and/or demand-response) is provided through public, private or non-profit entities. The services specifically address the needs of elderly, disabled, and general public patrons. All vehicles continue to be accessible to frail elderly and disabled passengers in compliance with the Americans with Disabilities Act. Rural public transportation services are provided along four basic corridors to the FCMA as follows:

- Coalinga – Huron – Five Points – Lanare – Riverdale – Caruthers – Raisin City – Easton Corridor
- Firebaugh – Mendota – Kerman Corridor
- Kingsburg – Selma – Fowler Corridor
- Orange Cove – Reedley – Parlier – Sanger Corridor

An additional inter-city corridor also provide linkages between rural incorporated cities:

- Huron – Interchange Developments at State Highway I-5 and 198, Harris Ranch, West Hills College, Coalinga.

Exhibit 4-21 enumerated a summary of the FCRTA's services in the rural system.

Rural Social Service Transportation

The COG has co-designated the FCRTA and the Fresno County Economic Opportunities Commission (FCEOC) as the Rural Consolidated Transportation Service Agency. The Rural CTSA celebrated its 25th anniversary in 2007. FCEOC is the lead agency responsible for overall program administration including liaison with social service agencies, data collection, development and implementation of the Rural CTSA Operations Program and Budget (OPB), execution of service contracts, and related administrative tasks. FCRTA administers Transportation Development Act (TDA) Local Transportation Fund, provides technical assistance, and evaluates the performance of the FCEOC.

The Social Transportation Improvement Act of 1979 encourages the coordination and consolidation of social service transportation. It enables up to five percent of the County's LTF monies to be set aside to enhance social service transportation. The Rural CTSA receives a share of these funds on a population basis ratio basis between the Urban and Clovis CTSAs. The operating costs of CTSA services are funded with TDA / LTF Article 4.5 revenues, contract service revenues, and farebox revenues. TDA funding must be matched with contract revenues and farebox revenues on a forty-five percent, forty-five percent, ten percent (45% / 45% / 10%) basis.

The Rural CTSA process primarily involves four types of coordinated transportation services. These services are provided through: 1) Vehicle Timesharing; 2) Ridesharing; 3) Consolidation; and 4) Maintenance.

The Rural CTSA currently provides services to the following four social service agencies: 1) Central Valley Regional Center (CVRC); 2) Fresno County Economic Opportunities Commission; 3) Fresno County Office of Education; and 4) Special Trips.

The Rural CTSA also provides drivers for fifteen rural public transit subsystems under contract with the FCRTA.

Annually the Rural CTSA prepares a comprehensive *"Operations Program and Budget"* that reflects their specific work program for the coming fiscal year. The 2006-07 edition of the OPB was adopted by the respective agencies policy boards and the COG Policy Board in June 2006.

4.5.2 Accomplishments

In October 1991, at the National Rural Public Transit Conference in Asheville, North Carolina, the FCRTA was singled out from among 650 other rural transit operators by Mr. Brian Clymer, Administrator of the Federal Transit Administration (formerly the Urban Mass Transportation Administration). He presented his Outstanding Public Service Award *"in recognition of FCRTA's outstanding efforts in coordination of rural public transit service and efficient and effective service delivery*".

The Council of Fresno County Governments' 1997 Transportation Achievement Award for a Rural Program was presented to the Fresno County Rural Transit Agency in recognition of *"their outstanding contributions in enhancing transportation services in Fresno County"*. A plaque was presented on March 20, 1997 as part of their Annual Transportation Forum at the Centre Plaza Holiday Inn in Fresno.

United States Congressman George Radanovich also recognized the tribute by stating: *"This award signifies the great honor and respect with which the FCRTA is held by the community. I applaud your*

dedication to the enhancement of the rural areas. I am confident that whichever new endeavors you seek will provide an even greater source of inspiration for the citizens of the Central Valley. Congratulations again and thank you for your outstanding accomplishments. I send to you my best wishes for every continued success."

California Senator Jim Costa also issued a *"Certificate of Recognition in Honor of the Award for Years of Outstanding Dedication and Community Service".*

During the previous few years FCRTA has made a number of modifications to its services and operations. Specific changes are documented in the "*Short-Range Transit Plan for the Rural Fresno County Area, 2007-2012".*

The Rural CTSA continues to modify its service arrangements to be responsive to the intent of California legislation, realizing a number of operational objectives in recent years. They include:

Centralized Administration

Centralized administration of the Rural CTSA has resulted in an ability to join with other agencies to provide a broader-based and a more comprehensive view of service needs and objectives, resulting in a more effective utilization of available funds. The Rural CTSA continues to serve as a technical advisor and clearinghouse for small community-based organizations and other governmental member agencies. Staff time devoted to administration has been reduced and other cost savings have been affected as a result of increased technical expertise utilized in service planning and delivery.

Consolidation of Funding

The Rural CTSA maximizes available services by aggregating various operating revenues from social service agencies. Since August 1987, the Rural CTSA has been collecting donations from participating seniors. This additional revenue helps achieve the farebox and program matching fund requirements.

The CTSA must rely on all available funding sources to replace existing vehicles which exceed budgeted maintenance costs due to age and high mileage.

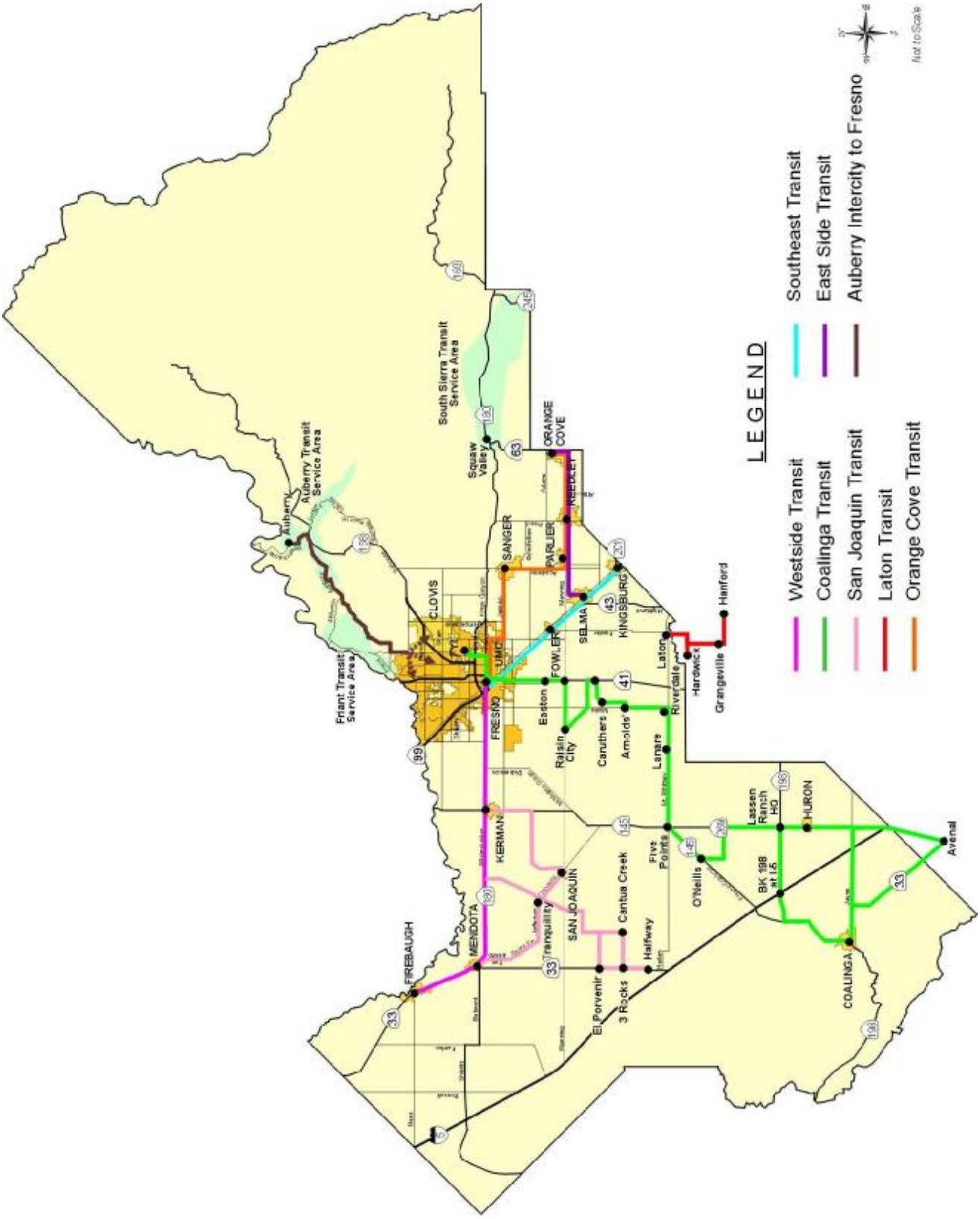
Centralized Dispatch and Route Consolidation

The Rural CTSA continues to primarily utilize its centralized dispatching system for transportation routes. FCEOC's centralized Food Preparation Center continues to have a measurable positive effect on the routing system of the meal congregate site delivery program and related operations.

The Rural CTSA has made great efforts to reduce the costs of transportation services by consolidating whenever and wherever feasible. In July 1988, the Senior Services Nutrition Program adopted a volunteer program for the Rural Homebound meal deliveries. Approximately 100% of the deliveries are performed by volunteers. In March 1994, homebound meal deliveries transitioned from one hot meal each day to frozen meals sufficient for one week. This not only reduced total trips dramatically but lowered operating costs as well, allowing further expansion of services while maintaining the integrity of the program.

Further, this consolidation of routes and services has enabled the Rural CTSA to reduce overall operating expenses to the program. For example, costs associated with fuel consumption and vehicle maintenance have decreased as a result of eliminating routes. It should be noted that these reductions in overall operations do measurably affect service levels.

Exhibit 4-17
Fresno County Rural Transit Services



FCRTA Service Summary
Exhibit 4-18

FCRTA Subsystem	Days and Times of Operation	Type of Service	Frequency of Inter-City Trips	Also Serves
Auberry Transit				
Inter-Community Service	M-F; 8:00am-3:00pm	Demand-Responsive	--	Adler Springs Auberry New Auberry,
Inter-City Service	Tu; 8:00am-5:00pm	24 Hour Prior Reservation-Demand Responsive	One R.T. Tu	Big Sandy Indian Rancheria, Burrough Valley, Cold Springs Indian Rancheria, Friant, Jose Basin, Marshall Station, Meadow Lakes, Mile High, Prather, Sycamore, Tollhouse, Fresno-Clovis Metropolitan Area
Biola Transit	Tu, 8:00am-5:00pm	24 Hour Prior Reservation-Demand Responsive	Tu	Fresno-Clovis, Kerman
Coalinga Transit				
Intra-City Service General Public Disabled	M-F; 8:00am-5:00pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled	M-Sa; 8:00am-6:15pm	Fixed-Route with Route Deviation	One R.T. M-Sa	Huron, Five Points, Lanare, Riverdale, Caruthers, Raisin City, Easton Fresno
Del Rey Transit				
Intra-City Service and Inter-Community Service	M-F; 8:00am-5:00pm	Demand-Responsive	Demand-Responsive	Del Rey Sanger
Firebaugh Transit				Sphere of Influence Fresno
Intra-City Service	M-F; 7:00am-5:30pm	Demand-Responsive	--	Firebaugh, Mendota, Kerman
Inter-City Service General Public Westside Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. M-F	San Joaquin Cantua Creek El Porvenir Half Way Tranquility Three Rocks
Fowler Transit				
Intra-City Service	M-F; 7:00am-5:30pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled Southeast Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Three R.T. M-F	Fresno, Fowler, Selma, Kingsburg
Huron Transit				
Intra-City Service	M-F; 6:00am-6:00pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled Coalinga Transit Inter-Community Service General Public/Disabled Huron Transit	M-F; 8:00am-6:15pm	Fixed-Route with Route Deviation	One R.T. M-F	Coalinga, Huron, Riverdale, Lanare, Caruthers, Easton, Fresno
	M-F; 9:00am-3:00pm	Fixed-Route with Route Deviation	Two R.T. M-F	Coalinga, West Hills College, I-5/198 Interchange, Harris Ranch, Huron

Exhibit 4-18
FCRTA Service Summary (Continued)

FCRTA Subsystem	Days and Times of Operation	Type of Service	Frequency of Inter-City Trips	Also Serves
Juvenile Justice Campus Transit	W-F; 3:00pm-9:15pm; Sa ; 9:00am-4:45pm	Fixed Route		Fresno, JJ Campus
Kerman Transit				
Intra-City Service	M-F; 7:00am-4:00pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled Westside Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. M-F	Firebaugh, Mendota, Kerman San Joaquin Cantua Creek El Porvenir Half Way Tranquility Three Rocks Fresno
Kingsburg Transit				
Intra-City Service	M-F; 7:00am-5:30pm Sa; 8:00am-5:00pm	Demand-Responsive	--	Sphere of Influence
Southeast Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Three R.T. M-F	Kingsburg, Selma, Fowler, Fresno
Laton Transit (KART)				
Inter-City Service General Public Kings Rural Area Transit (Kings County)	Scheduled M-F	Fixed-Route	One R.T. M-F	Grangeville (K.C.), Hanford (K.C), Hardwick (K.C.)
Fresno	Scheduled M, W, F	Fixed_Route	One R.T. M, W, F	Hanford (K.C.), Selma, Fresno-Clovis
Mendota Transit				
Intra-City Service	M-F; 7:00am-5:30pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled Westside Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Three R.T. M-F	Firebaugh, Mendota, Kerman, San Joaquin Cantua Creek El Porvenir Half Way Tranquility Three Rocks Fresno
Orange Cove Transit				
Intra-City Service	M-F; 7:00am-5:30pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service General Public/Disabled	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. M-F	Orange Cove, Reedley, Parlier, Sanger, Fresno
Parlier Transit				
Intra-City Service	M-F; 7:30am-4:30pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service Orange Cove Transit	Scheduled	Fixed-Route with Route Deviation	Two R.T. M-F	Orange Cove, Parlier, Reedley, Sanger, Fresno

Exhibit 4-18
FCRTA Service Summary (Continued)

FCRTA Subsystem	Days and Times of Operation	Type of Service	Frequency of Inter-City Trips	Also Serves
Reedley Transit Intra-City Service Inter-City Service General Public/Disabled Orange Cove Transit	M-Sa; 7:00am-5:30pm M-F; 7:00am-5:30pm	Demand-Responsive Fixed-Route with Route Deviation	-- **Two R.T. Wkdays**	Sphere of Influence Orange Cove, Reedley, Parlier, Sanger, Fresno
Sanger Transit Intra-City Service Inter-City Service General Public/Disabled Orange Cove Transit	M-Sa; 7:00am-5:30pm M-F; 7:00am-5:30pm	Fixed-Route and Demand Responsive Fixed-Route with Route Deviation	-- Two R.T. Wkdays	Sphere of Influence Orange Cove, Reedley, Parlier, Sanger, Fresno
San Joaquin Transit Intra-City Service and Inter-Community Service Westside Transit	M-F; 8:00am-5:00pm M-Sa; 7:00am-5:30pm	Demand-Responsive Fixed-Route with Route Deviation	One R.T. Two R.T. M-F	Sphere of Influence San Joaquin, Cantua Creek, El Porvenir, Half Way, Tranquility, Three Rocks, Kerman, Mendota, Firebaugh Kerman, Fresno
Selma Transit Intra-City Service Southeast Transit	M-F; 7:00am-5:30pm Sa; 8:00am-5:00pm M-F; 7:00am-5:30pm	Demand-Responsive Fixed Route Fixed-Route with Route Deviation	-- Three R.T. Wkdays	Sphere of Influence Kingsburg, Selma, Fowler, Fresno
Southeast Transit Inter-City Service	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	**Three R.T. Wkdays**	Kingsburg, Selma, Fowler, Fresno
South Sierra Transit Inter-Community Service	Requests Received M-F 8:00am-5:00pm; Service available as requested and coordinated	Demand-Responsive Volunteer Driver Mileage Reimbursement Program	As requested and coordinated	Pinehurst, Miramonte, Dunlap, Squaw Valley, Reedley, Fresno
Westside Transit Inter-City Service General Public/Disabled	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. M-F	Firebaugh, Mendota, Kerman, San Joaquin Cantua Creek El Porvenir Half Way Tranquility Three Rocks Fresno

Centralized Maintenance

One of the major goals of the Rural CTSA was to establish a preventive maintenance program that provides on-site maintenance of all Rural CTSA-associated program vehicles. To accomplish this goal, all preventive maintenance work is performed at the CTSA maintenance service facility. All repairs are performed according to existing preventive maintenance schedules approved by the California Highway Patrol (CHP) for all motor carriers.

A centralized maintenance facility has been operating since 1987. The facility has three service bays and the necessary equipment to conduct most repairs. The maintenance facility has five full-time staff comprised of one lead mechanic, three mechanics and one parts puller. In 2006 the FCEOC completed construction of a new larger maintenance building. In 2007, FCEOC will be remodeling the previous facility to become an expanded administrative / driver training center to meet the growing needs of the Urban and Rural CTSA.

In the future the FCEOC as the Urban and Rural CTSA needs to expand its administrative - operational office and maintenance facilities to meet the increasing demands of its ever increasing operations and fleet of over 150 vehicles.

Drivers Training and Safety

The CTSA, as mandated by funding sources and its insurance carriers, has developed a comprehensive program for training and orientation of all CTSA and FCRTA drivers.

On-going training programs are periodically scheduled on a quarterly basis to orient new drivers and satisfy in-service training requirements for the drivers. Cardiopulmonary Resuscitation (CPR) and First Aid Certificates are held by on-line supervisors, both of which represent skills sometimes called upon by the nature of the client group. Training is conducted by certified driver instructors, the California Highway Patrol (CHP), American Red Cross and insurance carrier representatives.

FCRTA acquired a video camera and a television/recorder to assist in presenting instructional materials to drivers and other support personnel. An extensive video library is being coordinated with the State and National Transit Associations and our insurance companies to ensure a comprehensive and progressive training program for all participating CTSA agencies.

The Rural CTSA continues to be enrolled in the California Department of Motor Vehicles (DMV) Pull Notice Program. This program allows the employer to request and receive updated driver information on employees DMV records automatically. This enables the Rural CTSA to readily identify a driver who is accumulating a negligent operator's record and whose license has been suspended or revoked.

These training and risk management efforts have contributed to a significant reduction in insurance premiums. The Rural CTSA's insurance carrier has not suggested any changes for the driver selection / training and vehicle maintenance programs during the past few years.

Combined Purchasing

Combined purchasing at the maintenance facility plays an integral role in the effort to maximize potential savings of combined purchasing which will lower the cost of providing transportation to the Rural CTSA's clients and participating agencies.

The maintenance component continues to purchase stock inventory that allows the facility to perform most repairs to the Rural CTSA's vehicles. This inventory of stock reduces required services by vendors, eliminates manpower involved in delivering vehicles for these minor repairs, and lowers mileage and cost per vehicle. Thus, lowering vehicle cost and reducing air pollution.

4.5.3 Needs Assessment

The assessment of needs in the rural area is a function of the COG's annual *"unmet transit needs"* process. The process itself was previously discussed in the Urban Section. Several surveys and demonstration programs have been conducted in recent years in response to particular rural unmet transit need requests:

- *Periodic ridership surveys* of each FCRTA subsystem continue to provide a profile of ridership characteristics and boarding and deboarding statistics and are conducted biennially.

- *Non-rider survey*: In response to a recommendation contained in a previous Triennial Performance Audit, COG and FCRTA staff have developed a survey form that was distributed randomly to 5,000 residents within FCRTA's Service Area.

  The bilingual (English and Spanish) multi-colored form was intended to introduce FCRTA's available services to those who may not be aware of their option to utilize public transit within rural cities and to the Fresno-Clovis Metropolitan Area. A tear-out map with phone numbers was provided for continued future reference purposes. As an incentive to utilize our services, we also provided a free round trip coupon that may have been utilized on any of our in-city services.

  Seven brief questions were asked to assist us in determining how we might better serve potential new riders. The form separated for return mailing purposes. Postage was pre-paid to facilitate a convenient response.

  Staff tabulated the results. A summary report entitled *"Rural Public Transportation Service Marketing: Non-Transit User Survey for the Fresno County Rural Transit Agency"* was made available for review purposes. Observations and recommendations were offered for staff and Board consideration and acceptance. The results were included in the *"Short-Range Transit Plan for the Rural Fresno County Area"*.

- *Needs Assessment Surveys:* The FCRTA has conducted many needs assessment surveys. Several have resulted in the implementation of demonstration services. The services are carefully monitored to ensure anticipated ridership expectations are realized, and minimum performance characteristic measures are maintained.

- *Big Sandy Indian Rancheria:* FCRTA Staff prepared an Unmet Transit Needs Survey for distribution to 330 tribal members "on" and "off" the reservation. Twenty-eight (28) surveys were returned. Limited-infrequent needs were expressed. The introduction to the Survey Form explain the three (3) existing services that were available to all mountain area residents, including Auberry Transit Intra-Community and Inter-City service to Fresno. That same information continues to be advertised weekly in the "Mountain Press" newspaper with expressed reference to the Big Sandy Rancheria, the Cold Springs Rancheria, and the Table Mountain Rancheria in Friant. When staff completed its survey analysis and report with finding and recommendations for the tribal leaders, several formal presentation opportunities were scheduled and then cancelled. Later, staff was informed that the entire leadership had been changed and that the new leadership was no longer interested in efforts initiated by the previous group. Staff forwarded multiple copies of the report and supportive documents through Rancheria representatives and Caltrans liaison staff. No other communications have subsequently transpired.

The annual unmet needs process and transit system performance evaluations shall ensure continued modifications, improvements, and expansion of rural transit service during the next twenty-five year RTP planning period.

In response to SAFETEA-LU legislation, the Fresno COG is in the process of developing an Inventory and Action Plan to address new requirements for the Job Access – Reverse Commute and New Freedoms Grant programs.

4.5.4 Proposed Actions

Short-Range Improvement Plan

The 2007-2012 Rural Short Range Transit Plan (Rural SRTP) will be adopted by the COG Policy Board in June, 2007. The following points outline the purposes of the Rural SRTP: 1) to provide a five-year, action-oriented program to implement the public transportation as defined in the RTP; 2) to provide a basis for local governments to demonstrate that public transportation needs within their jurisdictions have been reasonably met; 3) to serve as the planning basis for federal and state assistance to rural public transportation operations in Fresno County, and; 4) to provide a valuable source of information for citizens and local-elected officials.

Plans for the succeeding five years call for a continuation of public transportation services within and between incorporated cities, reflective of warranted service levels. Expansion may include increased service hours, and weekend services. Requests for expansion to new areas should attempt to be accommodated within existing available operations. Special attention must be exercised to ensure that existing transit services are not diluted or jeopardized as service expansion requests to new areas are received.

Those subsystems exhibiting the weakest performance will continue to be monitored for possible adjustments in service. The adjustments may take the form of service revisions, consolidation through new institutional arrangements or termination of service.

With the deregulation of common carrier service, some rural communities within Fresno County have lacked adequate inter-city bus service. The FCRTA acquired seven large capacity, alternatively fueled vehicles to address these obvious needs. Service improvements were introduced on the County's four primary inter-city routes in 1998 to ensure adequate service to meet public needs.

FCRTA will continue to seek improved operational and administrative efficiencies through coordination with the Rural Consolidated Transportation Services Agency.

The Fresno COG will be completing the first phase of a "Fresno Regional Transit Agency" evaluation study prepared by Nelson/Nygaard Consulting Associates in June 2007. The results will need policy board consideration. Following the successful passage of the local sales tax initiative, Measure C included funding for further study and implementation of a centralized transit entity.

The Rural CTSA has a similar document that guides its responsibilities. The *CTSA's "Operations Program and Budget"* is similar to a *"SRTP"*. It identifies the responsibilities of the CTSA, the legislative intent of the program, and the systematic basis for addressing the relevant issues in the coming fiscal year. It reflects the negotiated services among participating social service agencies.

The Rural CTSA will seek to augment or contract its services with those rural transit subsystems catering primarily to social service clients and expand service in unserved rural areas where warranted.

COG will continue to monitor and consider elderly and disabled needs in the planning process. Annually, the *"unmet transit needs"* process evaluates the needs of all segments of the community. The CTSAs annually review the needs of their clients, and the elderly and disabled community play an important role in that evaluation. Social service agencies must also recognize their responsibility under statute and continue to fund services for their clients.

Long-Range Improvement Plan

The rural area's long-range improvement plans reflect the recommendations of the RTP. For the most part, the plan improvements are very conservative. When justified by need, and sustainable by performance criteria, additional vehicles and/or service hours will be added. Population growth and development of residential, commercial, and industrial uses in rural areas may also prompt additional services.

FCRTA members have expressed a desire to program a couple of inter-community / regional demonstration programs to promote economic and community development.

Overall FCRTA member agencies envision short-term, subsidized transit operations that could prove self-supporting and assumable by the private sector. As plans are implemented, FCRTA is prepared to coordinate its services in whatever manner is necessary to further enhance their success.

Several other specific projects have also been suggested. FCRTA's plans could include subsidizing a service for up to a six-month period in which ridership would be attracted to make the service totally self-supporting by participants. Some of the programs would invite contracting with a vanpool vehicle provider. Possible examples include:

> Offering services to employees living in and around a city and working at a nearby correctional / mental health facilities. The program would involve multiple vehicles to respond to the twenty-four hour operation of the facility.
>
> Similar arrangements could be expanded to include workers or trainees who may be employed at a common business.
>
> Farm worker transportation services from cities to field operations and processing plants. Services could include: 1) vanpools, 2) demand responsive services; and 3) fixed route services.

The most significant determinant impacting future rural transportation services appears to be related to air quality compliance issues. The COG has developed and adopted Transportation Control Measures to address harmful emissions from conventional petroleum based vehicles. Single occupancy vehicles have been targeted, especially for commuter *"home"* to *"work"* trips. Alternatives including pedestrian and non-motorized transportation, carpooling, vanpooling, and public transportation are strongly encouraged.

To date, FCRTA's operations have primarily been responsive to the *"transit dependent"* population. It is estimated that less than one percent of FCRTA's regular riders are considered "choice" riders (individuals who choose *not* to use their personal transportation in completing a particular trip). It is further estimated that less than five percent of FCRTA's current regular riders use the services for employment purposes. The ridership growth potential of both *"choice"* and *"commuter"* patrons is certainly significant. In both cases, fares should be sufficient to ensure self supporting services. FCRTA intends to target its marketing program efforts to attract and service these riders. Multiple round trips per weekday over an extended ten and a half hour daily operating period would address both commuter and transit dependent patron needs between rural and metropolitan areas.

A number of significant activities are contemplated over the next twenty-five years of the RTP that may necessitate the consideration of additional transit services. In general, rural services could double in an attempt to keep pace with increased population trends, and in an effort to reduce vehicle miles traveled for air quality considerations.

In Western Fresno County several institutional facilities may impact travel patterns of support personnel and users including: Pleasant Valley Prison; Claremont Custody Center; Coalinga's Mental Health Facility; West Hills College – Coalinga Campus, Firebaugh Campus, Lemoore Campus, Lemoore Naval Air Station Campus; Mendota's Prison; Mendota Regional Job Initiative Center; community medical facilities; Fresno County One-Stop Centers; connectivity to Kings County – Lemoore, Hanford and

connectivity to Kings Area Rural Transit and Amtrak, and connectivity from Hanford through Selma to the FCMA and to Children's Hospital of Central California in Madera County; Madera County – Madera and the State Center College Center Campus; Merced County – Dos Palos and connectivity to Merced Transit; unincorporated communities service for Biola, Caruthers, Easton, Five Points, Lanare, Raisin City, and Riverdale.

In Eastern Fresno County they to have many facilities that may further impact travel patterns of support personnel and users including: Indian Rancherias – Big Sandy, Cold Springs, and Table Mountain and their respective Casinos; Reedley College; Orange Cove's Prison; Reedley Regional Job Initiative Center; community medical facilities; Fresno County One-Stop Centers; Fresno County's Juvenile Justice Campus and Court Complex; connectivity to Tulare County – Cutler, Orosi, Dinuba, Tulare, Visalia and the College of the Sequoias; unincorporated communities service for Dunlap, Miramonte, Pinehurst, Squaw Valley, and the Millerton - Brighten Crest New Town development.

In Central Fresno County to institutional facilities, including medical, education, shopping, and recreational. There may be consideration for a "cross town medial express service" to permit faster access to medial appointments by rural area passengers arriving on FCRTA's inter-city services to the FCMA. Other express connectivity may include: Amtrak; Fresno Yosemite International Airport, the future High Speed Rail and Light Rail stations.

In the mean time, roving vehicles may be considered. Such a program could address the service needs of remote Fresno County rural area residents and the intermittent special service to: senior programs; health fairs; County Fairs; Fresno Convention Center; Save Mart Center; Bulldog Stadium; Grizzlies Stadium; Fresno Zoo and Storyland; Discovery Center; and Tower Theater.
Promote ridesharing, carpooling, vanpools. Reverse commutes trips for employment purposes from the FCMA to the rural areas may best be addressed by these alternative user participant programs.

Farm labor transportation efforts could be expanded from the current vanpooling efforts that are being coordinated by the Kings County Area Public Transit Agency for Fresno, Kern, Kings, and Tulare Counties. The Agricultural Industries Transportation Services (AITS) study is currently a self sustaining program. Additional inter-community rural transit services could be developed to augment current general public transit services.

From an air quality perspective the FCRTA has been a leader in alternative fuels consideration. Since 1992, the FCRTA has been operating propane powered vehicles. In 1997 they introduced vehicles operating on compressed natural gas, and electric battery. Other alternative fuels may yet be evaluated including: hybrid, fuel cell and solar-electric. The issue of an adequate infrastructure continues to be an important factor in supporting these decisions. Currently, CNG fast-fill stations are located in Downtown Fresno, Clovis, Sanger, Reedley, and at Harris Ranch. Additional facilities are currently under construction at Fresno Area Express, Southwest Transportation at Elkhorn and State Highway 41, and Fresno State. Additional facilities need to be located geographically to support projected vehicle purchases. Specifically a station should be considered near Kerman for the Westside, and Selma for the Southeast side of Fresno County.

Alternative service consideration will be evaluated over the next twenty-five years of the planning period. Personal transportation devices may include: small electric cars; electric scooters; electric bikes; or standing electric mobility units (such as a Segways). Storage, recharge, and transferability issues will have to also be addressed.

Operations

The rural operations of the FCRTA and the Rural CTSA are functioning very well. Both agencies are subjected to the Annual Performance Evaluation process and the independent Triennial Performance Audit, every three years.

Coordination of Fares and Schedules

The FCRTA and Rural CTSA staff are participating on a quarterly basis with other transportation providers in Fresno County to further enhance coordination and communication of our individual operations, promoting seamless services for the general public.

FCRTA now interfaces with Greyhound in the Metropolitan Area. An enhanced transfer arrangement, is being sought by FCRTA for interfacing with Fresno Area Express-Handy Ride, Clovis Stageline, and the Clovis CTSA's Round-Up Service.

Transit Interface

In the Spring of 2007 the COG published the fifth edition of the *"Fresno County Transportation Guide"*. The guide will continue to be distributed through the rural area of Fresno County. It describes the multi-modal public transportation services available in the County. Airline information and airports are listed. Inter-city common carrier bus services are described. Amtrak's services are referenced. Public taxis are noted. The general public services of each provider are highlighted in English and Spanish text. Multi-colored maps, time schedules, and phone numbers are designed to assist potential riders in getting all around the County as easily as possible. A "trip planner" is included to assist the first time rider. A suggestion questionnaire is included to assist staff with the "in-house" updating of subsequent editions.

Public / Private Sector Coordination

Since FCRTA's creation in 1979, portions of the overall operation have been competitively bid. Specific Request for Proposals (RFP) and resultant contract negotiations have proven to be successful. Competition continues to ensure that transportation costs remain as low as market conditions allow. In some instances, remote rural locations cannot be served by the private sector at rates equal to or less than the public sector can provide. Sixteen of FCRTA's current twenty subsystem services are operated through three different private sector companies.

Coordination / Consolidation Efforts

Service adjustments continue to be made to each of FCRTA's subsystems to promote greater efficiencies. One of the most significant changes in the delivery of rural transit services, however, has been with respect to the consolidation of social service transportation services. FCRTA, in conjunction with the Fresno County Economic Opportunities Commission, has instituted substantial changes in its operations since the initiation of Rural Consolidated Transportation Services Agency services twenty-five years ago.

FCRTA currently contracts with the Rural CTSA for fifteen public transit subsystems: Auberry Transit; Biola Transit; Del Rey Transit; Firebaugh Transit; Huron Transit; Juvenile Justice Campus Transit; Kingsburg Transit; Mendota Transit; Orange Cove Transit; Parlier Transit; San Joaquin Transit; Selma Transit (Saturday); Southeast Transit; South Sierra Transit; and Westside Transit.

Coordination of transportation services and administrative functions between the FCRTA and the FCEOC is expected to result in considerable long-term cost savings. These two agencies have made notable progress in combined purchasing and driver training, in centralized dispatching, and administration, and in unified grant applications.

As referenced previously, Fresno COG in the process of developing an Inventory and Action Plan to address new requirements for the Job Access – Reverse Commute and New Freedoms Grant programs.

Financial Capacity Planning

The COG received State funding in fiscal year 1988-89 to respond to FTA's suggestion to prepare a Financial Capacity Plan for FCRTA. The analysis included projections of FCRTA's financial obligations versus anticipated revenues to determine the viability of FCRTA's future. The results concluded that each

of FCRTA's member agencies appear to have sufficient financial capacity to fund their respective share of planned “basic” (minimal) transit services through the period of the study, 2010. The agency, however, shall continue to exercise its adopted policy to seek available state and federal assistance to augment their resources for funding its rural public transit operations.

This particular study has been reexamined to determine if potential funding problems are evident towards the end of the RTP planning period. No particular problems are evident if the FCRTA receives available local, state, and federal funds intended for public transportation purposes, assuming that all the variables remain constant, due primarily to the conservative nature of FCRTA's operations.

Accessible Services in Compliance with the American's with Disabilities Act and Subsequent Implementation Regulations

For twenty-seven years the FCRTA has recognized its responsibilities in ensuring accessible services to passengers. The agency has had a 100% wheelchair accessible vehicle fleet since it began. All of FCRTA's fleet vehicles are wheelchair lift equipped to permit access by disabled patrons.

Since its inception in 1979, the agency operations were carefully considered to meet the special needs of the transit disadvantaged (elderly, disabled, and low-income). In past years, each respective service could deviate from its specified route on a demand responsive basis, up to one-half (½) of a mile in either direction (one mile path), to pick up or drop off a disabled passenger. On January 26, 1992 the deviation distance was extended to 3/4 of a mile in either direction (one and a half mile path) to comply with requirements of the Americans with Disabilities Act.

Common carrier service providers in Fresno County (Greyhound) offer their respective "helping hands" service to disabled passengers desiring to board their non-wheelchair lift accessible coach vehicles. Comparable inter-city "back-up" service is provided by the FCRTA to ensure disabled passengers may be transported within Fresno County.

The FCRTA shall continue with the process of systematically implementing necessary modifications to bring it into full compliance with the spirit and intent of the law.

Responsibilities and mandates under the Clean Air Act of 1990, the San Joaquin Valley Air Pollution Control District’s Air Quality Plan, the Council of Fresno County Government's Transportation Control Measures Plan, and the State’s Congestion Management System

The FCRTA has demonstrated a commitment to alternative fuel since 1992. FCRTA has successfully implemented a fleet conversion of twenty-one vehicles to propane. In 1997 they expanded their fleet to include compressed natural gas powered vehicles. They also successfully operated two zero emission electric battery powered vehicles for the past ten years. Currently their fleet is 82% alternatively fueled (only because there are now California Air Resources Board approved conversion devices for the remaining thirteen unleaded gasoline powered vans).

The FCRTA shall continue with the process of systematically implementing necessary modifications to bring it into full compliance with the spirit and intent of these laws, plans and programs.

Measure C

The final edition of the Measure C Expenditure Plan included the following text relating specifically to rural transit to be addressed and implemented over the next twenty year. These provision were specifically approved by the Fresno County voters in November 2006. Staff will address the specifics through the Short Range Transit Plan for the Rural Fresno County Area document and annual FCRTA Budgets. Many implementation details are yet to be addressed.

Fresno County Rural Transit Agency

- Primary Program
  - Install and integrate a regional automated farebox system to enhance transit coordination and seamless passenger travel between transit systems
  - Expand intra-city services to improve demand responsive paratransit service frequencies to the elderly, disabled, low-income, and youth of rural Fresno County
  - Complete fleet conversion to low emission buses
  - Deploy other operational and infrastructure improvements such as construction of a dispatch terminal, utilizing intelligent transportation system technology such as safety surveillance cameras and global positioning systems to provide better services within and between the rural incorporated cities and unincorporated communities
  - Expand inter-city service to improve scheduled fixed-route service frequencies to address trips for employment
  - Implement an unincorporated County area shuttle program
  - Implement escort medical transit service program
  - Expand transit services to the Eastside and Westside of Fresno County
  - Implement sub-regional Eastside and Westside transit terminal facilities with compressed natural gas and hydrogen refueling stations
- Secondary Program
  - FCRTA's phased implementation will accomplish all the Primary Programs within the twenty year time frame of available funding resources

The following Measure "C" funding policies will apply to each of the transit agencies, and/or entity, to implement with their respective programs.

Seniors Fare Subsidy Earmark Programs

- Primary Program
  - Free General Public Transit Fare Program for Seniors 65 years of age and Older
  - Each transit agency will commit to implement a Measure "C" reimbursement program from earmarked funds, to implement free fares for general transit ridership, for seniors 65 years of age and older
  - At 5-year intervals, each transit agency will conduct a performance evaluation to determine if the free senior fare reimbursement program is meeting its intended goals of increasing senior ridership on general public transit services. The evaluation will measure actual senior usage and fare reimbursement versus available program funding to ensure continued viability
  - If ridership increases beyond the earmark of available Measure "C" funding other funding sources may be utilized to continue the free senior fare program, otherwise the transit agencies may charge a reduced fare to augment and continue this Measure "C" fare subsidy program

- Secondary Program
    - Taxi Script Program for Seniors 70 years of age and Older
    - Each of the three (3) transit agencies will commit to develop a Taxi Script Program for persons 70 years of age and older, who do not meet ADA eligibility requirements for access to paratransit services
    - The program will be uniform between the three agencies and will provide for the purchase of a predetermined amount of script to be used for taxi service by those who are qualified to use the program
    - The details of the "script ratio" will be determined by the transit agencies at the time the program is implemented
    - At 5 year intervals each transit agency will conduct a performance evaluation to determine if the program is meeting its intended goals of increasing ridership amongst eligible seniors of the Taxi Script Program and assess whether or not to continue, or redirect the funding to a more effective alternative

Public Transit Agency Performance Criteria

- Measure "C" funds can be used to provide new / demonstration service for a period of up to three (3) years. The service must meet the minimum performance standards of each transit agency
- Service that does not meet the minimum performance standards may be discontinued; unless the transit agency can demonstrate that continued reduced / minimal "life-line" service is in the best interest of the community
- Any request to extend such "life-line" service(s) shall be reviewed by the Council of Fresno County Government's Fresno COG Social Service Transportation Advisory Council (SSTAC) with final approval made by the appropriate transit agency board

PTIS / Transit Consolidation

- Phase 2 – Public Transportation Infrastructure Study (PTIS)
    - Fresno COG would be responsible for preparing or retaining a team of consultants to prepare Phase II of the Public Transportation Infrastructure Study (PTIS). Phase I of this Study is almost complete and will identify existing infrastructure, review current policy documents and peer studies, and formulate recommendations for transit supportive strategies that will lead to a set of viable Public Transportation projects in Fresno County. The Phase I Study will set the stage for development of the Phase II effort funded in this Expenditure Plan.

- Transit Consolidation
    - Fresno COG has already commissioned a study to determine if consolidation of the various public transit agencies is viable. This Measure "C" Plan will provide funding to implement study recommendations should consolidation be warranted. Activities would include coordination with each transit agency to discuss the consolidation effort, development of a Joint Powers Agreement (JPA) or some other similar document to consolidate under one agency all transit service functions, and other required consolidation tasks that will result in implementation of Study recommendations.

ADA / Seniors / Paratransit

- Dedicated funding would be available for ADA and Senior / Paratransit services under the Regional Public Transit Program and could be used as matching funds for state or federal funds or to augment funding under the Public Transit Agencies Program or programs contained in the Local Transportation Program. Details regarding the funding process and implementing guidelines will be further defined by Fresno COG and considered for approval by the Authority.

Van Pool Programs

- Public / Private Competition
  - Measure "C" funds can subsidize van pool programs within Fresno County. The programs would be evaluated for funding allocation based upon an open competitive process. The Van Pool Program should provide an equal opportunity for both public and private industry competition, as well as potential public / private partnerships. Details regarding the funding process and implementing guidelines will be further defined by Fresno COG and considered for approval by the Authority.

- Commuter Van Pool Performance Criteria
  - The Fresno County Transportation Authority will issue a Request for Proposals to qualified entities to provide such a service
  - All commuter vanpools using Measure "C" funds allocated for this purpose must originate within Fresno County. This does not preclude an agency to use other Measure "C" funds (e.g., Regional Public Transit, Local Transportation Program) to subsidize additional Commuter Vanpools
  - Allocations of Measure "C" funds for vanpools will be prioritized based on overall cost effectiveness and air quality benefit

- Farmworker Van Pools
  - Dedicated Revenue Stream for Farmworker Vanpools
  - Each of the two sub-programs (Car & Van Pool and Farmworker Van Pool) should receive equal Measure "C" funding. In addition, the Farmworker Van Pool Program is required to operate in accordance with federal regulations and Measure "C" funding for Farmworker Van Pool Programs within Fresno County is to be allocated to entities through an open competitive process. Details regarding the funding process and implementing guidelines will be further defined by Fresno COG and considered for approval by the Authority.
  - Farmworker Van Pool Performance Criteria
  - The Fresno County Transportation Authority will issue a Request for Proposals to qualified entities to provide such a service
  - The RFP will include specific performance criteria and specific operating standards needed to operate such a service in the State of California
  - All farmworker vanpools using Measure "C" funds allocated for this purpose must originate within Fresno County. This does not preclude an agency to

use other Measure "C" funds (e.g., Regional Public Transit, Local Transportation Program) to subsidize additional Farmworker Vanpools

- o Allocations of Measure "C" funds for vanpools will be prioritized based on overall cost effectiveness and air quality benefit

Advanced Transportation Technologies

- Eligible Projects & Urban / Rural Allocation
  - o A portion of this funding allocation can be programmed and available for efforts needed to implement the new technologies. Also, the sub-category should be renamed to New Technology Reserve, and defined as a funding program for new transit technologies such as Personal Rapid Transit (PRT) or similar system. A further recommendation was that if the sub-category does not resonate with the voters in the follow-up poll it could be eliminated. It can also be eliminated if during the biennial Expenditure Plan update a detailed evaluation of the feasibility and likelihood of implementing such a system after ten (10) years is not eminent, or if construction is not eminent within 15 years after the Measure passes. The funds would then revert back to the Expenditure Plan update process to be allocated where the greatest need then exists. Details regarding the funding process and implementing guidelines will be further defined by Fresno COG and considered for approval by the Authority.

4.5.5 Identified Needs and Issues

Rural service needs have centered around ten issues:

1. *Implementation of adequate inter-city services to augment increasingly inadequate services between rural communities and the Fresno-Clovis Metropolitan Area.* Connectivity to and through rural communities and the metropolitan area is critical to the economic vitality of the region and its residents.

2. *Reciprocal fare/transfer programs between rural and metropolitan area transit services.* A common transfer mechanism could facilitate inter-community ridership throughout the county. Existing farebox revenue requirements on each respective agency hampers a satisfactory arrangement because the sharing of individual farebox receipts further erodes current receipts. The three transit agencies are currently working towards the purchase and implementation of a unified electronic farebox system to promote seamless transit travel throughout Fresno County. The program may be implemented in 2007-08.

3. *Expanded service to unincorporated rural area residents who live beyond city transit area boundaries.* To date, it has not been "reasonable" to set up a roving service vehicle to provide this extra service because requests were sporadic. Furthermore, patrons appeared unwilling to transfer to another provider's vehicles when entering a different service area to complete their trip. Varying fares, based on distance/time traveled is yet another issue. Following the implementation of provisions within the Measure C Expenditure Plan specific new services will be implemented to address these vary concerns during the next twenty year period.

4. *Adequate and stable funding for additional transportation improvements.* Transit vehicles and passengers are being subjected to less than optimum driving conditions. A significant revenue base must be secured to replace the decaying infra-structure. The condition of the economy and the reaction of the public to any form of increased taxation have proven to be very detrimental to even short-term financial planning. Dedicated funding sources, with escalation factors for inflation

and population growth are a common theme for transportation providers. Again, with the implementation of provisions and funding contained in the Measure C Expenditure Plan these vary issues should be adequately addressed during the coming twenty year period.

5. *Home to work - commuter transportation services.* The public appears to be reluctant to change, especially in matters of their "lifestyle". In order to significantly reduce the total vehicle miles traveled and thus air quality emissions, of single occupancy vehicles, the public must accept carpooling, vanpooling, and commuter bus service. Suggested programs, to date, have not been universally embraced. Measure C specifically included funding and implementation provision for computer vanpool services for the next twenty years.

6. *Inter-county connectivity of transit services to facilitate travel between the eight Counties adjacent to Fresno County:* Inyo County, Kings County, Madera County, Merced County, Mono County, Monterey County, San Benito County, and Tulare County. Further enhancement to periodic inter-regional common carrier services, facilitate trip purposes for: employment; medical; commercial; recreational; and social services.

7. *Farm Worker Transportation.* Agricultural workers need access to transportation services that are safe, affordable, reliable, and available. Traditional transit services do not meet the needs of farm workers because of varying work schedules, changing locations, seasonality of the work itself, and the unusual and varied hours of the actual work. The Caltrans Agricultural Industries Transportation Services (AITS) Pilot Program involving Fresno, Kern, Kings, and Tulare Counties is the first of its kind in California, and should continue. To date forty-six farm labor van pools are operating within Fresno County. It offers a unique approach to help individuals to come together and share independence in meeting their collective need to travel “to” and “from” their work, as necessary. Additional programs are also be explored. Funding under recently approved State program will be coupled with Measure C funding to dramatically expand the farm labor vanpool program over the next twenty years.

8. *Maintain service for the transit dependent population (i.e. elderly and disabled).* Basic services are literally a lifeline between this growing segment of the population and required services to sustain one’s quality of life.

9. *Additional marketing and education programs* to promote services.

10. *Elimination of repetitive documentation of regular activities*. The Paper Work Reduction Act of the Carter Administration has been ignored and promises by the Clinton Administration to streamline grant approval processes were not realized. The Bush Administration intends to consolidate programs and funding as part of their long-term tax reduction program. Administrative expenditures must be kept in check.

11. *Further Consolidation and Coordination of Transportation Services*. Efforts such as these are specifically being addressed and funded by Local, State and Federal sources. As mentioned previously, Fresno COG is taking a proactive approach to these previously identifies needs and issues

4.5.6 Unfinanced Needs

Unfunded mandates continue to have a significant impact on the year to year operations of the FCRTA and the Rural CTSA. The most recent were: the Americans with Disabilities Act; alternative fuels under the Clean Air Act; and Drug and Alcohol Testing requirements of the U.S. Department of Transportation.

The most significant ongoing need is the timely replacement of fleet vehicles. Measure C will go a long ways to addressing this particular need over the next twenty years. Of course, additional support from State and Federal sources will also be required. Existing grant programs remain very competitive. Available State and Federal apportionments simply purchase fewer vehicles due to inflationary increases in equipment costs.

4.6 Aviation

4.6.1 Overview

The Aviation Element results from the planning efforts of the COG, its member agencies and other local entities. The Element ranges from a broad locational diagram of public use airports within the Fresno County region to the specific details of individual airport facility development. The locations of the public use airports are shown in Exhibit 4-19.

The broader Aviation System Plans provide the foundation for the precise location, facility design and detailed costs of specific facilities contained in the Master Plans of the individual airport facilities. The Master Plans address long-term planning goals, potential land use, noise and safety impacts, and the means by which to implement the System Plans.

An integral next step in the Master Plan process is delineation of airport impacts on the surrounding land area. The responsibility for coordination of land use planning among state, regional and local agencies in the area surrounding an airport facility lies with the Airport Land Use Commission. Through adoption of land use policy plans, the Commission delineates a compatible environment for the airport facility and, in turn, protects a valuable local investment. COG member agencies with jurisdiction over an airport also incorporate these policies into their Airport Master Plans and general planning efforts.

Regional airport system planning is required by both state and federal funding agencies in order to inventory facilities, evaluate needs (both on the airport and as a result of aircraft activity in the surrounding areas), and forecast demand, which will determine funding levels and apportionment. The Fresno County region's Aviation System Plan is integrated into the California Aviation System Plan and, ultimately, into the National Airport System Plan, which identifies the existing airport relationships on a state and national level and the service and facility needs over a twenty-year period.

Public airports in Fresno County are, for the most part, subsidized by the jurisdiction's general fund. However, the cost of capital improvements currently needed by the airports cannot be met by local funding sources alone. Both the Federal Airport Improvements Program (AIP) and the California Aid to Airports Program (CAAP) are also not adequately funding airports in Fresno County. The Regional Transportation Plan anticipates funding for airport projects within Fresno County will fall short over the next twenty-three years.

4.6.2 Existing System Inventory

The Fresno County Regional Aviation System Plan, a segment of the Central California Aviation System Plan, provides detailed information for all the public use airports in Fresno County. That document is incorporated herein by reference.

Coalinga Municipal Airport

The old basic utility airport that had served the community of Coalinga since 1930 was officially closed on June 1, 1999. In 1996, Coalinga completed construction of a new basic utility airport facility located about four miles east-northeast from the center of the city in the southwest portion of the County of Fresno on 1,012 city-owned acres, about 248 of which are devoted to the airport and have been annexed into the city. The balance of the property is either retained in agricultural use or included in a Regional Habitat Conservation Plan. At an elevation of 622 feet, the airport is relatively fog-free year round. It is classified as a General Aviation Airport in the National Plan of Integrated Airport Systems (NPIAS) and a Community General Aviation Airport in the California Aviation System Plan (CASP).

The airport has one runway (12-30), 5,000 feet long and 100 feet wide with a 2-light PAPI system on each side and medium intensity runway edge lights. A gravel-surfaced crosswind runway (1-19), available for daytime use only, is 2,500 feet long and 60 feet wide. An asphalt helipad, 50 feet by 50 feet, is also

available. A parallel taxiway is located on the south side of Runway 12-30 with five entry/exit taxiways. A hangar building houses 19 based aircraft and a 60 foot by 50 foot maintenance hangar is available for aircraft maintenance activities. The on-site flight facility center accommodates pilot and crew flight preparation, and includes restrooms, a public telephone, and a kitchenette. Airport services include 100LL fuel (24-hour, “fast pay”). Aircraft operations at the airport total approximately 5,000 on an annual basis.

Firebaugh Airport

The Firebaugh Airport is a Basic Utility airport. It is at an elevation of 149 feet and encompasses 37 acres. It has one runway that is 3,102 feet long and 60 feet wide. It has about 23 based aircraft, no fixed based operators and handles about 10,000 operations per year. Firebaugh Airport is classified a General Aviation Airport in the NPIAS and a Community General Aviation airport in the California Aviation System Plan.

Fresno Yosemite International Airport

Fresno Yosemite International Airport (FYI) is Fresno's primary passenger airport facility and is the largest and busiest airport in the San Joaquin Valley. FYI is at an elevation of 333 feet and encompasses 2,300 acres of land located approximately five miles east of downtown Fresno. It has two runways, a principle runway (11L/29R) 9,222 feet long and 150 feet wide and a parallel general aviation runway (11R/29L) 7,206 feet long and 100 feet wide. This two-runway system is supported by full-length parallel taxiways on both the north and south. An FAA Airport Traffic Control tower (ATCT) is located on the south side of the airport and provides 24-hour traffic control services at the airport. Category III Instrument Landings are available to Runway 29R and non-precision landings to Runway 11L.

About 288 general aviation aircraft are based at FYI. The number of enplaned passengers at FYI increased to approximately 1.281 million passengers in 2006, an increase of about 7.54 percent over the previous year. This increase is expected to continue and is particularly noteworthy because enplanements on a national basis are down. The amount of enplaned cargo has recently decreased with the relocation of DHL to Ontario Airport in Southern California. However, the amount of enplaned cargo is once-again expected to grow over the next twenty-three years. Total operations at FYI are estimated to be approximately 280,000, including air carrier/commuter/charter, general aviation, and military operations but not including air freight operations.

FYI’s four fixed base operators (FBOs) offer a wide range of services including fueling, aircraft maintenance, repair, storage, charter services, flight instruction, an aircraft mechanic school, advertising, surveying, air taxi, patrol, rentals and sales. FYI is designated a Primary Commercial Service Hub Airport in the California Aviation System Plan.

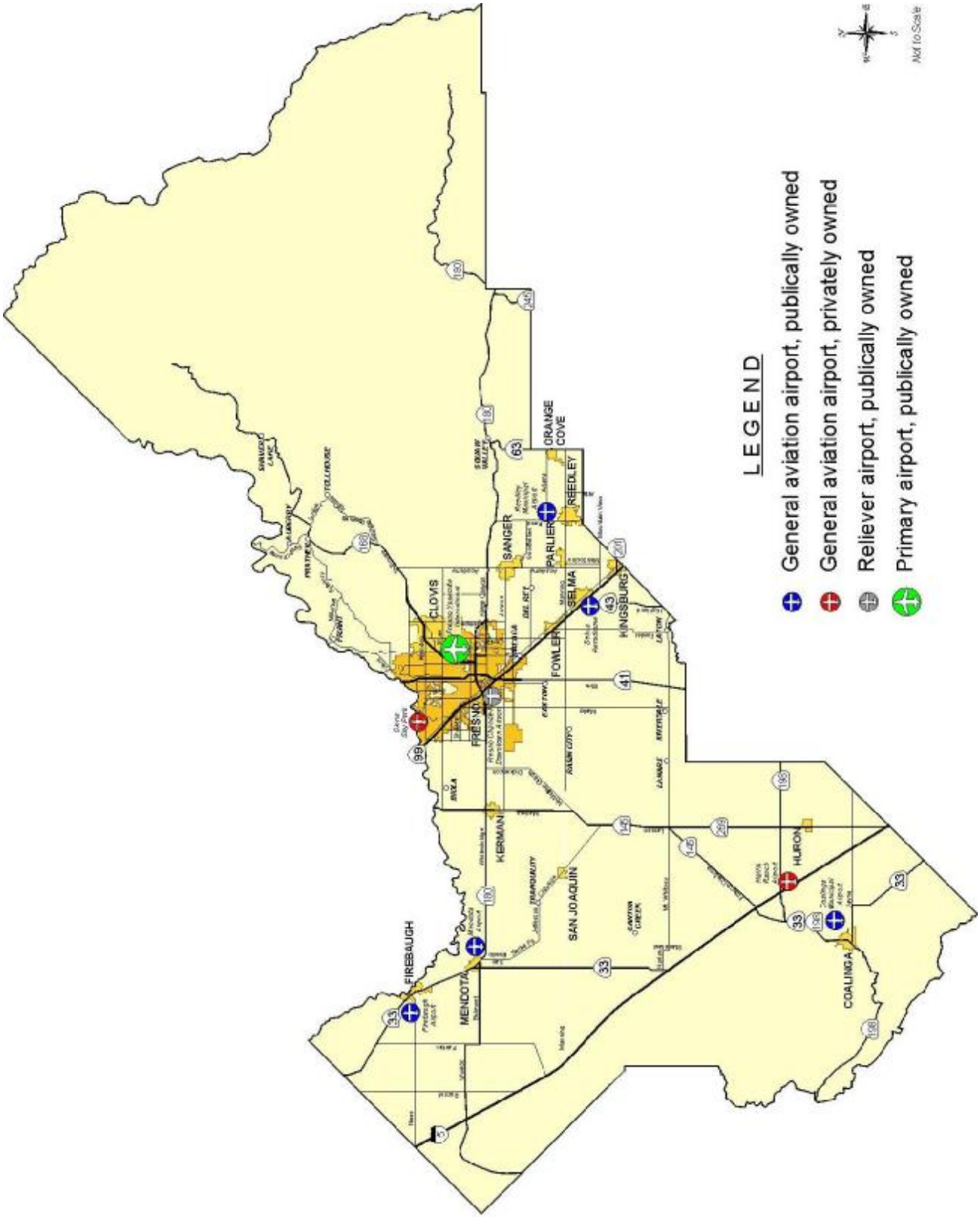
Chandler Executive Airport

Chandler Executive Airport is a federally designated "reliever" airport. Chandler is at an elevation of 278 feet and encompasses 200 acres. It has two runways. Runway 30L/12R was recently extended to 3,626 feet long and runway 30R/12L is 3,002 feet long. Both runways are 75 feet wide. The current Master Plan for the Airport proposes abandonment of Runway 30R/12L, part of which would become both a taxiway and apron for new development on the north side of the airport. Chandler currently has 232 based aircraft, five fixed based operators and handles approximately 60,000 operations a year. Chandler is classified a Reliever Airport in the NPIAS and a Regional General Aviation Airport in the California Aviation System Plan.

Harris Ranch Airport

Harris Ranch is a privately owned and operated, public use airport. It is at an elevation of 465 feet and encompasses 80 acres. It has one runway that is 2,820 feet long and 30 feet wide. This width is inadequate. There are currently no aircraft based at the airport, which handles approximately 10,000 operations a year. Harris Ranch is classified a Limited Use Airport in the California Aviation System Plan. Harris Ranch is not listed in the FAA NPIAS, making it more dependent on alternative funding sources.

Exhibit 4-19
Regional Airports



Mendota Airport

The Mendota Airport is a basic utility airport. It is at an elevation of 162 feet and encompasses approximately 112 acres. It has one runway that is 2,700 feet long and 50 feet wide. It has eight based aircraft and one fixed based operator and handles about 14,000 operations per year. The Mendota Airport is classified a General Aviation Airport in the NPIAS and a Community General Aviation Airport in the California Aviation System Plan.

Reedley Municipal Airport

The Reedley Airport is a basic utility airport. It is at an elevation of 383 feet and encompasses 138 acres. It has one runway that is 3,302 feet long and 60 feet wide. It has about 72 based aircraft and one fixed based operator and handles about 32,000 operations per year. The Reedley Airport is classified a General Aviation Airport in the NPIAS and a Community General Aviation Airport in the California Aviation System Plan.

Selma Aerodrome

The Selma Airport is a basic utility airport. It is at an elevation of 305 feet and encompasses 23 acres. It has one runway that is 2,490 feet long and 50 feet wide. It has about 80 based aircraft and four fixed based operators and handles about 21,000 operations per year. This is a privately owned and operated, public use airport. The Selma Aerodrome is not listed in the National Plan of Integrated Airport Systems and, therefore, is more dependent on state or local funding sources. It is designated a Community General Aviation Airport in the California Aviation System Plan.

Sierra Sky Park

Sierra Sky Park is a basic utility airport. It is at an elevation of 321 feet and encompasses 34 acres. It has one runway that is 2,920 feet long and 50 feet wide. It has about 100 based aircraft and handles over 20,000 operations per year. This is a privately owned, public use airport. Sierra Sky Park is also not listed in the FAA National Plan of Integrated Airport Systems and is, therefore, more dependent on state or local funding sources. It is designated a Community General Aviation Airport in the California Aviation System Plan.

Within Fresno County, there is a total of approximately 814 based aircraft and the public use airports combined handle a total of about 450,000 operations per year. Both of these figures and also enplaned cargo are expected to increase substantially by the year 2030.

4.6.3 Accomplishments

Recent Planning Activities

The COG, as a member of the Caltrans California Aviation System Plan - RTPA Advisory Committee, continuously monitors the California Aviation System planning process. Information is disseminated as necessary to the airport operators within the region and data is gathered as updated information is required or new operations are affected.

Fresno County Regional Aviation System Plan

On January 29, 1998, the COG Policy Board approved the Fresno County Regional Aviation System Plan, one of twelve county aviation system plans that together comprise the Central California Aviation System Plan (CCASP). The CCASP was developed over a four-year period and represents an attempt to shift aviation system planning in California from its traditional statewide, or “top-down” approach to a regional, or “bottom-up” approach. This new approach makes particular sense in a state like California where there exists wide diversity in regional economies and topography. The CCASP was added to other regional aviation system plans to form an overall California Aviation System Plan. The CCASP was funded by

ongoing grants from the Federal Aviation Administration, with the State Department of Transportation's Division of Aeronautics in charge of overall project management.

Fresno Chandler Executive Airport Master Plan

In April 1999, the City of Fresno adopted a comprehensive update of the Fresno Chandler Executive Airport Master and Environs Specific Plan. The Master Plan document identifies opportunities for Chandler in concert with other developments occurring in the area (nearby business parks, downtown redevelopment, and planned freeway access), reinforces the role of Chandler as a reliever airport to Fresno Yosemite International Airport and as an executive airport suitable for business aircraft, and guides development of the airport over the next twenty years. The Fresno Chandler Executive Airport Master Plan was updated in late 2004. The airport was renamed Fresno Chandler Executive Airport in June 2004.

Fresno Yosemite International Airport Master Plan

The City of Fresno has completed most of the short-term projects identified in its earlier 1997 Airport Master Plan for Fresno Yosemite International Airport. Consequently, in 2002, the City initiated an Airport Master Plan Update for the Airport. The Plan will develop a twenty-year forecast for aviation development, including plans that allow the airport to be prepared to accept service from potential low cost carriers. It will determine the projected needs of all airport users for both airside and landside facilities. It will evaluate the future development of the passenger terminal area. It will evaluate alternatives for development of each airport function (airfield, terminal area, air cargo, access and parking, airport support area and general aviation). It will prepare updated information to supplement the Airport's General Plan and Environs Plan. The new Master Plan is pending adoption by the end of 2007.

Reedley Airport Master Plan

This City of Reedley has recently completed and adopted a Master Plan for its airport, including an Airport Layout Plan Update and environmental assessment.

Coalinga Airport Master Plan

The City of Coalinga has also completed and adopted an Airport Master Plan for the Coalinga Municipal Airport. The Plan will accommodate the type and extent of aviation facilities needed at the Airport through the year 2025.

Airport Land Use Commission

The Airport Land Use Commission (ALUC) reviews plan amendments, rezoning applications, zoning ordinance text amendments, airport master plans and building regulations when located in the review area of Fresno County airports. If the ALUC finds a proposal inconsistent with its plan, the city council responsible for the airport in question may overrule the ALUC action by a four-fifths vote. However, specific findings pursuant to Section 21670 of the Public Utilities Code must first be made.

The Fresno County Airport Land Use Commission has adopted a series of land use policy plans for the public use airports within the region. The responsible public agencies have also adopted the respective land use policy plan or have incorporated certain provisions of the policy plan into their General Plan documents and Airport Master Plans. The policy plans provide the basis for recommendations on land use development proposals within the airport environs. The ALUC adopted Land Use Policy Plans for Coalinga's new Municipal Airport facility on November 28, 1994, for the Harris Ranch Airport on October 16, 1995, and for Fresno-Chandler Downtown Airport on March 15, 1999. Additionally, the ALUC adopted new noise contours for Sierra Sky Park, also on October 16, 1995. The ALUC recently adopted Land Use Policy Plans for Fresno Chandler Executive Airport, Reedley Municipal Airport, and Coalinga Municipal Airport.

Completed Improvements

In March 1993 the City of Fresno completed construction of an at-grade connection at Fresno Yosemite International Airport, between the existing concourse building and the main passenger terminal building. Also completed in 1993 was the Phase I remodeling and reconfiguration of the main lobby and terminal building at a cost of $6.5 million. Phase II improvements included a remodeled concourse, completed in March 1998 at a cost of $4 million.

Installation of a Category II instrument landing system was completed in the summer of 2000. The CAT II system will make it easier for passenger and cargo aircraft to land in poor weather, such as fog.

In 1987, the taxiway was reconstructed and the general aviation runway was lengthened to 7,206 feet as a precursor to the reconstruction of the main runway, completed in the late 1980's. This also allows for aircraft operations to be shifted to one or the other runway during critical construction periods. A new automated, enclosed baggage facility was constructed in 1987, which replaced the outdoor facility. The Airport has also developed and is implementing an Airport Noise Compatibility program.

In 2001 and 2002 the terminal roadways were reconfigured, providing additional traffic lanes in front of the terminal building. This included the addition of separate lanes and curbside for public transportation (vans, shuttles, taxis), as well as curbside canopies along the front of the terminal and along the public transportation curb. The size of the parking lot has been doubled.

Also in 2002, a large addition to the concourse building was completed. This addition consists of a second level holdroom facility with four new aircraft gate positions equipped with passenger loading bridges, as well as airline and airport operations space at ground level. The concourse addition includes stairs, escalators, and an elevator to convey passengers from the existing ground level concourse to the new second level facilities. The building addition also includes locations for two future loading bridges, allowing for a total of six second-level holdrooms/gates.

Fresno Yosemite International Airport recently initiated international air service to Guadalajara Mexico. The construction of a Federal Inspection Station was completed as required prior to initiation of this service by Mexicana Airlines.

Chandler Executive Airport continues to make improvements as funds allow. New T-hangars and maintenance facilities have been constructed. An Automated Weather Observing System (AWOS) was constructed and is now fully operational. Two new GPS approaches now exist. An overlay project on Runway 12R/30L, the airport's primary runway, in the amount of $157,000 was completed in Fiscal Year 1999-00. The primary runway had last received an asphalt-concrete overlay in 1992. In 2003, Chandler completed the largest airfield construction project in its history, the recently completed $3.9 million reconstruction of the main runway and ramp areas. In total, over $4.2 million in improvements have been completed at Chandler, including the recent extension of runway 30L/12R to 3,626 feet, the rehabilitation of Taxiway A, airfield drainage improvements, and security improvements.

Harris Ranch Airport completed a major asphalt sealing project in Fiscal Year 1996-97 in the amount of $50,000, generated entirely from private funds.

Mendota Municipal Airport also completed a major overlay runway project in Fiscal Year 1998-99 utilizing $98,000 from the 1998 three-year Aeronautics Program.

The City of Firebaugh received $301,000 in funding in Fiscal Year 1998-99 from the Caltrans Aeronautics Program for storm drain improvements and runway safety area. Also, Firebaugh Municipal Airport was selected in the 2000 Aeronautics Program to receive $41,000 in Fiscal Year 2000-01 to repair its runway edge.

The City of Reedley received $217,000 in Fiscal Year 2002-03 to overlay the runway and taxiway.

4.6.4 Needs Assessment

A number of issues continue to impact aviation in California, including safety, noise, ground access, transportation system management, airport financing, institutional relationships, land use, air quality, air service and public awareness. To a greater or lesser degree these issues also impact the Fresno County aviation sub-system.

Of particular importance to Fresno County airports is the need for additional state and federal funding to maintain existing airport facilities and construct new facilities necessary to accommodate anticipated levels of growth in based aircraft and aircraft operations. While the general aviation airports located in the county are anticipated to have ample capacity to accommodate future forecast levels of aircraft operations, this capacity could be significantly reduced if airport runways, taxiways, landing and navigation aids and other airport support facilities cannot be adequately maintained because of funding constraints. Likewise, the ability of airports to accommodate forecast levels of based aircraft is dependent upon the availability of funding to both maintain existing parking facilities and to construct additional parking as the need arises.

Another need identified by many of the general aviation airports in the county is funding for airport master plans. While Coalinga and Reedley have secured funding to develop Airport Master Plans, airports in Firebaugh and Mendota and the Selma Aerodrome have all identified the need to develop an airport master plan to guide future improvement and development. The City of Selma continues to explore acquisition of the Selma Aerodrome. The information contained in a master plan would assist the city to make a decision. Also, each of the cities, including Selma, believes its airport is important for economic development. Airport master plans would help delineate the physical relationship between airport development and adjacent industrial and business park development.

FYI's service area consists of six counties including Fresno, Kings, Madera, Mariposa, Merced and Tulare. State Department of Finance population figures indicate this six-county area had a total population on July 1, 2006 of 1,899,230 or 5.1 percent of the total California population of 37,444,385. It has become clear that passenger usage of FYI is underutilized due to market forces generated by air fares, the automobile and alternative airports in the Bay Area and Los Angeles. In 1990, a survey conducted by the Metropolitan Transportation Commission estimated over 100,000 passengers within a one hour drive of FYI drove to San Francisco, Oakland or San Jose for air service. Other surveys show that FYI is losing another 100,000 passengers to Southern California airports and another 100,000 passengers are driving to their final destinations. Total market leakage is estimated at over 300,000 passengers per year. Reduction of this market leakage through better airline service, including additional international service, is a primary challenge for FYI. Ongoing education is necessary to convince residents within the six-county service area of the advantages of selecting FYI rather than airports within larger metropolitan areas. These advantages include less use of expensive gasoline, reduced travel time, lower congestion, less vehicle wear and exposure, and better parking and security.

There is also an ongoing need to better quantify and promote the economic significance of FYI to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. Caltrans Division of Aeronautics completed a Final Report in June 2003 that provided a comprehensive evaluation of the economic benefits of aviation and airports to California communities and the overall State economy. The report, prepared by Economics Research Associates, noted that aviation's overall contribution to the California economy (including direct, indirect and induced impacts) amounts to nearly 9 percent of both total state employment and of total state output.

Of increasing economic significance to FYI is the role and value of air cargo. In this regard, major airports in both Southern and Northern California are experiencing significant air cargo constraints that include both facilities and operations capacity, thereby presenting an opportunity for the Fresno Region. Intermodal goods movement planning that effectively links the site suited airports will provide an attractive infrastructure for near-future demand for increased air cargo/distribution service. Longer term, increased associated passenger demand for FYI may also result. These economic opportunities should be pursued.

4.6.5 Proposed Actions

Future Planning Activities

The airport land use policy plans for the general aviation public use airports in Fresno County provide for orderly growth surrounding each airport. Future ongoing land use planning efforts of local governments will seek to assure that land use actions are consistent with these recommended policies. Many of the airports in Fresno County have expressed an interest in updating their comprehensive land use plans (CLUP). The COG is committed to include aviation system planning as an integral part of its transportation planning program and to prepare special aviation studies or reports as needed. The COG is further committed to update the Fresno County Regional Aviation System Plan at the appropriate time. Additionally, the COG is a member of the Caltrans RTPA Aviation System Planning Working Group. As such, it will continue to monitor and participate to the extent it can in activities of the Working Group.

Short-Range Improvement Plan

The short-range improvement plan calls for continued maintenance and ongoing improvements to the airport facilities and the protection of clear zones to comply with safety standards. Emphasis will continue to be placed on airport land use compatibility.

The City of Coalinga plans at full build out a 7,500 foot runway with a full Instrument Landing System (ILS). Planned short-range improvement projects include runway, taxiway and apron pavement maintenance, additional vehicle parking, and the extension of sewer and natural gas lines to the airport. The City's highest priority, to update the Airport Master Plan and Environmental Assessment, has been completed. Longer range improvements include a 4,000 foot long cross wind runway with parallel taxiway and lights, hangars for potential light industrial tenants, shades for existing tiedowns, a terminal building, and a fire station. The crossing runway is particularly important because of wind direction and velocity, and, therefore, safety considerations at the airport.

The City of Firebaugh's planned short-range improvement projects include a pavement maintenance program, install reflective markers and security fencing, a 150-foot runway extension, and reconstruct and repave the aircraft parking area. As with Coalinga and other airports in the County, development of an Airport Master Plan remains a high priority.

At Fresno Chandler Executive Airport, planned short-range improvement projects are to improve security, relocate the compass rose and lighted windsock, rehabilitate the terminal building (phase 1) and aircraft taxiways, design and construct taxiway "H" and associated infrastructure, and acquire runway 12R property. Longer range improvement projects are to design and construct aircraft apron (phase 3) and airport access road improvements, design and construct north airfield drainage improvements, and design and construct runway 30L-12R extension to 4200 feet with grade separation (phases 1 and 2). Also proposed is closing the shorter of the two parallel runways thereby expanding the amount of developable land at the airport and providing for use of the closed runway as a ramp area along which aviation facilities and an aviation-related industrial park could be built.

Federal Aviation Administration (FAA) funds were used to fund two projects at Fresno Chandler Executive Airport in fiscal year 2004-05. The City of Fresno utilized $166,700 to fund the first phase rehabilitation of Chandler's historic Terminal Building, believed to be the last continuously operating WPA terminal building in the nation. Approximately $150,000 per year for the subsequent two years was utilized to fund phases 2 and 3 of the rehabilitation project.

The Fresno Chandler Executive Airport Master Plan Update and Environmental Assessment was completed in 2004. Also in 2004, the City of Fresno renamed the airport from Fresno Chandler Downtown Airport to Fresno Chandler Executive Airport.

At FYI, numerous short-range improvement projects are planned. The latest Aeronautics Capital Improvement Program contains a listing of these projects and is incorporated herein by reference.

Several important projects were completed in fiscal year 2004-05. Approximately $2 million in discretionary funding from the FAA was the final component for the $10.1 million air cargo ramp. The ramp and access road improvements are designed to accommodate the needs of air freight companies and to capitalize on Fresno's mid-state location. The large staging area was built on the north side of the airfield to consolidate air cargo in that strategic location and provide room to expand, as cargo needs demand. Also, the FAA continues to award about $1.1 million annually for the ongoing Noise Attenuation Program at FYI, which will include purchase of land and insulation of buildings to reduce the impact of noise surrounding the airport. The FAA has also awarded $213,000 to fund a new Master Drainage Plan to complement planning efforts for air cargo and other increased uses on the airport in the future. Finally, $5.6 million in FAA discretionary funds were utilized to rehabilitate the 9,222-foot main runway.

Other short-term improvement projects include airfield lighting and airfield signage, taxiway rehabilitation, security improvements, purchase ARFF Vehicle, and approach zone land acquisition. The design and reconstruction of runway 11R-29L, estimated to occur in 2007, is notable because of its cost at about $19 million.

City of Mendota planned short-range improvements include cap/seal the parking ramp and existing runway, widen the runway to 60 feet, cap/seal/extend taxiways, apron expansion, provide hangers, improve access roads, and extend the runway (including taxiway) 1,400 feet including runway lights. Development of an Airport Master Plan is also a high priority.

An Airport Master Plan/Updated Airport Layout Plan and Environmental Assessment for Reedley's airport has recently been completed. Planned short-range physical improvements include overlay the airport runway and taxiway, replace runway lighting and relocate taxiway lighting, install an Automatic Weather Observation System, widen the runway by ten feet on the west side and the parallel taxiway by five feet on the east side, widen the parallel taxiway to 50 feet; remove tree obstructions, and construct a hangar taxiway. There is also an immediate need at the Reedley Airport for additional hangar space and shelters.

The Selma Aerodrome's needed short-range improvements include improving and lengthening the runway from 2,400 feet to 3,600 feet to meet FAA standards, upgrading airport lighting, and reconstructing the taxiways. An Airport Master Plan is also needed.

Long-range plans will focus on continued orderly growth of airports within the region and on enhancing air passenger and freight service.

Ground Access Improvement Program-Fresno Yosemite International Airport

The focus of the ground access improvement program is on Fresno Yosemite International Airport. FYI is the only primary air carrier airport in the Fresno COG planning region. This section identifies existing and anticipated access conditions that may impact FYI and affect the Airport's ability to serve current and future demand. This section also identifies a Ground Access Capital Improvement Program for FYI.

Highway Accessibility

Freeway access to FYI has greatly improved. New Freeways 168 and 180 provide much better access to FYI and connect the airport with the Fresno freeway system and beyond. Freeway 180 has been completed between the Hughes/West Diagonal west of Freeway 99 and Clovis Avenue while Freeway 168 has been completed between Freeway 180 and Tollhouse Grade. On Freeway 180, interchanges have or will be built at the new Route 168 and Cedar, Chestnut, Peach, Clovis, and Fowler Avenues. On Freeway 168, interchanges have been built at McKinley, Shields, Ashlan, Shaw, Bullard, Herndon, Fowler and Temperance Avenues.

Surface Streets

Major streets that provide access to FYI include McKinley, Clinton, Shields, Dakota, Peach and Clovis Avenues. All arterial streets offer a level-of-service (LOS) of C or better during peak hours. The commercial

passenger and parking facility access to FYI is on Clinton Avenue. McKinley Avenue provides commercial and military access to FYI. Clovis Avenue is a major arterial that offers direct access to commercial areas of the airport as well as providing north and south access to McKinley Avenue. Clovis Avenue also provides major access to FYI from the City of Clovis. Shields Avenue borders the airport on the north side and provides access to commercial, military and private aviation related traffic.

With the opening of Freeways 168 and 180, which have become major traffic feeders to the airport, certain surface streets have been affected by increased traffic levels. In particular, Peach Avenue between Freeway 180 and McKinley Avenue now provides the major access to FYI and has been improved to a four-lane boulevard street, including an attractive “gateway” treatment at McKinley Avenue.

Mass Transit Service

- Bus - FYI is directly served by Fresno Area Express. Like FYI, FAX is also a division of the City of Fresno's Department of Transportation. Currently, FAX Routes 39 and 26 provide service to the airport. Service is every half-hour on weekdays and every hour on weekends. FAX annually reviews bus routing and schedules, evaluating the need for new service.

  COG staff recognizes that there are limitations to the bus services provided, not only to Fresno Yosemite International Airport but systemwide as well. Unfortunately, these limitations are symptomatic of the overall transit operations funding picture. There clearly is not enough funding available for transit operations. COG staff will continue to aggressively pursue all possible sources of transit operations funding in hopes of providing improved transit service. The Measure C Extension will provide significant additional funding for transit operations in Fresno and Clovis and throughout Fresno County.

- Light Rail or other fixed-guideway rail transit system - Potential future light rail corridors have been modeled with the airport in mind. Freeways 168 and 180, which serve FYI, are designed with 60 feet of ROW reserved for either future HOV lanes or light rail. Also, the Clovis Branchline/Pinedale Spurline railroad corridor, recently acquired and improved as a multi-use trail by the cities of Fresno and Clovis, extends along Clovis Avenue in the vicinity of FYI to the Dayton Avenue alignment north of Shields Avenue. This corridor may also be utilized for future light rail. The Public Transportation Infrastructure Study will further evaluate rail public transit needs and opportunities that promote optimum connectivity within the region.

- High-Speed Rail - It is the position of local agencies and the COG that future high-speed rail through the Valley stop in downtown Fresno at a station located along the Union Pacific Railroad corridor with connecting service to FYI by bus, possible future light rail, or some other fixed-guideway transit system.

- Taxis - Taxi service is available at FYI throughout the airport’s service hours.

- Complimentary Vans - Complimentary vans operated by local hotels between these establishments and the airport are available for all flights.

Terminal Area

- Curbside Access – Until recently, curb congestion was an issue at FYI. The Terminal Area Plan recommended expansion of the terminal curbside area and provision of an on-airport recirculation roadway, both of which have been completed. The Plan also calls for the construction of an additional access lane from East Clinton Avenue and East McKinley Avenue to improve airport access from the north and south.

- Air Cargo - Total air freight and mail tonnage is forecast to increase by fiscal year 2030. Additional air cargo facilities have recently been completed, including development of the north side air cargo

facilities between the existing US Marine Base, the Army National Guard facility, Taxiway B and the Shields-Peach Connector. An air cargo ramp has been completed. The ramp and access road improvements have been designed to accommodate the needs of air freight companies and to capitalize on Fresno's mid-state location. The large staging area built on the north side of the airfield will consolidate air cargo in that strategic location and provide room to expand, as cargo needs demand.

- Parking - The Terminal Area Plan recommended new parking facilities located within the terminal access roadway loop to meet increased demand. Both the new terminal access roadway loop and new parking facilities have been completed. Further increases in the number of public and employee parking spaces will be addressed as the enplanement level rises at FYI.

4.6.6 Financing

Existing Financial Sources

Aeronautic projects are funded from federal, state and local sources. The Regional Transportation Plan anticipates that funding for airport projects within Fresno County will fall short of the amount needed over the next twenty years. Detailed information concerning airport revenues for all Fresno County public use airports is contained in the Fresno County Regional Aviation System Plan, a component of the Central California Aviation System Plan, approved by the Council of Fresno County Governments Policy Board on January 29, 1998 and incorporated herein by reference. Also incorporated herein by reference are detailed listings of airport improvement projects for the next five years for FYI and Fresno Chandler Downtown Airport included in the Five-Year Capital Improvement Program for each airport.

In November 2006, Fresno County voters approved a twenty-year extension of Measure C, the one-half cent sales tax increase for transportation purposes. Included in the expenditure plan for the extension of Measure C is $17,000,000 (approximately one percent of the total amount estimated to be generated by the extension of Measure C), for use by Fresno Yosemite International Airport and Fresno Chandler Executive Airport. These funds will be available to match state and federal funding for improvements at the two airports. A list of these projects is provided in the Expenditure Plan.

Unfinanced Needs

The primary conclusion of the above referenced Financial Element of the Fresno County Regional Aviation System Plan is that funding for public use airports in the county has recently been and likely will continue to be increasingly precarious and complex. Recent and likely future trends indicate that there will be increasing reliance upon local, private, and non-traditional sources of funding for airport maintenance, operation, and development. Consequently, those airport operators and managers who have recognized these funding trends have compensated by implementing funding changes at the local level. For example, the City of Fresno has imposed a Passenger Facility Charge for Fresno Yosemite International Airport and the City of Reedley has reevaluated its entire airport fee structure in a successful attempt to generate additional revenues. In addition, the Measure C Extension will generate important additional funding for Fresno Yosemite International Airport and Fresno Chandler Executive Airport. However, for the remaining publicly-owned airports within the county, it is not possible to substantially raise revenue from fees, leases, concessions and other local and private sources. These airports still require subsidy from their individual community's general fund. Given the increasing pressure on local general funds, it is problematical as to whether this source of funding will continue to be available.

This increasingly difficult funding situation exists at a time when airports within Fresno County have identified important and necessary development projects and when there is a growing awareness within the County of the importance of local airports to the entire transportation system and to the regional economy. The need for a stable and reliable funding source for airport development is vital to the well-being of the air transportation system and the economy of the Fresno County region.

4.7 Non-Motorized Transportation

4.7.1 Overview

The Non-Motorized Transportation element of the RTP is focused on regional, metropolitan, and community bikeway networks and a network of multi-use trails that includes bicycling. Local planning efforts also include equestrian and hiking trail networks and pedestrian facilities. Pedestrian facilities are essentially site-specific and local, and hold particular importance in community design and redesign in working toward a more livable environment. Equestrian facilities are essentially recreational in nature. Neither pedestrian nor equestrian facilities are typically regional in function and, following the direction of the District 6 System Management Plan, this RTP will not consider them as viable alternative transportation modes at the regional level. Nevertheless, this RTP recognizes the value of equestrian and hiking trail systems for recreational purposes, as enhancements to the multimodal transportation system, and for their contribution to an improved quality of life in Fresno County and, therefore, supports their continued development.

For many, the use of bicycles as a means of transportation has several appealing aspects. Bicycling has positive air quality, energy, economic and health impacts and can reduce automobile congestion. From an air quality perspective, every bicycle trip that replaces an auto trip results in cleaner air. Bicycles do not consume limited fuel, maintenance is low, and bicycling can be used for commuting as well as for recreational purposes while providing physical exercise.

The bicycle's door-to-door capability for shorter trips makes it an attractive alternative mode of transportation in the Fresno region when the climate is mild, because the flat terrain is ideal for riding. Implementation of a bikeway system will provide connectivity between cities and access to destinations of regional interest, as well as commuter lanes in the Fresno-Clovis Metropolitan Area and in many smaller cities within the county.

Goals for the development of bicycle transportation in Fresno County are as follows:

- Planning - The recognition and integration of the bicycle as a valid transportation mode in transportation planning activities.
- Physical Facilities - Safe, convenient, and continuous routes for bicyclists of all types that interface with and complement a multimodal transportation system.
- Safety and Education - Improved bicycle safety through education and enforcement.
- Encouragement - Increased acceptance of bicycling both as a legitimate transportation mode on public roads and highways and as a transportation mode that is a viable alternative to the automobile.
- Implementation - Increased development of the regional bikeways system and related facilities by maximizing funding opportunities.

4.7.2 Existing System Inventory

The planned bikeways regional system is shown in Exhibits 4-20 and 4-21. The plan calls for community routes and routes which link communities and provide access to activity centers, including major commercial and employment centers, major recreational sites, and schools. All of the cities in the County and the County itself have planned bikeway facilities, although limited available funding has had an impact on their construction. Nevertheless, local agencies continue to add to the inventory of completed bikeways on an ongoing basis, particularly in conjunction with new development.

Exhibit 4-20
Rural Bikeways System

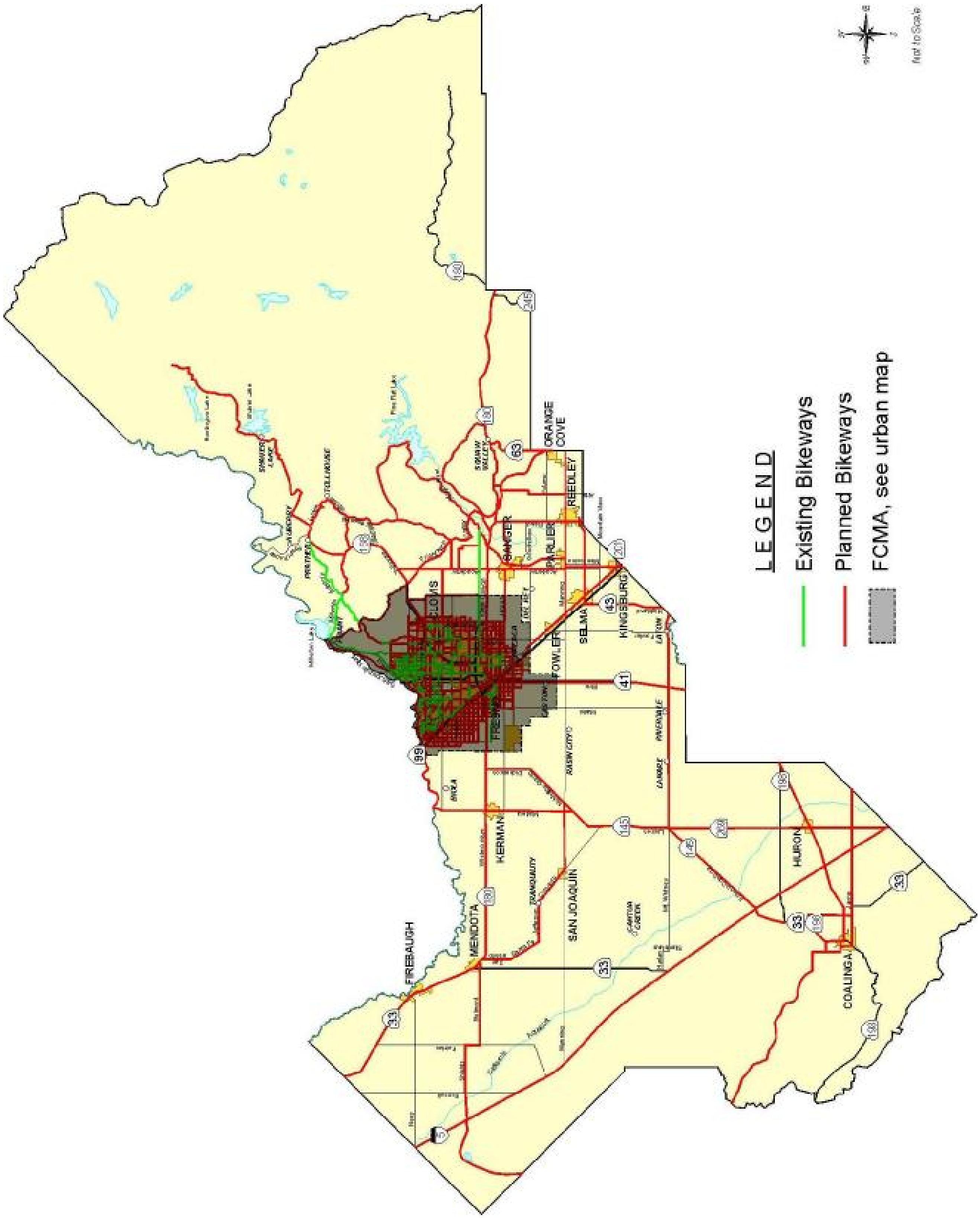
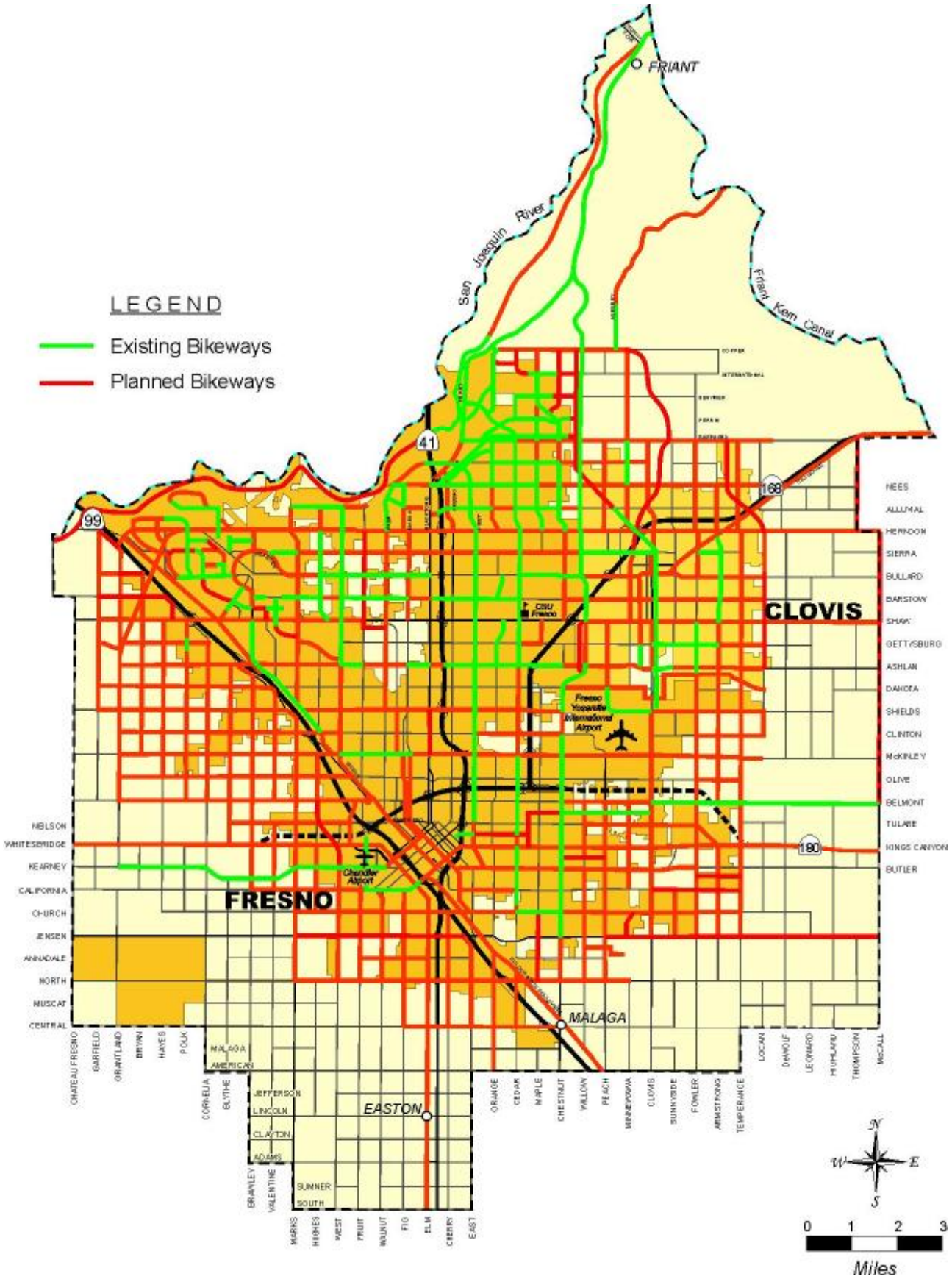


Exhibit 4-21


LEGEND
Existing Bikeways
Planned Bikeways
FRIANT
San Joaquin River
Friant Kern Canal
CLOVIS
FRESNO
MALAGA
EASTON
CSU Fresno
Fresno Yosemite International Airport
Chandler Airport
99
41
168
180
NEES
ALLUVIAL
HERNDON
SIERRA
BULLARD
BARSTOW
SHAW
GETTYSBURG
ASHLAN
DAKOTA
SHIELDS
CLINTON
McKINLEY
OLIVE
BELMONT
TULARE
KINGS CANYON
BUTLER
NELSON
WHITESBRIDGE
KEARNEY
CALIFORNIA
CHURCH
JENSEN
ANNADALE
NORTH
MUSCAT
CENTRAL
CHATEAU FRESNO
GARFIELD
GRANTLAND
BRYAN
HAYES
POLK
MALAGA
AMERICAN
CORNELIA
BLYTHE
JEFFERSON
LINCOLN
CLAYTON
ADAMS
BRAWLEY
VALENTINE
SUMNER
SOUTH
MARKS
HUGHES
WEST
FRUIT
WALNUT
FIG
ELM
CHERRY
EAST
ORANGE
CEDAR
MAPLE
CHESTNUT
WALLACE
PEACH
MINNEWAWA
CLOVIS
SUNNYSIDE
FOWLER
ARMSTRONG
TEMPERANCE
LOCAN
DIANOUF
LEONARD
HIGHLAND
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4.7.3 Accomplishments

Since the adoption of the 1984 General Plan, the City of Fresno has modified it's street design standard for the construction of collectors and arterials in newly developing areas to add five feet per side for a bike lane. The adoption of this standard has promoted the long-term development of a bikeway system in newer areas. Provision of this right-of-way in advance avoids the conflicts that arise when the loss of on-street parking becomes a necessary part of bikeway implementation. Within the City of Fresno, several miles of bikeways have been added, particularly in the Woodward Park and Bullard Community Plan areas, but elsewhere in the community as well. The City of Clovis provides for bike lanes along designated streets in accordance with adopted specific plans and has implemented bikeways along segments of several major streets.

Cities outside of the metropolitan area have also proceeded with efforts to incorporate bikeway facilities in their plans and programs. For example, the City of Reedley adopted a Kings River Corridor Specific Plan in January 1991 that included proposed bikeway facilities. Reedley also approved a General Plan Update in August 1993 and a subsequent Specific Plan that include both city bikeways and bikeways that provide connectivity to the Regional Bikeway System.

Coalinga and Kerman recently updated their general plans to include a bikeways section. Fresno, Selma, Sanger, Parlier, Reedley and Fresno County have all addressed bicycle transportation in their general plan circulation elements. In addition, Coalinga and Huron, and more recently Fresno, Clovis, Kingsburg, Reedley, Sanger and Selma, have developed Bicycle Transportation Plans in order to compete for funding under the Bicycle Transportation Account.

Several communities have competed successfully for funding under the Safe Routes to School Program. The purposes of the Safe Routes to School Program are: 1) to encourage and enable school children including children with disabilities to walk and bicycle safely to school, 2) to make walking and bicycling to school an appealing mode choice, and 3) to facilitate the planning, design, and implementation of facilities that enhance walking and bicycling to school. Successful Fresno County communities under this program include Clovis, Reedley, Kerman, Fresno, Mendota, Sanger, Orange Cove, San Joaquin, Firebaugh, and the County.

The City of Fresno has taken an active role in requiring the installation of bike racks in new development to encourage increased use of bicycling and bus commuting. The City of Fresno has also installed bike racks on its entire transit fleet, as has the City of Clovis on its Stageline transit fleet and the Fresno County Rural Transit Agency on its intercity transit fleet. Newer busses of the Rural Transit Agency's intracity fleet are also equipped with bike racks.

The City of Fresno has established a Bicycle Pedestrian Advisory Committee that advises the City Council and Mayor on all matters involving bicycle transportation.

The Measure C Extension approved by the voters in November 2006 requires that by January 1, 2012, all jurisdictions within Fresno County will have updated and/or adopted a Master Plan for Trail, Bicycle and Pedestrian Facilities that promotes connectivity within all of Fresno County and its urban areas. The Master Plan will be the guiding document for upgrade and/or installation of such facilities. If any jurisdiction fails to meet this goal, the earmarked funds for trail, bicycle and pedestrian facilities shall be withheld by the Fresno County Transportation Authority until such time as a jurisdiction is in compliance.

Measure C Extension earmark funds may be used for new construction of pedestrian/bicycle trails and for the development of the Master Plan as well as retrofitting pedestrian/bicycle trails within the circulation system that existed as of January 2007 or the date of adoption of the Master Plan. Trails built with earmarked or other Measure C Extension funds shall, at a minimum, be designed in accordance with the design criteria for bicycle paths and multi-purpose trails set forth in the California Highway Design Manual, Chapter 1000, Bikeway Planning and Design, with certain caveats as noted in the Final Measure C Extension Expenditure Plan.

The Final Measure C Extension Expenditure Plan includes additional requirements applying to all streets, roads, and highways utilizing either regional or local allocation funds. For example, every highway, expressway, super-arterial, arterial, or collector within the County constructed or reconstructed in whole or in part with Measure C Extension funds shall include accommodations for bicycle travel either by a shared roadway or by bike lane. Reference is made to the Expenditure Plan for a description of these additional requirements, including exceptions to the requirements.

4.7.4 Needs Assessment

While much of the basic work of planning for regional and metropolitan bikeway systems was done in this area in the 1970s and 1980s, it is important to periodically reevaluate the planned bikeway system and make adjustments as necessary to reflect changes in growth patterns and the development of new activity centers. For example, Fresno County's comprehensive revision of its General Plan, adopted in October of 2000, includes a significantly expanded planned bikeways network for the unincorporated area of the County. However, the need remains, particularly with many mid-sized and smaller cities in Fresno County, to prepare and adopt Bicycle Transportation Plans that discuss the eleven required elements listed in Section 891.2 of the Streets and Highways Code. These plans are required in order for local agencies to be eligible to compete for Bicycle Transportation Account funding.

The tasks ahead are also focused upon implementation of facilities through development project requirements or through active programs undertaken by the county or the cities. Most likely the programmatic initiative for facility implementation rests with traditional public works or traffic engineering staff who work with street development and pavement marking and signing programs. With competition for funds and staff time, local programs can be dependent on the priorities set by both governing bodies and by agency staff. Coordination between agencies on regional routes can also diminish unless a forum exists which promotes active participation. The Council of Fresno County Governments can assist local agency staff by providing an opportunity to share information and coordinate future efforts, taking a proactive position to encourage and facilitate bicycle use. There have been two recent examples of this Fresno COG role. First, the Fresno COG, with assistance from a non-motorized committee formed for this purpose, assisted the County in determining the unincorporated area bikeway network for inclusion in the County's recent general plan. Second, the Fresno COG prepared in April 2001 a "template" Bicycle Transportation Plan for use by cities in Fresno County. The "template" plan has been and will continue to be most useful to the smaller communities as the larger communities typically have their own staffs to manage their planning processes.

In addition, a number of pedestrian safety enhancements such as pedestrian over-crossings and under-crossings at dangerous intersections, street and sidewalk repairs and installations, and additional curb cuts and handicap ramps have also been identified within communities as worthwhile projects should future funding become available.

4.7.5 Proposed Actions

Future Planning Activities

Beginning in Fiscal Year 2007-08, the Fresno COG will implement the Measure C Extension Pedestrian/Trails/Bicycle Facilities Program guidelines. In particular, as noted above, by January 1, 2012, all jurisdictions within Fresno County will have updated and/or adopted a Master Plan for trail, bicycle and pedestrian facilities that promotes connectivity within all of Fresno County and its urban areas.

Short-Term Program (1 - 4 Year Programs and Projects)

The Transportation Development Act requires that 2% of the Local Transportation Fund be set aside each year for bicycle and pedestrian purposes. The COG apportions these monies annually to each jurisdiction, proportionate to its population. Recent years have shown growing use of these funds for pedestrian

projects, particularly as local jurisdictions looked for funding to meet ADA requirements. With growing emphasis on air quality and Transportation Demand Management objectives and with funding available through the Measure C Extension Program that must be spent on ADA improvements, the focus may shift back to bikeway system implementation.

Fresno County will continue to implement planned facilities as a part of its road construction program. The cities of Fresno and Clovis will stripe and sign those major street segments that have recently been constructed and will be constructed, particularly within the growing northern, eastern and western portions of the Fresno Clovis Metropolitan Area. The RTP anticipates that the cities of Fresno and Clovis and Fresno County will continue to implement the regional bikeway system in a timely manner and that the smaller cities within Fresno County also will continue to implement their proposed bikeway plans as funding provides.

In addition, the Measure C Extension Program requires every highway, expressway, super-arterial, arterial or collector within the County constructed or reconstructed in whole or in part with Measure C funds shall include accommodations for bicycle travel either by a shared roadway or by bike lane. A shared roadway includes a paved shoulder or a wide outside lane. The Measure C Extension Program includes other provisions as well, including a listing of exceptions to the requirements.

Long-Range Improvement Plan

The Master Plan for Trail, Bicycle and Pedestrian Facilities will designate the most suitable location for the long-term development of bikeway corridors for commuting and recreation. A detailed description of the metropolitan and rural cities routes will be included in the Master Plan, development of which is expected to begin in fiscal year 2007-08. Through this planning effort and other means, the Fresno COG will renew efforts to encourage bicycle travel and to coordinate metropolitan and regional planning efforts.

The 20-year Measure C Extension Program estimated funding total for bicycle facilities is $15 million, for pedestrian/trails in the urban area (Clovis and Fresno Spheres of Influence) is $37 million, and for pedestrian/trails in the rural area is $16 million.

4.7.6 Unfinanced Needs

Were unlimited funding available, each local agency in the county would develop its planned bikeway facilities through construction of additional pavement width, acquisition and development of separated paths, or striping and signing of existing rights-of-way. A standard striping and signing program using state guidelines is very costly to implement. As a part of the Master Plan for Trail, Bicycle and Pedestrian Facilities, the Fresno COG will quantify the planned miles of facilities and will encourage local governments to apply for new funding sources and expend funding that is already available for completion of the planned system.

4.8 Rail

4.8.1 Overview

The movement of inter-city freight is an important function of the rail system in that it provides an alternative mode for the transport of the wide variety of agricultural commodities and manufactured goods produced within the region. Movement of freight by rail results in significant reductions in the number of trucks using major inter-regional roads such as Freeway 99 and Interstate 5, thereby reducing traffic congestion, air pollution, and maintenance costs.

The Surface Transportation Board and the California Public Utilities Commission (PUC) have historically exercised strict control over railroad operations, including shipping rates and the abandonment, construction, relocation and consolidation of railroad rights-of-way. At the regional level, the Regional

Transportation Plan can provide a general framework to assure coordination and interfacing with other transportation modes in an overall planning process.

Passenger rail has also received renewed emphasis, with the result that local governmental bodies have more fully participated in the process of policy making and planning for inter-city rail passenger service. Specifically, with the establishment of the San Joaquin Valley Rail Committee in February of 1987, all regions of California directly affected by the San Joaquin passenger service can now participate in planning the route's future.

4.8.2 Existing System Inventory

The rail network in Fresno County consists of approximately 280 miles of operating main and branchline right-of-way (Exhibits 4-22 and 4-23). The Union Pacific Railroad (UP) and the Burlington Northern Santa Fe Railroad (BNSF) each operates one mainline that passes through Fresno County. In addition, there are four branchlines that either pass through (Exeter Subdivision) or lie completely within (West Side Subdivision, Riverdale Subdivision, Clovis Subdivision) Fresno County. These branchlines are operated by the San Joaquin Valley Railroad Company, a shortline railroad owned by StatesRail, a shortline railroad holding company. Additionally, the railroads operate many spur lines to serve industrial and agricultural clients, some of which operate on adjacent property by agreement between the railroad and the property owner.

Amtrak continues to play a role in the balanced transportation system of the San Joaquin Valley. Amtrak operates four trains per day between Bakersfield and Oakland and two trains per day between Bakersfield and Sacramento with each train making one round trip per day. This allows for six north-bound and six south-bound schedules each day. Amtrak service has helped fill a service level void that exists in mass transit between inter-city bus and airline services. Also, there is Amtrak dedicated bus service connecting rail stations with cities not directly served by the San Joaquin trains.

Exhibit 4-22
Rural Rail System

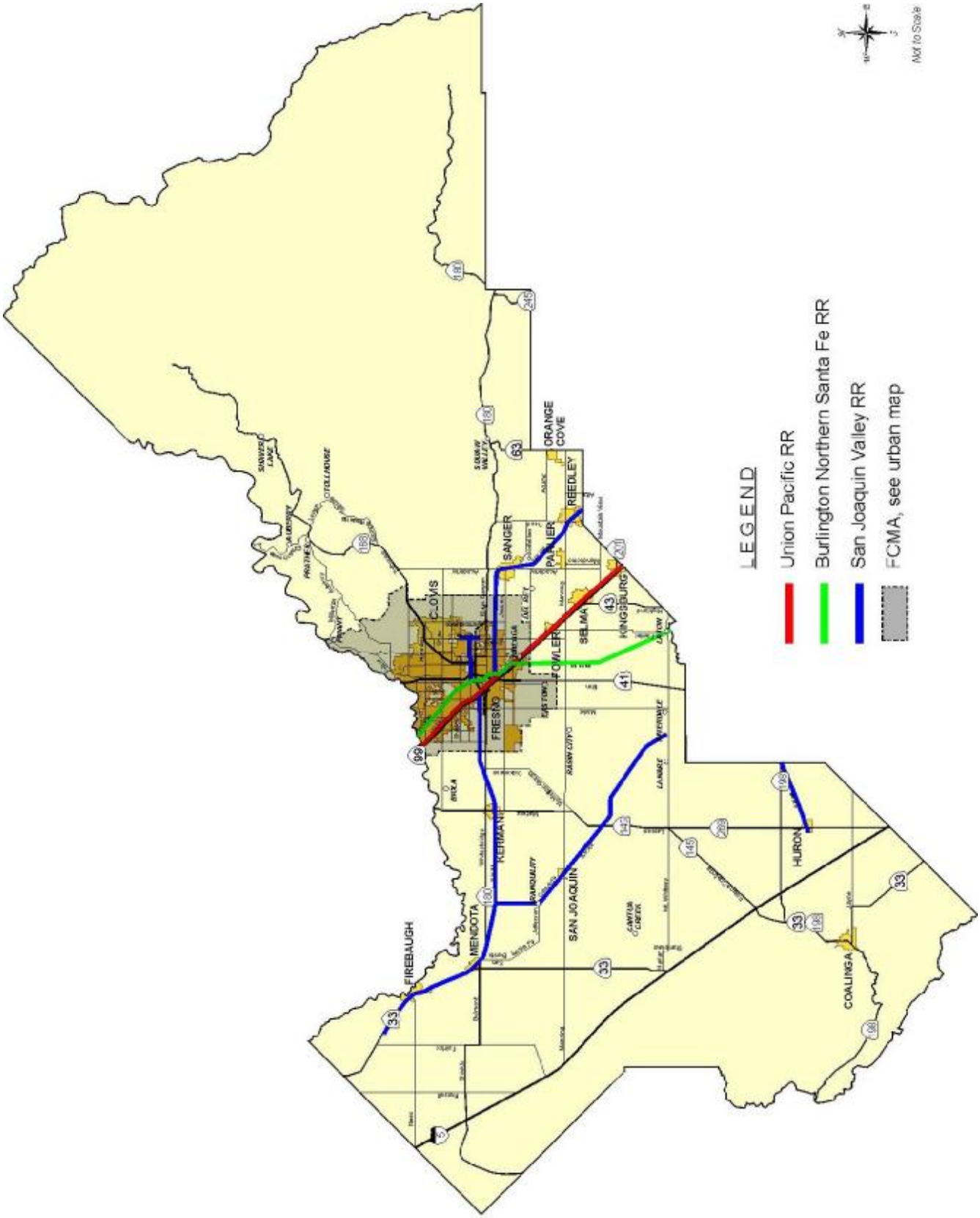
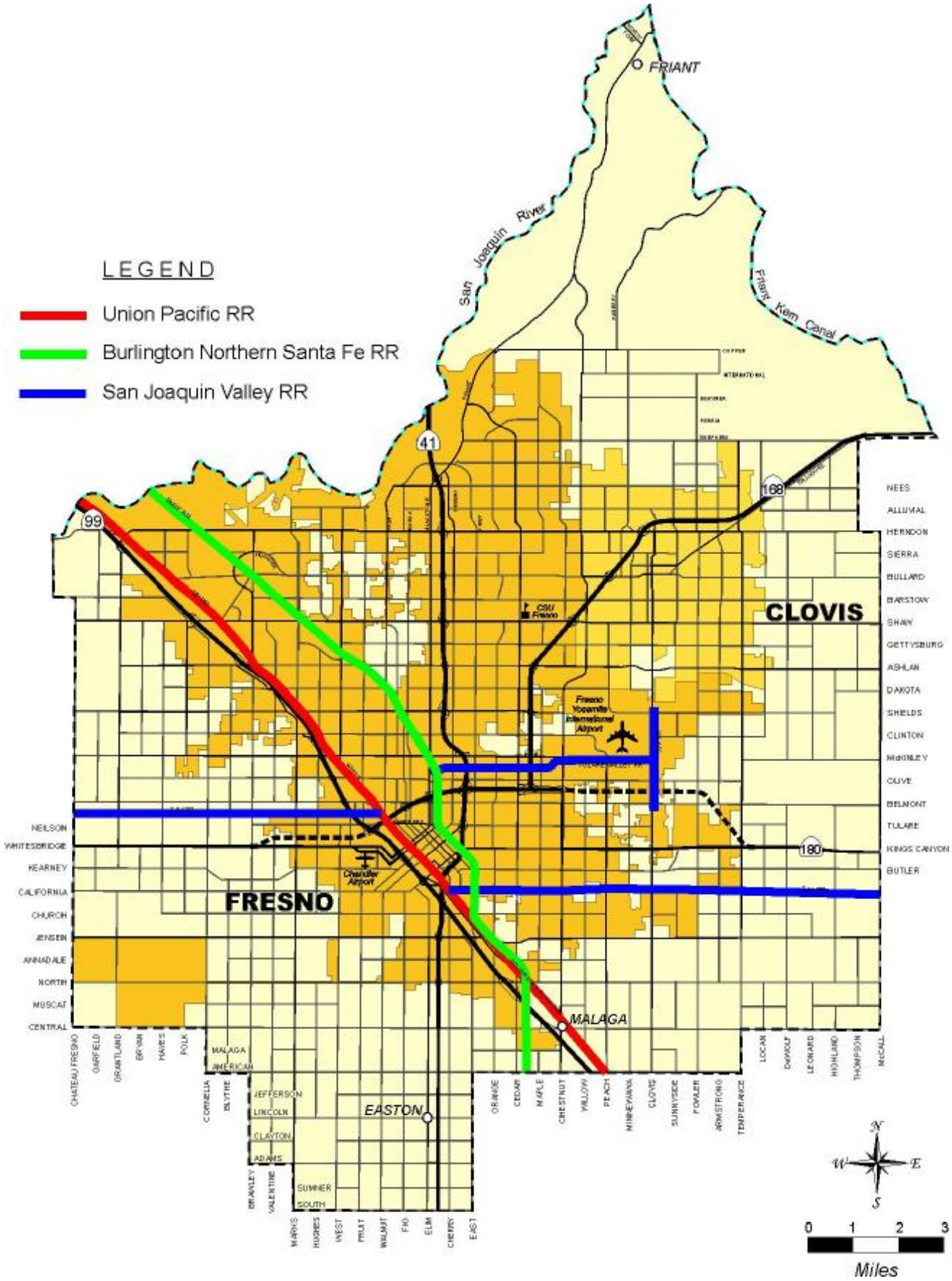


Exhibit 4-23
Urban Rail System



including additional grade separation structures in the Union Pacific corridor costing an estimated $96 million. Many of these grade separation structures will have to be built even if consolidation does not occur.

The City of Fresno, the County of Fresno, the Fresno COG, the BNSF and the UP jointly agreed to fund an updated study on rail consolidation, including new cost estimates. HDR Engineering, Inc. was again retained to conduct the study, which was completed in March of 2002. Since the 1993 study, two grade separations were completed, Shaw Avenue and Marks Avenue, and ten grade crossings in the city were closed. Updated cost estimates ranged from $275 million to $319 million depending on the alternative, a 38% increase over the estimates developed in the 1993 study. However, these cost estimates do not include the cost of purchasing the portions of UP's right-of-way to be deeded to BNSF, the cost of compensating or relocating industries that will lose rail service if the BNSF corridor is completely abandoned, the cost of mitigation measures, and certain other costs.

Light Rail, Commuter Rail, and other Fixed Guideway Rail Systems

Although earlier studies indicate there is not currently sufficient ridership for a light rail, commuter rail, or some other fixed guideway rail transit system, it is prudent from the standpoint of long-range planning to identify and preserve rail corridors that may be needed in the future, given our growth potential. Evaluation of a countywide fixed guideway rail transit system should consider future air quality constraints in the Valley and the alternative to additional lanes on existing commuter corridors between smaller Fresno County cities and the metropolitan downtown hub. Caltrans continues to examine the rail alternative on rights-of-way of new freeway projects.

Existing rail trackage within the county has been inventoried and analyzed for its future benefit as mass transportation corridors. The existing trackage is extensive and located in areas that could well serve many of the heavily developed portions of the metropolitan area and other areas of the county. The thirteen-mile long Clovis Branchline/Pinedale Spurline Railroad Corridor was acquired by the cities of Fresno and Clovis in December 1997 for alternative transportation purposes, including potential future light rail.

It is feasible that commuter rail routes may someday extend into Tulare, Kings and Madera Counties. There is significant commuter activity between the Fresno-Clovis Metropolitan Area and other central San Joaquin Valley urban areas such as Visalia, Madera, and Hanford.

In addition, in 1986 Fresno County voters adopted a ½ cent sales tax for transportation purposes. Approximately 70 percent of the highway funds are to be utilized for an urban freeway system, most of which has been completed, including undeveloped highway medians that could serve as future light rail or some other fixed guideway rail transit corridors. The voters of Fresno County approved a twenty-year extension of Measure C effective July 1, 2007. Funding is included for Phase II of the Public Transportation Infrastructure Study (PTIS), which will look to the future and identify how Fresno County residents can take advantage of new technologies and advances in public transit and land use planning.

Current criteria utilized by state and federal agencies for light rail or other fixed guideway rail transit may be modified in the future. Such factors as changes in the economy, air quality, fuel costs and the availability of private vehicles may also increase the attractiveness of fixed guideway rail transit to local agencies and the general public. Both planning and contingency studies on the feasibility and routing of fixed guideway rail transit should continue.

Additional Amtrak Service

A sixth daily round trip was added on March 18, 2002. Both the fifth and sixth trains provide a direct train connection to Sacramento while the other four currently utilize Amtrak bus service for the portion of the trip between Stockton and Sacramento. Predominant right-of-way ownership is by the BNSF (Port Chicago – Bakersfield). The UP owns 39 miles at the north end of the route between Oakland and Port Chicago and 49 miles in the new segment between Stockton and Sacramento. Caltrans and Amtrak anticipate there will

be eventual demand for eight round-trips on the San Joaquins, with the seventh round trip (by rail from Stockton to Sacramento) occurring in 2010/11 and the eighth round trip (by rail from Stockton to Oakland) occurring in 2012/13.

San Joaquin Valley Rail Committee

A San Joaquin Task Force, consisting of a coalition of Amtrak users and rail service interest groups, was formed in 1983 to provide support for the continuation of Amtrak service throughout the Valley and to offer suggestions for service improvements. In 1987, this task force was replaced by the Steering Committee of Caltrans' Rail Task Force, now called the San Joaquin Valley Rail Committee. The Rail Committee provides a more structured forum for Valley rail concerns to be voiced. This committee has representatives appointed by Valley cities and counties and other non-Valley counties that are served by Amtrak's San Joaquin service.

A local rail committee was formed by the county of Fresno in 1985, although much of the staff time was funded through the COG. However, in May 1999, the COG Policy Board approved the establishment of a COG Rail Committee that would be named by and report directly to the Policy Board. The County's rail committee was subsequently abolished. The COG Rail Committee advises the Policy Board on all rail issues including high-speed rail, rail consolidation, Amtrak rail passenger service, rail abandonments, rail freight service, and other rail issues. Makeup of the committee includes one elected official each from the Fresno County Board of Supervisors, the Fresno City Council, the Clovis City Council, the Westside city councils as a whole, and the Eastside city councils as a whole. Public members include two members each appointed by the Board of Supervisors and the Fresno City Council, and one member each appointed by the Clovis City Council, Caltrans, the Eastside city councils as a whole and Westside city councils as a whole. There are a total of thirteen voting members on the COG Rail Committee.

High-Speed Rail Authority

The California High-speed Rail Authority is the successor organization to the earlier High-speed Rail Commission, which determined that high-speed rail is technically, environmentally and economically feasible once constructed, and would be operationally self-sufficient. The Authority's purpose is to fund and construct the high-speed rail system. In June 2000, the Authority produced a business plan for designing, building and funding a high-speed train system for the state. The Authority's plan, "Building a High-Speed Train System for California: Final Business Plan," satisfied a legislative requirement for showing where a statewide high-speed train network could go, how it could be built, how it could integrate with other forms of transportation and how it could be financed. Also in 2000, the Governor signed AB 1703 (Florez and Costa), which required the Authority to prepare a program Environmental Impact Report (EIR) and Tier 1 Environmental Impact Statement (EIS) on the statewide high-speed train system. The legislation also instructed the Authority to work with the Business, Transportation and Housing Agency to "develop and implement a strategy to maximize federal funding for the high-speed train network and the complementary, conventional train improvements." The Authority certified the Final Program EIR/EIS on November 2, 2005. The Fresno COG will continue to work with the Authority and its consultants to provide for consideration of Fresno County consensus positions regarding the many high-speed rail issues in subsequent environmental documents and other plans and studies.

The Intercity Rail Program

The vision of the Intercity Rail Program (IRP) is to provide a rail transportation alternative to other travel modes; provide relief to highway and airway congestion; improve air quality; conserve fuel; and contribute to efficient and environmentally superior land use. To achieve this vision for inter-city rail in California, service must be frequent and reliable, and serve the major inter-city destinations with travel times competitive with the auto. The San Joaquin Corridor, the Pacific Surfliner Corridor, and the Capitol Corridor are all supported by operating and capital funding from the state.

New Amtrak Station Facility

The restored historic Santa Fe Depot was dedicated on February 12, 2005. The City of Fresno continues to make improvements to the facility and site utilizing funds from the Transportation Enhancement Program and other programs.

Rail Abandonment

Abandonment of railroad branch lines within Fresno County is detrimental to users relying solely on rail freight service and results in the loss of potential light or commuter rail corridors that would be almost impossible, or at least very difficult, to replace. State law requires that local jurisdictions have a right to review proposed abandonments and have the right of first refusal of that right-of-way. Local agencies in Fresno County exercise their review rights whenever abandonments are proposed. Additionally, Fresno County rail policy seeks legislation to require that all lines proposed for abandonment be brought under public ownership as a precondition to abandonment.

In December 1997, the cities of Fresno and Clovis acquired title to those portions of the Clovis Branchline/Pinedale Spurline Railroad Corridor which lie within their respective spheres of influence. The Corridor extends, within the City of Fresno and its Sphere of Influence boundary, from North Ingram Avenue to North Willow Avenue and adjacent to North Willow Avenue from East Copper Avenue to its intersection with the Fresno Sphere of Influence boundary and, within the City of Clovis and its Sphere of Influence boundary, from its intersection with the Clovis Sphere of Influence boundary to approximately the East Dayton Avenue alignment. With the exception of the central portion, the corridor has been developed as a multi-use trail. In the long-term, the Corridor may also accommodate transit in addition to pedestrian and bike paths. Transit is understood to mean local rail, light rail, or other transit modes.

Rail Inventory

On April 30, 1990 the COG submitted a Commuter and Inter-City Rail Right-of-Way Inventory to the California Transportation Commission, consisting of the following:

- All potentially available and suitable rights-of-way for commuter and inter-city rail development.
- All rights-of-way owned by railroad corporations which may or may not be for sale at the present time.
- Full consideration of the potential for passenger service on railroads which are not expected to be for sale, including the leasing of operating space and other operating arrangements on currently operated railroads.

The Inventory was updated in 1992 to include a review of the 1990 Rail Right-of-Way Inventory and an updated survey of corridors in the County that may have potential for passenger rail service.

The Fresno County Rail Corridor Preservation/Acquisition and Transportation Alternatives Study was adopted by the COG in January 1997. The primary purpose of the study was to inventory the different railroad branchline corridors within Fresno County and evaluate their potential for alternative transportation purposes, including potential future fixed guideway rail transit. The study concluded that although the majority of branch line corridors within the County have already been abandoned, dismantled and sold, most of the corridors that have the greatest potential to provide rail transit service are intact. The study prioritizes the different corridors for preservation and identifies funding sources and strategies.

Reference should be made to the 1990 Commuter and Inter-City Rail Right-of-Way Inventory, the 1992 update of the inventory, the 1997 Fresno County Rail Corridor Preservation/Acquisition and Transportation Alternatives Study, and the 2004 Caltrans Rail Right-of-Way and Abandoned Rail

Corridors Evaluation Study for detailed information on the different railroad mainlines and branchlines existing in Fresno County, including their potential for rail transit service.

Potential Rail Corridors in Freeway Rights-of-Way

Freeways 41, 180 and 168 within the Fresno Clovis Metropolitan Area each contain an ultimate median of thirty-six (36) feet, which would provide sufficient width for light rail, except possibly at interchanges. In addition to the ultimate median, twenty-four (24) feet for two additional median lanes is reserved for HOV, Dedicated Bus or regular traffic lanes, for a total right-of-way in the median of sixty (60) feet.

California Inter-Regional Intermodal Service (CIRIS)

The primary objective of this study was to estimate the market for the California Inter-Regional Intermodal Service (CIRIS), a short-haul rail intermodal service that would connect the San Joaquin Valley with the Port of Oakland. This short-haul rail intermodal service is viewed by many as an alternative that would reduce the amount of truck traffic in the region by diverting some of the goods between the Valley and the Port from the current truck dray operations to rail. Furthermore, the Fresno area location for the rail alternative appears favorable because it has both a large market and a relatively low cost differential between the CIRIS service and the current truck-only drayage operations. Public benefits from the operation of the CIRIS service include lower congestion and emission reductions due to reduced truck traffic

Potential Commuter Rail Corridor Extension to Adjoining Counties

In addition to identifying and preserving potential future commuter or light rail corridors in Fresno County, the transportation needs and resources of adjacent counties should also be considered. The counties of Madera, Tulare and Kings have also developed rail inventories that may be helpful in determining which rail corridors have potential for regional commuter or light rail service. Kings, Tulare, and Fresno counties, along with the San Joaquin Valley Railroad, private companies and the San Joaquin Valley Unified Air Pollution Control District, cooperated to rehabilitate the rail between Visalia in Tulare County and Huron in Fresno County in order to improve and reestablish freight rail service. The two-year project was completed in 2003. At some future point, the Cross Valley Rail Project may also provide commuter rail opportunities.

Completed Improvements

Several rail-related construction projects in Fresno County have either been started or have been completed during the past three years. These include the project to double-track the 8.6 mile segment of the BNSF mainline between Calwa and Bowles in Fresno County, scheduled for completion in early 2007; the restoration of the historic Santa Fe Depot for use as Fresno's Amtrak station, completed in early 2005; and, the construction of an underpass at Weldon Avenue and the Burlington Northern Santa Fe.

Local agencies, Amtrak, community rail interest groups and State and Federal legislators and agencies continue to lay the groundwork for additional significant changes. Major efforts are focused on two goals, rail consolidation and high-speed rail.

4.8.4 Needs Assessment

The following rail transportation needs for Fresno County have long been identified.

- Consolidation of all Burlington Northern Santa Fe mainline rail traffic onto the Union Pacific corridor from the point where the two railroad tracks cross at North Avenue and Golden State Boulevard near Calwa to a point north of Herndon Avenue.

- Additional inter-city train service for the Amtrak San Joaquin route.

- Rerouting the Amtrak San Joaquin service from the Burlington Northern Santa Fe to the Union Pacific alignment between Fresno and Stockton.

- Construction of a new multimodal station in Fresno on the Union Pacific alignment subsequent to or concurrent with consolidation.

- Obtaining and preserving abandoned railroad rights-of-way through the County of Fresno for future local transportation purposes, including commuter or light rail.

- Long-range planning and corridor preservation for potential future commuter or light rail or other fixed guideway mass transit applications in Fresno County.

- Development of additional direct passenger rail service rather than connecting dedicated bus service between Stockton and Sacramento and new passenger rail service between Bakersfield and Los Angeles as a logical expansion of Valley train service.

- Assessment of potential commuter and light rail and other fixed guideway rail transit systems in Fresno County.

4.8.5 Proposed Actions

Future Planning Activities

Rail planning will continue to consider the above needs with emphasis on constructing railroad grade separations, rail consolidation, high-speed rail, and fixed guideway transit systems.

The extension of Measure C, approved by the voters in November 2006, requires progress be made on rail consolidation. An evaluation of its feasibility and the likelihood of securing the additional funding are to be included in the biennial update of the Expenditure Plan. A more thorough review should take place at ten years. If rail consolidation is not programmed with construction imminent within fifteen years after the Measure passed, the funds will revert to grade separation projects that coordinate with transit improvements and provide the greatest amount of congestion relief and air quality benefit. A portion of the funds may be used to fund the effort of securing the additional funding from state, federal, or other agencies to fully fund rail consolidation. This would include financing a position to seek the additional funding, securing the services of a lobbyist for this project, and working on operations issues along the corridors. Fresno Area Residents for Rail Consolidation (FARRC) and the City of Fresno will work with the Fresno County Transportation Authority to pursue the additional funding. Should rail consolidation occur, the land along the BNSF tracks will revert back to the City and County of Fresno for trails, bikeways, and pedestrian facilities.

The City of Fresno will continue to rehabilitate the existing historic Santa Fe depot and site using federal Transportation Enhancement Program funds and other sources of funding. COG staff anticipates working closely with the City of Fresno to identify and utilize additional funding sources to complete the site improvements so that the new station will function effectively as a multimodal facility.

The potential for a light rail, commuter rail and other systems of fixed guideway transit in the Fresno-Clovis Metropolitan Area and throughout Fresno County will again need to be evaluated. Options must be kept open when evaluating mass transit and right-of-way needs in the future. Phase I of the Public Transportation Infrastructure Study has been completed. The purpose of the Study is to evaluate mobility needs and opportunities, and to identify strategies for public transit and transit supportive infrastructure development that will result in wider acceptance and use of non-automobile transportation modes such as public transit, bicycle and pedestrian travel. In addition to the development of viable alternative public transportation options for Fresno County, this study seeks to develop ridership projections and cost estimates for various scenarios that will be used to establish a long-range plan leading to optimum connectivity within the region. The extension of Measure C includes funding for Phase II of this Study.

Fresno COG member agencies will continue to petition the Public Utilities Commission for funding of grade separations, including separations on the Union Pacific mainline where both Burlington Northern Santa Fe and Union Pacific rail traffic will one day be consolidated, with priority given to public safety and improving the circulation system. The COG and member agencies will also investigate the establishment of "quiet zone communities" within Fresno County. Current California Public Utilities Code rules require the sounding of the locomotive horn or whistle when crossing any street, road, or highway at grade level. Newly proposed federal rules would provide potential relief to communities by establishing rules for ensuring railroad grade-crossing safety so that the sounding of the locomotive horn can be avoided. A community desiring to become a Quiet Zone must install Supplemental Safety Measures (SSM's) or additional warning device/traffic control apparatus that can effectively compensate for the absence of the locomotive horn or whistle.

During the next few years, much rail planning activity will continue to center around high-speed rail in an effort to maximize its benefits for Fresno County. This will include the ongoing development of Fresno County consensus positions on the many aspects of high-speed rail and the effective communication of those positions to the High-Speed Rail Authority. COG will continue to work closely with the Authority and its staff and consultants during the development of the project-level environmental document for Fresno County and the San Joaquin Valley, and other studies and plans.

Local agencies, Amtrak, rail interest groups and state agencies continue to work together and with the railroads to lay the groundwork for significant railroad improvements in the future.

Short-Range Improvement Plan

Grade Separation

No grade separation projects are currently scheduled.

Rail Consolidation

The extension of Measure C provides for $102.5 million over the twenty-year period for rail consolidation. Effective July 1, 2007, funding becomes available for planning, design, and environmental studies as well as lobbying activities required to secure additional funding. The COG will continue to investigate all available means to accomplish this project, including linkages with the development of a California high-speed rail system and other state and federal initiatives.

Rail Passenger Station

The rehabilitation of the historic Santa Fe Depot for use as the new rail passenger station in downtown Fresno on the Burlington Northern Santa Fe tracks was completed in early 2005. However, additional improvements to the Depot itself and to the site have either been programmed or will be programmed as funds become available.

Commuter Rail Feasibility Study

The extension of Measure C provides funding for Phase II of the Public Transportation Infrastructure Study. Phase II of the PTIS will provide additional information on alternative fixed guideway rail transit systems, including light rail and commuter rail. Current criteria of state and federal agencies for light rail may be modified in the future. Other factors, including changes in the economy, difficulties in achieving air quality attainment through traditional approaches, fuel costs, the availability of private vehicles, and increasing vehicular congestion and development densities may increase the attractiveness of alternative fixed guideway rail transit systems to local agencies and the general public. An analysis of existing systems in communities similar to Fresno in terms of size, density of development and other factors will comprise an important component of the study.

Caltrans Recommendations for Amtrak

The fiscal year 2006-07 Business Plan for the San Joaquin Corridor, prepared by the Caltrans Division of Rail, identifies short-term actions that, when implemented, will make the service more attractive to potential riders. The focus of Caltrans' short-term operating strategies is to improve customer service and amenities and increase the cost-effectiveness of the services. These two strategies are complementary, as an improvement in customer satisfaction should increase ridership and revenue. Performance standards for this year include five percent ridership and fifteen percent revenue gains, a farebox return projected to increase to 52.4 percent, and on-time-performance projected to continue at 75 percent.

Actions address opening new stations and parking facilities, additional improvements to track and signals elsewhere on the line, marketing the service and public relations, expanding the "Free Transfer" program with local transit operators, adjustments to the feeder bus network, coordinating schedules with other Amtrak services, and monitoring and adjusting food service as needed. These recommendations are aimed at significantly upgrading the level of train service available to San Joaquin passengers and increasing ridership. Of particular note is an effort by Caltrans to more effectively market Amtrak San Joaquin train service to minority groups, particularly Latinos because of their relatively large population, and efforts to expand the college student travel discount program and promote the Senior Travel program.

Long-Range Improvement Plan

High-Speed Rail

In the long-term, rail improvements in Fresno County may occur in conjunction with the development of a statewide high-speed rail system. Specific improvements might include the construction of a new rail passenger station along the Union Pacific corridor in downtown Fresno and new grade separation structures, which might also benefit rail consolidation, along the Union Pacific corridor, the recommended alignment for high-speed rail through Fresno.

Amtrak

Principal long-range objectives for the San Joaquin Corridor include increasing annual ridership, annual revenues, the revenue/cost ratio, and the frequency of daily round-trip service from 4 to 5 between Oakland and Bakersfield and from 2 to 3 between Sacramento and Bakersfield. Additional objectives include reducing train running times and improving the reliability of trains. Improvements have been identified which will provide for an increase of train speeds to 110 mph where possible, in order to reduce travel times, and to operate additional roundtrips. These improvements include significant expansion in track capacity and the installation of a supplemental signal system to permit speeds higher than the current limit of 79 mph.

4.8.6 Financing

Existing federal financial sources include:

- Federal Transit Administration - Federal programs have been available in the past to fund urban light rail and commuter rail projects that meet federal criteria. While at this time it is doubtful that local rail projects can meet current federal criteria under these programs, COG will periodically review these criteria and other factors to determine the current feasibility of light rail or commuter rail or some other fixed guideway rail transit projects.

- The Congestion Mitigation/Air Quality program provides funding for transportation projects that will contribute to the attainment of national ambient air quality standards. The capital costs of new rail systems that initiate commuter and/or urban rail services are eligible for CMAQ funding. In some cases CMAQ funds can be used for operating costs up to three years for new transit

systems. Although these funds could likely be used to purchase abandoned rail right-of-way for non-motorized transportation, because of the ability to implement such a project fairly quickly, it is not likely that these funds could be used to purchase abandoned right-of-way for a future fixed guideway rail program that is not scheduled for implementation in the near future. CMAQ funding was a key component of the funding package developed for the Cross Valley Rail Project.

- The Transportation Enhancements Activities (TE) Program provides funding for projects that integrate transportation facilities into their surrounding communities. Preservation of abandoned railway corridors is one of the acceptable funding categories of the TE Program, with an 88.53 percent federal funding share. Emphasis is given to projects that produce an immediate result in terms of trails, bikeways or other transportation modes. TE funds have been utilized along with other funding sources to develop and landscape the Clovis Branchline/Pinedale Spurline Corridor and the AT&SF Railroad Corridor through Reedley as multi-use trails.

- The Regional Surface Transportation Program (RSTP) provides funding for transit capital improvement projects and bicycle/pedestrian projects. The federal share is 88.53 percent for transit projects and 80 percent for bicycle or pedestrian related projects. Acquisition of the Clovis Branchline/Pinedale Spurline Corridor was funded in part by RSTP funds.

Existing state financial sources include:

- Public Utilities Commission - Grade crossings and railroad grade separations are implemented through the State Public Utilities Commission (PUC). Funding for such crossing and separation projects is currently limited to $15 million on a statewide basis. The application cycle begins every two years and each new list is effective for two years. The PUC also recommends to Caltrans projects to be funded from the annual $10 million Section 130 Highway-Rail Crossing Improvement Program, a federally funded program for reducing the hazards of at-grade highway-rail crossings.

- Projects selected by the Public Utilities Commission are funded 80 percent by State grade separation assistance funds with a 10 percent match from the affected railroad and a 10 percent match from the responsible local agency. Railroad projects are constructed based on their priority list ranking and on the availability of state grade separation assistance funds.

- The Intercity Rail Program - The IRP includes five corridors identified in Proposition 108. The San Joaquin Corridor is one of those corridors. The Intercity Rail Program does not require a local match. The Department of Transportation has the lead role in the IRP. Local input is limited to sharing ideas and concerns. There is no formal application process for the local agencies to participate in. Most of these bond funds have been allocated.

- Additional funding for inter-city rail projects along the San Joaquin Corridor became available with the passage of Proposition 116. Total funding available to the corridor is $145 million. This program is also a Caltrans-driven program and all Proposition 116 funds will have Caltrans as the project manager. Most of these bond funds have been allocated.

- State Proposition 1B, approved by the voters November 7, 2006, provides $400 million for Caltrans intercity rail projects. Of this amount, $125 million shall be used for the procurement of intercity rail cars and locomotives. Other provisions of Proposition 1B include funding for commuter rail and freight rail.

Existing local financial sources include:

- City and County TDA funds and general funds may be utilized for the purchase of abandoned rail right-of-way and other rail improvements.

- Other local funds available to governmental agencies are their gas tax revenue and Measure "C" revenues. These funds are especially useful in providing the local share of State programs described above. In addition, as noted above, the extension of Measure C includes $102.5 million for the rail consolidation project. If this project is not programmed with construction imminent within 15 years of the date Measure C was extended (November 7, 2006), the funds will revert to grade separation projects that coordinate with transit improvements and provide the greatest amount of congestion relief and air quality benefit.

Anticipated Revenues & Expenditures

Valley passenger rail service is operated by Amtrak and supported by state funding. There is no local budget expended for this service.

4.9 Specific Transportation Strategies and SAFETEA-LU Management Systems

4.9.1 Overview

The use of motor vehicles on the street and highway system continues to be the primary travel mode within and through the region, given the rural and agricultural nature of the county. Under SAFETEA-LU and the influence of the Clean Air Act, more emphasis is placed on the efficient use of existing systems. Maintenance of existing roadways and reduction of congestion, maintenance of existing capacity, or improving capacity at a low cost are all important. Capacity is also important to modal alternatives, such as transit and cycling, which use existing streets. The efficient functioning of streets and highways also contributes to improved air quality as vehicles generally produce more air pollution at low speeds and while idling.

In addition to the planning agencies, the California Air Resources Board and the San Joaquin Valley Air Pollution Control District contribute education, research, and regulation efforts related to transportation strategies. The COG and local agencies involved in transportation and land use planning work cooperatively with the Air District to enact strategies working toward the goal of air quality. While there is overlap among the many transportation strategies, efforts fall into the following categories:

1. Transportation Control Measures

Transportation Control Measures (TCMs) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. States are required to show that they have included all reasonably available control measures in the State Implementation Plans (SIPs), including Transportation Control Measures. Transportation Control Measures (TCMs) focus on the reduction of motor vehicle emissions by reduction of vehicle use or changing traffic flow or congestion conditions. Typically, vehicle technology based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not considered TCMs.

The Clean Air Act as amended in 1990 lists the following transportation control measures and technology-based measures:

(i) programs for improved public transit;
(ii) restriction of certain roads or lanes to, or construction of such roads or lanes for use by, passenger buses or high occupancy vehicles;
(iii) employer-based transportation management plans, including incentives;
(iv) trip-reduction ordinances;
(v) traffic flow improvement programs that achieve emission reductions;
(vi) fringe and transportation corridor parking facilities serving multiple occupancy vehicle programs or transit service;

(vii) programs to limit or restrict vehicle use in downtown areas or other areas of emission concentration particularly during periods of peak use;
(viii) programs for the provision of all forms of high-occupancy, shared-ride services;
(ix) programs to limit portions of road surfaces or certain sections of the metropolitan area to the use of non-motorized vehicles or pedestrian use, both as to time and place;
(x) programs for secure bicycle storage facilities and other facilities, including bicycle lanes, for the convenience and protection of bicyclists, in both public and private areas;
(xi) programs to control extended idling of vehicles;
(xii) programs to reduce motor vehicle emissions, consistent with title II, which are caused by extreme cold start conditions;
(xiii) employer-sponsored programs to permit flexible work schedules;
(xiv) programs and ordinances to facilitate non-automobile travel, provision and utilization of mass transit, and to generally reduce the need for single occupant vehicle travel, as part of transportation planning and development efforts of a locality, including programs and ordinances applicable to new shopping centers, special events, and other centers of vehicle activity;
(xv) programs for new construction and major reconstructions of paths, tracks or areas solely for the use by pedestrian or other non-motorized means of transportation when economically feasible and in the public interest. For purposes of this clause, the Administrator shall also consult with the Secretary of the Interior; and
(xvi) program to encourage the voluntary removal from use and the marketplace of pre-1980 model year light duty vehicles and pre-1980 model light duty trucks.

The Revised 1996 Rate of Progress Plan for the San Joaquin Valley specifically identifies TCMs committed for implementation from 1990 through 1996. The commitments are listed within the following TCM categories:

TCM1 – Traffic Flow Improvements
TCM2 – Public Transit
TCM3 – Rideshare Programs (Rule 9001)
TCM4 – Bicycle Programs
TCM5 – Alternative Fuels Program

Most of the TCMs in the plans were implemented in the short term, and have been fully implemented. As a result, any resulting creditable emission reduction benefits have been incorporated into the traffic forecasts for the region. However, the TIP/RTP provides continued funding for transportation projects that support TCM programs (e.g., traffic flow improvements, public transit, rideshare programs, and bicycle programs).

The Amended 2003 PM-10 Plan for the San Joaquin Valley was approved by EPA on April 28, 2004. Local jurisdictions included commitments in the *Amended 2002 and 2005 Ozone Rate of Progress Plan* to commitments reduce ozone related emissions; these measures are documented in the *Regional Transportation Planning Agency Commitments for Implementation Document, April 2002.* These commitments are included by reference in the Amended 2003 PM-10 Plan to provide emission reductions for precursor gases and help to address the secondary particulate problem. Since these commitments are included in the plan by reference, the commitments were approved by EPA as TCMs. The Transportation Conformity Rule requires that the TIP and RTP "must provide for the timely implementation of TCMs in the applicable implementation plan." Documentation of the timely implementation of TCMs is included in the corresponding conformity analysis.

2. Transportation Demand Management

Transportation Demand Management (TDM) refers to strategies aimed at modifying people's travel behavior. TDM specifically targets the work force, which generates the majority of peak hour traffic. Education is an essential feature of demand management, as attempts to persuade people to consider their transportation choices in an effort to reduce SOV usage. Transportation alternatives must be available. Strategies and alternative transportation modes, which are included in TDM, are as follows:

- Public transit
- Rideshare programs
- Use of flex hours
- Vanpools
- Cycling or walking
- Telecommuting
- Mixed use land development

Similar to TCMs, Fresno County, the cities, private businesses, and governmental offices implement some of these programs.

3. Transportation System Management

Transportation System Management (TSM) is a program designed to identify short-range, low-cost capital improvements, which improve the operating efficiency of the existing transportation infrastructure. TSM, in coordination with the programs listed above, improves air quality and the level-of-service of the existing roadways, reducing congestion and improving circulation. These strategies fall within the responsibility of member agencies and Caltrans and include the following:

- Ramp metering
- Traffic signal synchronization
- Street widening
- Removal or limitation of on street parking
- Access limitations on arterial streets
- Turning lanes and bus bays
- Traffic engineering geometric improvements
- Bikeway facilities
- Bus terminals
- Pedestrian malls

Transportation System Management strategies are implemented by cities, the county, transit operators, and Caltrans.

4. Land Use Strategies

Research done by the Air District and the Air Resources Board indicates that land use and transportation strategies can reduce vehicle trips and vehicle miles traveled, thus reducing the air pollution produced by automobiles. Within California, and the Central Valley in particular, design of residential neighborhoods still assumes reliance upon the automobile for the majority of trips. Land use decisions in the next twenty-five years will have an important impact upon future air quality. Alternative transportation modes must be available in order for residents to have a choice. Communities can be designed to be more conducive to walking, biking, and transit use. In that process, "livable" environments are created with reduced congestion, healthier air, and increased mobility for all groups. Strategies used effectively in other communities have resulted in urban areas that have improved air quality, are viable economically, and are hospitable to their residents. Available approaches include the following:

- Compact development
- Focused infill and renewal
- Transit oriented development
- Concentration of employment densities (50 to 60 employees per acre)
- Enhanced downtown districts
- Focusing expected new growth into compact, walkable, mixed-use configurations
- Clustered activity centers- nodes, urban villages, or suburban activity centers
- Integrated street patterns which allow travel choices to neighborhood destinations
- Traditional neighborhood development (Neo-Traditional Design Movement)

Land use strategies and policies are directed and implemented by those agencies empowered by the State of California with authority over land use matters: counties and cities. In April of 1998, a coalition of Fresno area business, agriculture, conservation and development interests, the Growth Alternatives Alliance, released *A Landscape of Choice: Strategies for Improving Patterns of Community Growth*. This document sets forth a series of planning principles and recommendations that establish a benchmark for consensus-driven decision making to guide lawmakers in planning the future of Fresno County and its 15 cities. Three basic guiding principles proposed include: utilization of urban land as efficiently as possible, development of livable communities that promote pedestrian and transit-oriented design, and recognition of the need to protect and direct growth away from important agricultural land. The Alliance asked for and received the unanimous acceptance and endorsement of its report by all legislative bodies with land use authority in Fresno County.

4.9.2 Existing Requirements

Transportation conformity, which originates from the Federal Clean Air Act, is the main requirement. The transportation conformity rule is codified in Title 40 Code of Federal Regulations Part 93. The conformity rule requires that transportation plans, programs, and projects conform to state, air quality implementation plans, known as the State Implementation Plan (SIP). Conformity to a SIP means that transportation activities will not produce new air quality violations, worsen existing violations, or delay timely attainment of the national ambient air quality standards.

Timely implementation of Transportation Control Measures (TCMs) is one of the conformity requirements. Fresno COG's conformity process is discussed in more detail in the 2007 Air Quality Conformity Determination. The conformity rules also require interagency consultation. Fresno COG along with the other seven Valley TPAs signed a Memorandum of Understanding with the Air District to jointly develop and implement transportation control measures.

The most important change in requirements since the 2004 RTP is that revocation of the one-hour ozone standard, which has been replaced by the more stringent 8-hour standard. The Air District is currently developing an 8-hour ozone attainment demonstration plan (or SIP). This plan will likely include a request for reclassification from serious to extreme nonattainment. This would delay the attainment date from 2013 to 2024. The new State Implementation Plan will contain new transportation conformity motor vehicle emission budgets. Fresno COG staff and the air quality consultants are working with the Air District to develop the new motor vehicle budgets.

Regulation of emissions is not sufficient; public information and education campaigns certainly play a role in promoting the behavior change necessary to impact vehicle miles traveled. Under SAFETEA-LU, public participation is an integral component of the transportation planning process. Fresno COG continues to bring transportation-related air quality issues to our technical and policy committees and our Board in hopes of educating not only transportation professionals, but also addressing the interested public.

4.9.3 Accomplishments

The foregoing is descriptive of transportation strategies which are aimed at reducing congestion, improving transportation system operational efficiencies, reducing vehicle miles traveled, and persuading the work commuter to evaluate the choice of travel mode and thereby reduce dependence on single occupant vehicle (SOV). Fresno County agencies, particularly within the metropolitan area, have been involved in implementing many of these strategies since the late 1970's. Recent years have seen improvements in our ability to monitor and to model the effectiveness of various strategies. The Air District continues in its path of ongoing negotiation of rules, strategies, and requirements with local agencies and local businesses. Change may be slow, but it is being accomplished incrementally.

4.9.4 Needs Assessment

Fresno COG has worked with the Air District on development of the local control measure section of the 8-hour ozone plan. No new measures are proposed in this RTP; however, Fresno COG continues to review and improve the programs that impact air quality, such as the Congestion Mitigation and Air Quality (CMAQ) program.

4.9.5 Proposed Actions

Short-Range Plan

Actions required and taken between now and 2010 make up the short-range transportation strategy for Fresno County. These actions are found in the Short-Range Transit Plan, the Regional Transportation Improvement Program, and the TCMs contained in existing Air District plans.

Long-Range Plan

Long-range strategies will be dependent on the effectiveness of short-range programs and upon available funding. Potential programs include land use planning strategies that increase densities and concentrate trips, high-speed rail, light rail or other alternative fixed route facilities, HOV lanes, and other multimodal corridor alternatives.

4.9.6 Unfinanced Needs

Unfinanced needs for transportation strategies are documented in other modal sections of the RTP, which deal with meeting transportation needs in ways that do not expand the number of SOV trips. These unfinanced needs include the following:

- Improving the hours, frequency, and geographical coverage of transit service
- Light rail or electric bus systems
- Redevelopment leading to increased densities along corridors
- Personal rapid transit systems
- Electric cars
- Additional park and ride facilities
- Completion of all planned bikeway facilities
- Signal synchronization throughout the metropolitan area
- Other creative uses of developing technology

4.9.7 SAFETEA-LU Congestion Management Process

SAFETEA-LU requires Transportation Management Areas (TMAs), which are urbanized areas with a population over 200,000, to address congestion management through a process that provides for safe and effective integrated management and operation of the transportation system. Fresno is considered a TMA, and as such, is required to include congestion management in the development of performance measures and strategies in the transportation plans.

The Congestion Management Process (CMP) provides information on transportation system performance and alternatives to relieve congestion and improve mobility of persons and goods. The intent of a CMP is identification and implementation of the most efficient use strategies for existing and future transportation facilities, where congestion is occurring or is expected to occur. The CMP includes several elements:

(1) Methods to monitor and evaluate the performance of the multimodal transportation system
(2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion
(3) Establishment of a coordinated program for data collection
(4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies
(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy
(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies

Fresno COG's Congestion Management System (or Process) is defined in Work Element 172 of our Overall Work Program (OWP). It is a system constructed of parts of existing, workable systems including monitoring and evaluation of the multimodal transportation system (e.g. traffic counts), the ridesharing program, assessment of existing programs, etc. As part of the 2007/2008 OWP, Fresno COG has committed to review and update our Congestion Management System (or Process).

4.9.8 California Congestion Management Program

California's Congestion Management Program became law along with the gasoline tax increase in 1990 (Proposition 111). The Congestion Management Program tied land use and development policies to transportation with the intent of lessening smog and traffic congestion. So cities and counties would take the legislation seriously, a portion of the new gasoline tax money was to go directly to cities and counties that complied with a locally adopted Congestion Management Program.

With the passage of AB 2419 (Bowler) in 1996, the Congestion Management Program became optional if the county and cities, representing a majority of the incorporated population, decided to exempt themselves from the Congestion Management Program requirements. Fresno County's Congestion Management Program and the COG's designation as the Congestion Management Agency was rescinded by the COG Policy Board on September 25, 1997, at the request of Fresno County and its fifteen cities.

4.10 Air Quality

4.10.1 Overview

Air quality is a self-defining term: *the quality of the air that we breathe*. As discussed in Chapter 1, the San Joaquin Valley faces the serious environmental problem of poor air quality during many parts of the year. National ambient air quality standards (NAAQS) are established for primary pollutants and are set to protect sensitive persons (children, elderly, those with respiratory disease, etc.) from air that is harmful. Pursuant to federal law, the Environmental Protection Agency (EPA) has designated the entire San Joaquin Valley a nonattainment area that does not meet these standards for ozone and particulate matter.

<u>Ozone</u>
Ozone is the main component of what is commonly referred to as urban smog. Ozone is formed when two chemicals, volatile organic compounds (VOCs) and nitrogen oxides (NOx), interact with sunlight and heat. Generally, low wind, stagnant air, no clouds, and warm temperatures provide the best conditions for ozone formation; the conditions in San Joaquin Valley are ideal for this reaction. Since the formation of ozone occurs during warmer weather, it is mostly a problem in summer and early fall. Ozone does not form immediately, but occurs over time and distance; therefore, ozone is a regional pollutant and often impacts a large area.

The first component of ozone is the volatile organic compounds (VOCs). Significant sources of VOCs are (1) Solvent Evaporation, which includes dry cleaning, painting, printing, and consumer products (cleaners, insect repellents, air fresheners, etc.), (2) Farming Operations, (3) Automobiles, (4) Petroleum Production, which includes emissions resulting from the handling of petroleum liquids and gases at extraction, processing, transport, and marketing facilities, and (5) Light-Duty Trucks (pick-ups, SUVs, etc.)

Again, the second component that contributes to the formation of ozone is NOx. Main contributors to NOx emissions are (1) Heavy-Duty Trucks, (2) Fuel Combustion, which comes from stationary sources such as orchard heaters, oil and gas production, electric utilities, and commercial space and water heaters, (3) Farm Equipment, (4) Off-Road Equipment, including construction equipment, small utility engines, lawn mowers, leaf blowers, and portable generators, and (5) Light-Duty Trucks.

In order to recognize the impacts of day-long exposure, the U.S. EPA has developed a new 8-hour standard for ozone. The 8-hour standard is set at 80 ppb and is more protective of human health and the environment. On April 15, 2004, EPA designated the eight-counties of the San Joaquin Valley as a nonattainment area for the 8-hour ozone standard.

Particulate Matter

The other significant pollutant in the San Joaquin Valley is Particulate Matter (PM). Particulate matter, commonly called "dust", actually takes several different forms, including tiny pieces of soot, dust, ash, or a combination of other chemicals. In addition to directly-emitted particles, "secondary particles" result from gases that are transformed into particles through physical and chemical processes in the atmosphere. These particles can include basic elements such as carbon and metals, or can be complex mixtures such as diesel exhaust and soil.

In addition to the ozone problem in summer and early fall, the San Joaquin Valley exceeds the standards for coarse particulate matter (PM-10) at other times of the year. The highest levels of particulate matter in Fresno County and the San Joaquin Valley are found in late fall (October) through winter (February). This, in combination with ozone, creates a year-round air pollution problem. The primary sources of PM-10 include farming operations, paved road dust, fugitive dust, unpaved road dust, and waste burning. In addition, residential wood combustion can be a significant contributor in urban areas during the winter months, accounting for up to 30% of emissions.

The federal standard for particulate matter is set for all particles with a diameter of 10 microns or smaller (PM-10). To put that size in perspective, the diameter of a human hair is anywhere from about 50 to 100 microns. Our region must meet both a daily PM-10 standard of 150 micrograms per cubic meter, as well as an annual average of 50 micrograms. On May 8, 2006, the State requested that EPA find that the Valley attained the PM-10 standards based on Valley air quality data for the years 2003-2005. On October 17, 2006, EPA finalized approval of the state's request to find the Valley in attainment of the PM-10 NAAQS.

PM-10 also includes finer particles with a diameter of 2.5 microns or smaller (PM2.5). Although the status has not yet designated by EPA, the Valley experiences fine particulate (PM2.5) during winter months that are at least twice the national ambient air quality standard for this pollutant. These finer particles pose an increased health risk, because they can reach deep into the lungs and contain substances that are particularly harmful to human health. Whereas most PM10 is composed of dust, PM2.5 comes mainly from combustion sources, such as vehicle exhaust and fireplaces; NOx is a significant contributor to the formation of fine particulate matter.

Carbon Monoxide

Carbon monoxide (CO) has been an air quality problem in the past, but only affected four of the eight Valley counties, including Fresno, Kern, San Joaquin, and Stanislaus. However, the Fresno/Clovis Metropolitan Area was redesignated to a "maintenance area" when EPA proposed direct, final approval for the *1996 Carbon Monoxide Redesignation Request and Maintenance Plan* this plan, and promulgation of the SIP on March 31, 1998. This means that the concentrations of CO have not exceeded the national ambient air quality standard in the near history.

Air Quality Planning

Based upon the geographical shape of the Valley, one single air basin, a regional approach to air quality planning is utilized. Currently, the eight Valley transportation planning agencies (TPAs) and the San Joaquin Valley Unified Air Pollution Control District ("Air District") have a Memorandum of Understanding (MOU) to ensure a coordinated transportation/air quality planning approach. The MOU defines a cooperative process aimed at maximum effectiveness and compatibility of both air quality and transportation plans. It also facilitates compliance with the air-quality conformity provisions of the federal Clean Air Act.

A close relationship exists between Transportation Systems Management, Transportation Demand Management, air quality, and energy planning. Transportation Systems Management is the efficient management of existing transportation systems so as to improve upon the level of performance (i.e. traffic flow improvements), while Transportation Demand Management involves planning strategies for managing human behavior regarding how, when, and where people travel. Because Transportation System and Demand Management efforts have secondary benefits, reduction in motor vehicle emissions

and in fuel use, they along with other measures are commonly referred to as Transportation Control Measures.

The Regional Transportation Plan recognizes the state and federal air quality planning regulations. This chapter summarizes these regulations, and reviews actions to reduce mobile source emissions to a level necessary to attain state and federal air quality standards.

4.10.2 Existing Federal & State Requirements

Transportation Planning as Related to Air Quality / Energy Issues

In September of 1975, the Urban Mass Transportation Administration (now named the Federal Transit Agency) and the Federal Highway Administration issued joint regulations for the development of transportation improvement programs. The regulations called for a short-range, low-capital, multimodal Transportation Systems Management Element to be consistent with the long-range Regional Transportation Plan. The California Legislature also passed statutory requirements (AB 3705, 1988) which mandated the preparation of a separate Transportation Systems Management element for regional transportation planning areas over 50,000 population.

The Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991 redefined the joint regulations and created a new framework for linking air quality, transportation, and land use. It intended a significant shift in federal transportation policy from reliance on roads and motor vehicles to a multimodal approach. ISTEA and its successors TEA-21 and SAFETEA-LU employ a model of federalism that delegates major planning decisions to the states and MPOs. They also reinforce the goals of the federal Clean Air Act by making air pollution a central concern of transportation planning and spending decisions.

ISTEA created, and TEA-21 and SAFETEA-LU, continue the Congestion Mitigation and Air Quality (CMAQ) Program, which funds transportation projects and related programs that contribute to air quality improvements and provide congestion relief. The main goal of the CMAQ Program is to reduce emissions in nonattainment and maintenance areas.

Air Quality Planning

Federal and state legislation requires an integrated transportation/air quality planning process. The Federal Clean Air Act Amendments of 1990 reaffirmed that all areas have to attain the national ambient air quality standards. Numerous specific reductions of emissions and an aggressive attainment time frame were required. Although the Air District is responsible for implementing most federal Clean Air Act requirements, the MPOs are responsible for development and implementation of transportation control measures and compliance with the transportation conformity regulation.

Failure to meet requirements of the federal Clean Air Act may result in the following disciplinary actions, which are commonly known as offset and highway sanctions. These are as follows:

1. Offset Sanctions: Establishment of a 2 to 1 emission offset ratio requirement for new stationary sources. This occurs 18 months after a finding of violation.

2. Highway Sanctions: These sanctions are implemented 24 months after the violation. Prohibition of project approval or awarding of grants under the Title 23 US Code except for projects or grants for the following:

    - Safety;
    - Capital programs for public transit;
    - Construction of lanes solely for passenger busses or high occupancy vehicles;

- Planning for employee work-trip reduction;
- Traffic flow improvements that achieve a net emission reduction;
- Parking facilities that serve high occupancy vehicle programs or transit operations;
- Programs to limit or restrict vehicle use in areas of emission concentration;
- Programs for breakdown or accident scene management and vehicle information systems to reduce congestion and emissions; and
- Other transportation-related programs the DOT finds to improve air quality and does not encourage single occupancy vehicle capacity.

3. Federal Implementation Plan (FIP): After the 24 month period, EPA would also be required to create a Federal Implementation Plan (FIP), which describes how the region will reduce emissions to reach attainment, taking control away from the state and local Air District.

The imposition of highway sanctions could have a major affect in Fresno County, as they would produce delays in numerous projects, which invariably increases the cost of projects.

State Implementation Plan

The blueprint for air quality progress is the State Implementation Plan (SIP). EPA has published a set of fundamental principles designed to develop effective control strategies for the SIP. These principles are the evaluation criteria EPA applies to the plan as a whole and to each individual measure it contains. According to the EPA, the following four principles help provide assurances for achievement of the planned emission reductions: quantifiable, enforceable, accountable, and replicable.

As previously mentioned, the San Joaquin Valley does not meet air quality standards for ozone and particulate matter. As such, the Air District is required to prepare a SIP to address each air pollutant.

Based on the Valley being a severe ozone non-attainment area, it is required under the federal Clean Air Act to attain the national ozone standard as expeditiously as possible, but no later than 2005. In 2003, the Air District adopted and submitted the Amended 2002 and 2005 Rate of Progress (ROP) Plan for the severe area requirements. However, modeling could not show that the Valley could reach attainment by 2005. In January, the Air District voluntarily requested redesignation to “extreme” nonattainment. EPA has approved of this request, and on May 17, 2004, the entire San Joaquin Valley was redesignated as an “extreme” ozone non-attainment area.

The 1-hour ozone standard was subsequently revoked on June 15, 2005. The San Joaquin Valley was classified as a Serious non-attainment area for the 8-hour Ozone standard under the June 15, 2004 federal 8-hour ozone standard and was given an attainment date of June 15, 2013. The Air District is currently developing the 8-hour ozone plan, which will be submitted to EPA in Summer 2007.

Since 1987, the Valley air basin has been classified as nonattainment for PM-10 (fine particulate matter 10 microns in size or less). The Air District adopted its Amended PM-10 Plan in 2003. The plan demonstrates attainment of the annual and 24-hour PM-10 standard by the end of 2010. EPA proposed approved the plan in 2004. Control strategies in the Plan include reduction of emissions from fugitive dust, agricultural sources, paved and unpaved roads, and indirect sources (new developments that result in increased vehicle miles traveled and emissions). On February 16, 2006, the San Joaquin Valley Air Pollution Control District adopted the 2006 PM-10 Plan. This Plan has not been officially submitted to EPA at this time.

California's Air Resources Board submitted a redesignation request to EPA in July of 1996 on behalf of Fresno County and nine other areas in the state to reclassify the areas to maintenance status for carbon monoxide. EPA approved the *1996 Carbon Monoxide Redesignation Request and Maintenance Plan* in March 1998. The Plan included contingency provisions made up of measures that were already adopted such as California reformulated fuel, enhanced vehicle inspection and maintenance (Smog Check II), and low-emission new vehicle standards. Additionally, the Plan contains the CO emission budget to which we show conformity in the transportation conformity determination for this RTP.

4.10.3 Accomplishments

The major accomplishments made toward improving local air quality since adoption of the 2001 RTP include the following measures:

Regional Transportation / Air Quality Planning

The eight Regional Transportation Planning Agencies (RTPAs) in the San Joaquin Valley continue through a Memorandum of Understanding (MOU) to ensure coordinated transportation/air quality planning activities. The MOU defines a cooperative process aimed at maximum effectiveness in meeting state and federal air quality standards.

Interagency consultation is generally conducted through the San Joaquin Valley Model Coordinating Committee. The San Joaquin Valley Model and Coordinating Committee (MCC) has been established by the Valley Transportation Planning Agency's Director's Association to provide a coordinated approach to valley air quality, conformity and transportation modeling issues. The committee's goal is to ensure Valley wide coordination, communication and compliance with Federal and State Clean Air Act requirements. Each of the eight Valley Transportation Planning Agencies (TPAs) and the Air Pollution Control District are represented. In addition, the Federal Highway Administration, Federal Transit Administration, the Environmental Protection Agency, the California Air Resources Board and Caltrans are all represented on the committee.

Valleywide Air Quality Coordination

In November 1995, the eight Valley RTPAs jointly contracted for the services of an air quality consultant to assist and advise them regarding air quality and modeling regulations. This contract was renewed in 2004, and the consultant continues to contribute technical assistance to the TPAs. In early 2006, this contract was extended through June 2008. In 2004, the TPA Directors Association also agreed to provide funding for an additional air quality consultant contract through 2008. While the current contract provides service for technical and policy activities, the majority of time is dedicated to technical analysis. This additional contract provides long-term policy assistance to the planning agencies. Fresno COG continues to serve as the contract manager for all air quality contracts.

Regional Transportation/Air Quality Plans and Programs

The Valley TPAs have contributed to Air District plans, including the *Amended 2002 and 2005 Ozone Rate of Progress Plan and the Amended 2003 PM-10 Plan*. The Air District is currently developing an 8-hour ozone plan, which included updates and information provided by the TPAs.

Transportation Modeling for Air Quality Conformity

The Regional Transportation Planning Agencies have developed a coordinated effort for transportation modeling for air quality conformity purposes. The objective is to satisfy air-quality conformity requirements from a Valley-wide perspective, and as individual counties. A staff level committee of the Valley RTPA Directors, the Model Coordinating Committee and Air Quality Conformity Working Group meets regularly (three to four times per year) to discuss issues of concern regarding transportation and air quality planning in the Valley.

Transportation Control Measure Program

A transportation control-measure program was prepared for the Valley and approved by the Air District in March 1994. This program provided the basis for TCMs included in 1994 Ozone Attainment Demonstration Plan and the 1997 PM_{10} Attainment Demonstration Plan. None of these TCMs have yet

been approved by EPA and incorporated into the State Implementation Plan. Fresno COG and its member agencies developed reasonably available control measures (RACM), which were included in the Air District's Severe Area Ozone Plan. Fresno COG also developed best available control measures (BACM) as a part of the 2003 Amended PM-10 Plan. Additional information was included earlier in Section 4.9 of the 2007 Regional Transportation Plan.

Traffic Flow Improvements

Fresno COG member agencies identify facilities, which require traffic flow improvements. If requested, Fresno COG modeling staff assists in the identification of congested facilities by providing current and future years traffic forecasts from the traffic model. Numerous traffic flow improvements resulting in air-pollution emission reductions in member jurisdictions have been funded under the TEA-21 and SAFETEA-LU CMAQ program.

Rideshare Program

Trip reduction services provided by ValleyRides.com primarily assists two segments of the region it serves: employer worksites and individual commuters. Services include consultation, worksite program development, and carpool matching.

4.10.4 Needs Assessment

Management of the transportation system is becoming an increasingly important need in Fresno County. Current air quality issues are driving this need, but energy consumption and maximizing the utilization of existing facilities are also important. Funding for developing new capacity increasing projects is constrained; even the construction of Measure "C" projects will not satisfy the long-term travel demand within the Fresno/Clovis Metropolitan Area. Therefore, the Fresno region will be looking to demand management measures as means of maintaining accessibility, reducing congestion, and reducing air pollution in order to enhance capacity and meet ambient air quality standards.

Previous efforts have been regional or generalized in terms of analysis and recommendations. This focus will likely shift to more specific corridor analysis where management action is needed and can be developed. This is especially true in regards to federal legislation that requires consideration of alternate transportation modes, the cost/effectiveness of such modes, and potential environmental impacts associated with each mode.

Modeling activities continue to indicate a strong demand for east-west travel in the northern portion of the Fresno/Clovis Metropolitan Area. Therefore, the Fresno COG managed a series of studies to investigate alternatives. In conjunction with Madera County, Fresno COG completed a Phase I analysis of east-west corridor alternatives between Avenue 18 1/2 in Madera County and Herndon Avenue in Fresno County. A Phase II analysis identified the most appropriate crossing of the San Joaquin River.

In addition, Fresno COG served as the lead-planning agency for the Herndon Avenue Specific Study. This study's purpose was to analyze future travel demand in the northern Fresno Clovis metropolitan area and determine the appropriate type of transportation improvement beyond those already planned that would be needed on Herndon Avenue in order to accommodate projected population growth and resultant vehicle trips.

Growth in vehicle miles traveled (VMT) continues to outpace growth in population. Large increases in the percent growth in vehicle miles traveled will continue to challenge our ability to demonstrate air quality conformity. Failure to provide for sufficient mobile source reductions (i.e., vehicle emissions) through transportation strategies may result in more stringent regulations.

4.10.5 Proposed Actions

Short-Range Improvement Plan

Air Quality Measures

The Short-Range Improvement Plan provides actions that will reduce air emissions between 2007 and 2010. As indicated in the Needs Assessment section of this chapter, the majority of short-term measures improving air quality are related to system, demand, and control management strategies. Local governments, Fresno COG, and other regional, state, and federal agencies should take the following actions to facilitate the implementation of strategies necessary to ensure that air quality standards are met:

- Fresno COG will continue to cooperate with the other seven Valley transportation planning agencies and the Air District in providing coordinated transportation/air quality planning.

- Fresno COG and the Air District will continue to cooperate/consult in activities aimed at achieving air quality standards.

- Identified Transportation Demand and Control Measures shall be considered and carried out where appropriate by designated responsible governments and agencies.

- Fresno COG in cooperation with the cities of Fresno and Clovis and Fresno County will continue to evaluate the Fresno/Clovis Metropolitan Area circulation system. Planning efforts require closer evaluation of over-capacity traffic corridors and improved monitoring of the streets and road system. This evaluation will be accomplished through focused corridor analysis, using those corridors as identified in adopted General Plans.

- Fresno COG, through ValleyRides.com, will encourage individuals and employers to increase average ridership per vehicle by matching those who are interested in carpooling or vanpooling based on home and work/school locations and schedules.

- Fresno COG will continue to support the efforts of the Air District to integrate appropriate policies and implementation measures identified in the Air Quality Guidelines for General Plans into local general plans.

- Fresno COG, Fresno County and its fifteen cities will encourage land use patterns which reduce dependency on the automobile, reduce energy consumption, and support the use of transit and other alternative modes.

- Fresno COG will encourage local transit agencies to explore the use of alternative fueled buses.

- Fresno COG will support state and federal legislation mandating increased vehicle efficiency in vehicle miles per gallon and other transportation energy conserving legislation.

- Fresno COG and local transit agencies will support greater flexibility from funding sources for bus purchases in order to promote selection of the most energy-efficient models.

- Caltrans in cooperation with Fresno COG can promote the development of high-occupancy vehicle lanes, park-and-ride lots, and parking management strategies where appropriate.

- Fresno COG, Caltrans, cities, the county can support utilization of alternate fuel strategies.

The introduction of technology into the consumer market can have a significant impact on fuel consumption. Hybrid technology, which combines electrical and gasoline engines, increases fuel efficiency and gas mileage of many automobiles, and are generally less polluting than conventional gasoline vehicles. Improvements to the fuel economy of the fleet can also reduce dependence on gasoline and other fuel sources. Several automakers have released and are planning to release hybrid automobile and truck models in the coming years. While initially more expensive than their gasoline-only counterparts, the costs would be expected to decline as the availability of these vehicles increases.

Many city fleets and bus fleets are also converting to natural gas and other alternative fuel vehicles, which are cleaning burning fuels that can reduce pollution and create an option to gasoline-only vehicles. While these are not typically available to individual consumers, natural gas models should be available in coming years. Still many few years down the road, research on implementing hydrogen fuel cell technology could produce "zero-emission" vehicles for retail sale in the long-term.

Long-Range Plan

Long-range actions are those that will be implemented within a 20-year period. They depend upon the effectiveness of the short-range programs, upon federal and state air quality policies and mandates, and upon available funding. Long-term strategies are those that will take many years to accomplish because they are often aimed at changing human attitudes and behavior towards the use of new and alternate transportation systems and fuels. The goals, objectives, and policies for air quality attainment and energy conservation stress concerted efforts toward supporting alternative transportation modes including improvement of bicycle and pedestrian systems and upgrading existing public transit and rail facilities. The long-range strategies will continue to focus upon Transportation Control Measures, Transportation System Management and Transportation Demand Management.

Other long-term strategies stress utilizing existing transportation and energy resources more efficiently. Nationwide, transportation planners have come to realize that increasing the "supply" of the transportation system (i.e. building and widening highways and roads) does not alone solve complex transportation problems. With increasingly scarce resources and growing environmental concerns, it will become necessary that we use our existing transportation network more efficiently. This entails changing the "demand" for the transportation system: how we get to and from our destinations, what time we travel, whether we link trips, and how often we drive by ourselves in single occupant vehicles.

The "key" to acceptance of long-range strategies involves a commitment to public education by local, regional, state, and federal governments. Even the best transportation alternatives will have a difficult time competing with the perceived benefits of the private automobile. Incentives are necessary to overcome these built-in advantages and to make other types of travel just as economically appealing as driving alone. Examples include subsidized bus and rail passes; preferential, free, or subsidized parking for carpoolers; and subsidized vanpools. State and federal governments need to continue assisting local governments in providing funding sources to implement such strategies.

Equally important in this educational effort, is that cities, the county, Caltrans, and public service and utility districts address transportation/air quality concerns in their long-range plans and programs. Long-range planning strategies that call for mixed land uses, creation of higher density nodes to be supported by public transit systems, and comprehensive bikeway and pedestrian plans are necessary, if alternate transportation systems are to be successful and energy resources conserved.

4.11 Environmental Mitigation

Introduction

This section documents how the 2007 RTP and 2007 RTP EIR complies with the SAFETEA-LU environmental requirements as set forth in the Final Rule for federal planning requirements published in the Federal Register on February 14, 2007. SAFETEA-LU §134(i)(2)(B) states:

"(i) In general. – A long-range transportation plan shall include a discussion of the types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan.

(ii) Consultation. – The discussion shall be developed in consultation with Federal, State, and tribal wildlife, land management, and regulatory agencies."

Environmental mitigation is also included in the Final Rule:

(1) §450.104: Environmental mitigation activities means strategies, policies, programs, actions, and activities that, over time, will serve to avoid, minimize, or compensate for (by replacing or providing substitute resources) the impacts to or disruption of elements of the human and natural environment associated with the implementation of a long-range statewide transportation plan or metropolitan transportation plan. The human and natural environment includes, for example, neighborhoods and communities, homes and businesses, cultural resources, parks and recreation areas, wetlands and water sources, forested and other natural areas, agricultural areas, endangered and threatened species, and the ambient air. The environmental mitigation strategies and activities are intended to be regional in scope, and may not necessarily address potential project-level impacts.

(2) §450.322(f)(7): A discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the metropolitan transportation plan. The discussion may focus on policies, programs, or strategies, rather than at the project level. The discussion shall be developed in consultation with Federal, State, and Tribal land management, wildlife, and regulatory agencies. The MPO may establish reasonable timeframes for performing this consultation;"

(3) Final Rule §450.336: "Any decision by the Secretary concerning a metropolitan transportation plan or TIP developed through the processes provided for in 23 U.S.C. 134, 49 U.S.C. 5303, and this subpart shall not be considered to be a Federal action subject to review under NEPA."

California Environmental Quality Act (CEQA)

The California Environmental Quality Act (CEQA) was enacted in 1970 and requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts. The RTP and any subsequent revisions, amendments, or updates, are required to comply with CEQA Public Resources Code §21002.1 (Supplement to the 1999 RTP Guidelines, 2003).

2007 RTP Environmental Impact Report

Following the provisions and requirements of CEQA, Fresno COG has prepared a programmatic environmental impact report for the 2007 RTP that describes strategy-level mitigation measures which could avoid or minimize significant adverse impact of implementing the 2007 RTP. In doing so, the 2007 RTP EIR identifies measures that will restore and maintain the environmental functions affected by the metropolitan transportation plan to the maximum extent feasible. The adopted mitigation measures are typical for transportation and development projects and have been demonstrated to be effective.

As part of the development of the 2007 RTP EIR, Fresno COG followed standard CEQA requirements for public outreach and agency consultation. This consultation included the: Notice of Preparation of the EIR, Notice of Completion of the Draft EIR, Draft Final EIR, and the Notice of Determination. Notifications were sent to all interested parties, including local agencies, other regional agencies, and the California State Office of Planning and Research – State Clearinghouse which distributes CEQA EIR documents to affected State resource agencies. In addition, comments and responses to comments received during

the 30-day Notice of Preparation comment period and the mandatory 45-day comment period for the Draft EIR are documented in of the Final 2007 RTP EIR.

SAFETEA-LU Compliance

CEQA requires the identification of potential environmental impacts due to the implementation of the 2007 RTP. In doing so, it also requires a discussion of activities that would serve to restore or maintain the environmental functions that are affected by the RTP. This is consistent with the SAFETEA-LU statute and regulation as included in the Final Rule. The discussions contained within the EIR are conducted at the program level, and, while the may be applied at the project-level, do not necessarily address specific project-level impacts.

Requirements under federal environmental regulations (NEPA) are different from the requirements under CEQA, however, the federal requirements specific to the RTP – those listed above – do not trigger a formal NEPA analysis (§450.336) and corresponding need to deal with the specific differences between NEPA and CEQA, nor do they focus specifically or entirely on the avoidance of impacts. The focus of the environmental mitigation discussion as identified in SAFETEA-LU is on identifying, "activities that have the greatest potential to ***restore and maintain*** the environmental functions affected by the plan (SAFETEA-LU §134(i)(2)(B))." [emphasis added]

Therefore, the CEQA analysis contained in the 2007 RTP EIR accomplishes the intent and spirit of the environmental mitigation discussion required in SAFETEA-LU.

Environmental Mitigation SAFETEA-LU Gap

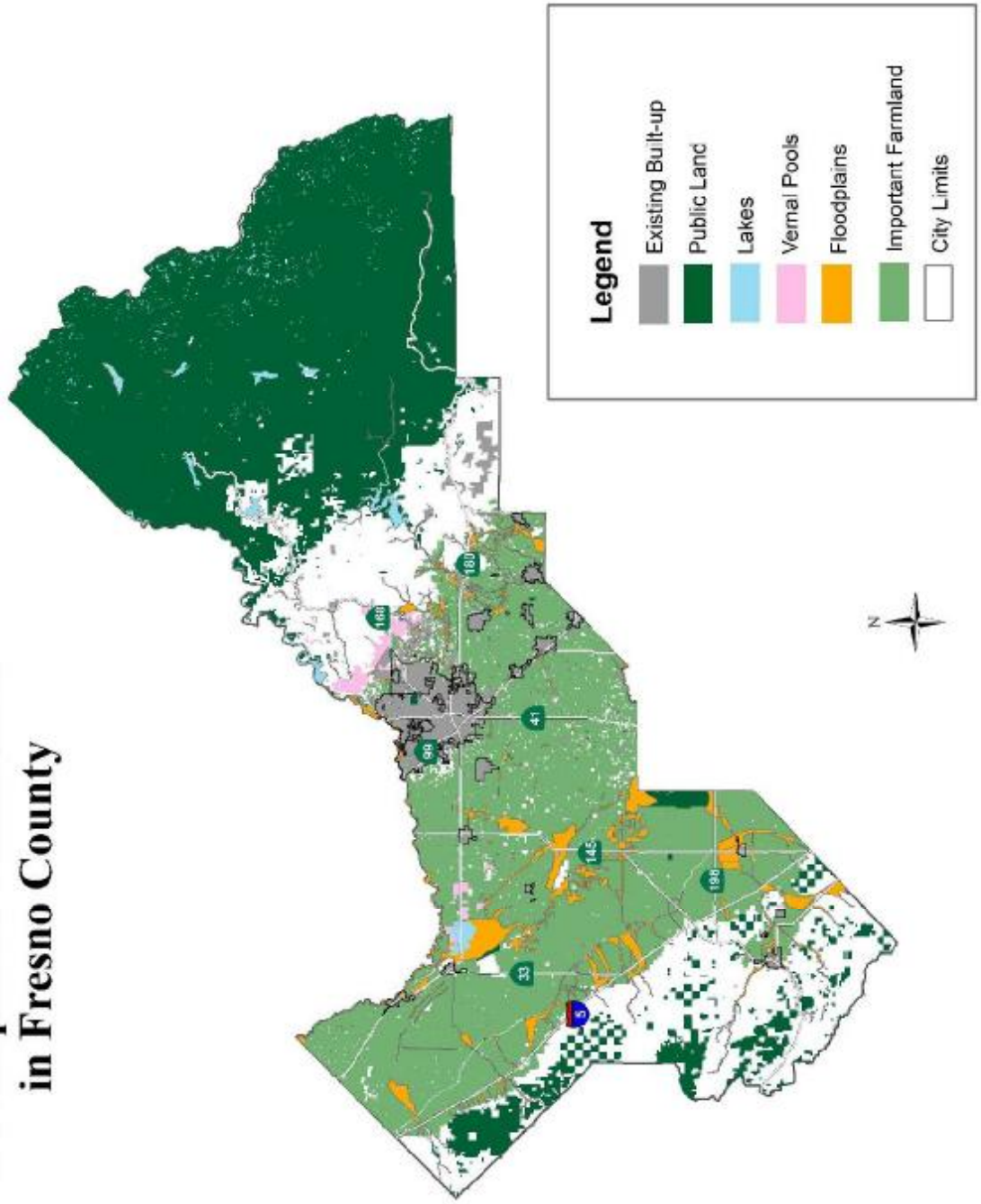
As Fresno COG neared the completion of the 2007 RTP update and associated RTP EIR in March 2007, the federal expectation for what this type of enhanced consultation requires was still uncertain. In addition, in November 2006, FHWA had requested the development of the Gap Analysis described above, in which Fresno COG was asked to identify our strategy for meeting this requirement.

Given the uncertainty surrounding compliance with this requirement, and the need to complete the RTP in time to comply with the July 1, 2007 SAFETEA-LU deadline, Fresno COG included commitments in the Gap Analysis that represent a reasonable effort to address the environmental mitigation consultation requirements as part of the ongoing transportation planning process, along with a commitment to amend results of the consultative process into the 2007 RTP as applicable.

Fresno COG continues to make efforts to improve the discussion of the relationship between transportation and the environment. As part of the Blueprint process, staff is identifying environmental constraints and impacts to the region. Exhibit 4-25 illustrates some of the considerations in the planning process. COG staff will refine this process and analysis for transportation and land use planning in the coming years.

Exhibit 4-24

Development Constraints in Fresno County



Chapter 5
Financial Element

5.1 Introduction

As required by federal transportation legislation, the Financial Element of Fresno COG's 2007 Regional Transportation Plan (RTP) is intended to provide the costs and revenue assumptions necessary for decision makers to implement the RTP. These assumptions include revenue estimates for specific governmental funding programs, local contributions and tax initiatives. The intent of the financial assumptions is to provide a level of financial detail adequate for options to be exercised by State and local decision makers. The following is a brief summation of the components of the Financial Element:

1. Provides an estimation of the costs and a projection of the revenues available for transportation system improvements recommended in the Action Element of the RTP. In doing so, it contains financial assumptions and projections that set parameters for the Regional Transportation Improvement Program (RTIP).

2. The incorporation of a Financial Element in the RTP allows the RTP to be financially constrained as required by federal legislation. Federal statutes state that a financial plan must be included that demonstrates how the projects can be implemented while the existing transportation system is being maintained.

3. Serves as an inventory of existing and potential new transportation funding sources that can be used for transportation system improvements that are most appropriate for implementation in Fresno County. It also identifies potential funding shortfalls along with recommendations for the development of needed new sources of revenue.

4. Includes a financially constrained list of projects for which funding has been identified or is reasonably expected to be available within the RTP planning horizon. Also included is a list of projects (financially unconstrained) which are both necessary and desirable should funding become reasonably available.

The financial chapter of this RTP will cover the following areas: financial assumptions, unmet financial needs (urban & rural), existing major revenue sources, long-range financial projections, and potential new revenue sources.

5.2 Financial Assumptions

The following financial assumptions were used to develop revenue and cost projections:

- Projected State and federal highway revenues reflect the average amounts programmed by the state in the State Transportation Improvement Program (STIP).

- The funding shown is the estimated average annual amount from each of the various funding sources for the years 2007 through 2030.

- Local Transportation Fund monies are assumed to be constant throughout the life of the RTP.

- State Transit Assistance Fund monies are assumed to be constant throughout the life of the plan.

- The Regional Surface Transportation Program, Congestion Mitigation and Air Quality

Improvement (CMAQ) Program, and the Transportation Enhancements (TE) program as part of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) programs will continue or be replaced by similar programs throughout the life of the RTP.

- Federal Transit funds are assumed to remain at their present levels throughout the life of the plan.

- Fresno County's local 1/2 cent sales tax, "Measure C", with revenues designated for transportation improvements was extended by the voters of Fresno County in 2006 and will expire in 2027.

5.3 Senate Bill 45

Senate Bill 45 (Kopp) became effective January 1, 1998 and provided major reform to the State of California's transportation programming process. The bill succeeds the 1989 "Transportation Blueprint" legislation and makes fundamental changes in the funding, programming, and planning of transportation improvements in California. The basic intent of the bill was to simplify the overall programming process and to better establish responsibility and accountability for project delivery. In essence, Senate Bill 45 (SB 45) transforms the State Transportation Improvement Program from a project delivery document to a resources management tool.

Under SB 45, Caltrans continues to be responsible for the operation, maintenance, and rehabilitation of the state highway system. Caltrans will be responsible for programming improvement projects funded through the Interregional Improvement Program; however, for projects funded with Regional Improvement Program funds, Caltrans can only promote and recommend highway improvement projects to the Regional Transportation Planning Agencies (RTPAs) for inclusion in their Regional Transportation Improvement Programs.

To an increased degree, Caltrans will now be accountable to the regions, and not just to itself, for designing projects on time and on budget. Caltrans and the regions will have to negotiate the cost and schedule for designing projects. Once an agreement is reached and the amount placed in the STIP, Caltrans will be required to meet those commitments. Some of the major changes created by the bill are as follows:

- Of the funds available for the STIP, 75% are committed to the Regional Improvement Program (RIP) and 25% are committed to the Interregional Improvement Program (IIP).

- The Regional Improvement Program funds are available to RTPAs for a broad range of transportation improvements, including not only state highways, but also grade separations, transportation system management projects, soundwalls, rail transit projects, local streets and roads projects, intermodal facilities, and bicycle and pedestrian facilities.

- The Interregional Improvement Program funds will be available for state highway, intercity rail, grade separation, and mass transit guideway improvements.

- The former "County Minimum" formula which provided at least seventy 70% of the STIP funds to the counties (as modified by the north/south split) is replaced with a "County Share" system which represents 75% of the STIP funds, again as modified by the north/south split.

- Certain project development, design, and construction engineering costs are added to the elements currently programmed in their STIP (right-of-way and construction capital). These projects are to be identified for each project for each year of the STIP.

- The California Transportation Commission (CTC) cannot allocate funds for right-of-way

acquisition and construction until completion of environmental studies and selection of a preferred alternative.

5.4 Existing Major Revenue Sources

5.4.1 Federal Programs

Regional Surface Transportation Program

The Regional Surface Transportation Program (RSTP) provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including that National Highway System (NHS), bridge projects on any public road, transit capital projects, and public bus terminals and facilities. SAFETEA-LU permits a portion of funds reserved for rural areas to be spent on rural minor collectors. SAFETEA-LU expands and clarifies STP eligibilities, such as environmental provisions (natural habitat mitigation, storm water retrofit, and anti-icing and de-icing), programs to reduce extreme cold starts, modifications of sidewalks to meet Americans with Disabilities Act (ADA) requirements, infrastructure-based Intelligent Transportation System (ITS) capital improvements, and privately owned intercity bus terminals and facilities. Eligible projects include but are not limited to:

- Highway projects
- Bridges (including construction, reconstruction, seismic retrofit and painting) on all public roads
- Transit capital improvements
- Carpool, bicycle and pedestrian facilities
- Safety improvements and hazard elimination
- Research and traffic management systems
- Planning
- Transportation enhancement activities and control measures
- Safety improvements and bridge replacement projects on local roads and rural minor collectors.

Congestion Mitigation and Air Quality

The Congestion Mitigation and Air Quality Improvement Program provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Federal Clean Air Act. Funding is available for areas that do not meet the National Ambient Air Quality Standards/non-attainment areas), as well as former non-attainment areas that are now in compliance (maintenance areas). Funds are distributed to states based on a formula that considers an area's population by county and the severity of its air quality problems with the non-attainment or maintenance area.

Projects or programs eligible for CMAQ funding are those which will contribute to attainment of National Ambient Air Quality Standards with a focus on ozone and carbon monoxide. Typical projects are:

- Public transit improvements
- High Occupancy Vehicle (HOV) lanes

- Employer-based transportation management plans and incentives
- Traffic flow improvement programs (signal coordination)
- Fringe parking facilities serving multiple occupancy vehicles
- Shared ride services
- Bicycle and pedestrian facilities
- Flexible work-hour programs
- "PM-10" projects, under certain conditions

National Highway System

The National Highway System is composed of 163,000 miles of rural and urban roads serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations and includes connections to terminals designated in TEA-21 and continued in SAFETEA-LU. It includes the Interstate System, other urban and rural principle arterials, highways that provide motor vehicle access between the NHS and major intermodal transportation facilities, the defense strategic highway network, and strategic highway network connectors. NHS funds are distributed based on a formula which includes each state's lane-miles of principle arterials (excluding Interstate), vehicle miles traveled on those arterials, diesel fuel used on the State's highways, and per capita principle arterial lane miles. SAFETEA-LU expands and clarifies eligibility of NHS funding for certain types of improvements, such as publicly owned bus terminals, infrastructure-based intelligent transportation system capital improvements, and natural habitat mitigation.

Interstate System / Interstate Maintenance

The 46,000 mile Dwight D. Eisenhower national system of Interstate and Defense Highways retains a separate identity within the NHS. To ensure the continued maintenance and improvement of this system, the Interstate Maintenance (IM) Program established under ISTEA has been retained in SAFETEA-LU for fiscal years 2005 through 2009. These funds are distributed based on each state's lane miles of Interstate routes open to traffic, vehicle miles traveled on those Interstate routes, and combinations to the Highway Account of the Highway Trust Fund attributable to commercial vehicles. Beginning in TEA-21, reconstruction is an eligible activity for IM funds.

Highway Bridge Program

The Highway Bridge Program provides funding to enable states to improve the condition of their highway bridges through replacement, rehabilitation, and systematic preventative maintenance. Local agency bridges, regardless of functional classification, are eligible for the HBP. Bridge replacement and rehabilitation projects are nominated by the local agencies and selected from the Division of Structures Eligible Bridge List. States may carry out projects for the installation of scour counter measures or systematic preventative maintenance irrespective of standing on the list.

Transportation Enhancements (TE) Program

The TE program is a competitive grant program to fund environmental and alternative transportation projects which enhance the transportation system. Public agencies submit TE project applications to the COG for scoring and regional prioritization based on a bid target determined by the California Transportation Commission. Of the overall TE funding made available to the State of California, 75% goes to the regions, to be administered through the State Transportation Improvement Program; the remaining 25% of the enhancement funds go to the State for programming. Projects must have a direct

relationship to the intermodal transportation system by function, proximity, or impact. Also, projects must be over and above required project environmental mitigation and fall within the established categories for project eligibility. Eligible projects include:

- Facilities for pedestrians and bicycles;
- Acquisition of scenic easements and scenic or historic sites;
- Scenic or historic highway programs;
- Landscaping and other scenic beautification;
- Historic preservation;
- Rehabilitation and operation of historic transportation buildings, structures, or facilities;
- Preservation of abandoned railway corridors (including conversion and use as pedestrian or bicycle trails);
- Control and removal of outdoor advertising;
- Archaeological planning and research; and
- Mitigation of water pollution caused by highway runoff.

Federal Lands Highways Program

The Federal Lands Highways program provides for transportation planning, research, engineering, and construction of highways, roads, and parkways and transit facilities that proved access to or within public lands, national parks, and Indian reservations. Federal Lands Highways (FLH) program authorizes funds through 2009 for Indian Reservation Roads (IRR), Park Roads and Parkways, Refuge Roads, and Public Lands Highways. Eligible projects may also include:

- Transportation planning for tourism and recreational travel that benefits public lands;
- Recreational development;
- Adjacent vehicular parking areas;
- Interpretive signing;
- Acquisition of scenic easements and scenic or historic sites;
- Provision for pedestrians and bicycles; and
- Construction and reconstruction of roadside rest areas including sanitary and water facilities and other appropriate public road facilities such as visitor centers.
- New eligible uses of Public Lands include funds for maintenance of Forest Highways, signage identifying public hunting and fishing access, and funds for facilitating of the passage of aquatic species beneath roads in the National Forest System.

Railway-Highway Crossing Program

This program aims to reduce the number of fatalities and injuries at public highway-rail grade crossings through the elimination of hazards and/or the installation/upgrade of protective devices at crossings. Eligible projects include any at-grade grossing between a road and a railroad track recommended for improvement by the California Public Utilities Commission (PUC) and where a 10% match funding source is identified. The selection process begins with any project identified by Caltrans, a local agency, or a railroad as requiring investigation. The investigation usually consists of a field review, discussion between all parties, a jointly developed recommended improvement, and a preliminary schedule of funding. The final selection criteria is initiated when the local agency provides the 10% matching funds to a project or the PUC list of recommended highway/rail grade crossing projects.

Highway Safety Improvement Program

SAFETEA-LU authorizes a new core Federal-aid funding program, to achieve a significant reduction in traffic fatalities and serious injuries on all public roads. To receive HSIP funds, the State must have in effect a State Strategic Highway Safety Plan that identifies and analyzes highway safety problems and opportunities. Funds may be used for projects on any public road or publicly owned bicycle and pedestrian pathway or trail. The Federal share is 90 percent, subject to the sliding scale adjustment, except that the Federal share is 100% for certain safety improvements.

Emergency Relief Program

Emergency Relief (ER) funds are intended to aid states and local highway agencies in paying unusually heavy expenses of repairing serious damage to federal-aid highways resulting from natural disasters or catastrophic failure. Only work that exceeds heavy maintenance, is extraordinary, and restores the facility to its previous level-of-service is eligible.

Federal Airport Improvement Program

Administered by the Federal Aviation Administration, Airport Improvement Program (AIP) funds are available through an entitlement program and discretionary fund for commercial airline airports, and through discretionary funds for “reliever” airports and general aviation airports. The program allocates funds annually based on passenger enplanements. The monies may be banked for a maximum of three years. Subsequently, they are included in a discretionary fund and allocated based on a nationwide priority list.

Air National Guard

Fresno Yosemite International Airport (FYI) is also home for the California Air National Guard. The basing of the Guard in Fresno provides the airport with an additional funding source for maintenance and improvements. The Guard has assisted with some of the costs associated with recently completed construction projects. It is anticipated that the Guard will continue its participation in future airfield improvement projects at FYI.

Federal Transit Administration Section 5307

This program provides financial operating and capital purchase assistance to operators of urban public transportation services. Funds are apportioned to urbanized areas with populations over 50,000 based on a formula using population and population density.

Federal Transit Administration Section 5311

This program provides funding through the State, based on a formula, to urban areas with a population under 50,000. The funds are for capital and/or operating assistance. Capital assistance is provided for up to 88.53% of the net project cost. Operational assistance has a 50% federal participation ceiling.

Federal Transit Administration Section 5310

This program provides funding to private non-profit corporations for capital expenses to support the provision of transportation services to meet the needs of elderly and disabled persons. Capital assistance is provided for up to 88.53% of the net project cost.

Jobs Access Reverse Commute (JARC) – Section 5316

The purpose of the Jobs Access Reverse Commute (JARC) grant program is to assist states and localities in developing new or expanded transportation services that connect welfare recipients and other low income persons to jobs and other employment related services. Job Access projects are targeted at developing new or expanded transportation services such as shuttles, vanpools, new bus routes, connector services to mass transit, and guaranteed ride home programs for welfare recipients and low income persons. Reverse Commute projects provide transportation services to suburban employment centers from urban, rural and other suburban locations for all populations.

New Freedom – Section 5317

The purpose of the New Freedom grant program is to encourage services and facility improvements to address the transportation needs of persons with disabilities that go beyond those required by the Americans with Disabilities Act (ADA). Funds are available to support the capital and operating costs of new public transportation service targeted toward people with disabilities or public transportation alternatives that go beyond those required by the ADA.

Federal High Priority (Demonstration) Projects

The High Priority Projects Program provides designated funding for specific projects (commonly referred to as demonstration projects) identified by Congress and identified in SAFETEA-LU. The designated funding can only be used for the project as described in the law.

Safe Routes to School Program

A new core funding program under SAFETEA-LU to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development and implementation of project that will improve safety, and reduce traffic, fuel consumption, and air pollution in the vicinity of schools. The program is State administered. Projects are 100% federally funded.

5.4.2 State Programs

Regional Choice Program

Generally speaking, these funds represent approximately 75% of the funds available in the State Highway Account. The funds are programmed by the RTPAs in their Regional Transportation Improvement Programs for inclusion in the State Transportation Improvement Program. Pursuant to SB 45, allocations of Regional Choice funds are known as ‘County Shares” and replace the previous “County Minimums.” Eligible projects include:

- Local roads
- Public transit
- Intercity transit
- Pedestrian and bikeway facilities

- State highway improvements
- Grade separations
- Intermodal facilities
- Safety projects
- Transportation System Management projects

Interregional Improvement Program

IIP funds represent 25% of available State Highway Account funding. The funds are programmed by Caltrans on a Statewide priority basis, for use primarily on the State highway system (outside urbanized areas). Regional agencies may also nominate projects that generate economic development (may be inside metropolitan areas). Regional agencies may nominate projects if they can show better cost effective use of funds. Eligible projects include:

- Interregional roads (outside of metropolitan areas)
- Interstate 5
- State Highways 41, 99, 168, and 180 east
- Intercity rail
- "Flex" projects which promote economic development

State Highway Operation and Protection Program

The purpose of the State Highway Operation and Protection Program (SHOPP) program is to maintain the operational integrity and safety of the State highway system. It includes State highway safety and rehabilitation projects, seismic retrofit projects, land and building projects, landscaping, some operational improvements, bridge replacement, and the Minor Program - generally those types of projects that Caltrans as the owner-operator of the system must do to maintain the integrity of the system. Unlike STIP projects, SHOPP projects may not increase roadway capacity.

Eligible projects include State highway safety and rehabilitation projects, seismic retrofit projects, land and building projects, landscaping, some operational improvements, bridge replacement, and Minor Programs.

Local Transportation Funds

Local Transportation Funds (LTF) are derived from the 1/4 cent of the statewide sales tax. LTF revenue is returned to local governments for transportation purposes with public transportation the primary focus. This money comes back to local governments for funding of bicycle and pedestrian facilities, public transportation, or streets and roads. The LTF is distributed to each city and unincorporated area based on population.

In the San Joaquin Valley, LTF funds may be used for both transit and streets and roads purposes as long as all reasonable transit needs are addressed. The City of Fresno currently uses all of its LTF funds for public transit, although Fresno County and the remaining cities in the county use some LTF funds for roads. LTF is one of the principle sources of public subsidies for Fresno Area Express.

State Transit Assistance Fund

The State Transit Assistance fund (STA) is derived from a portion of the Motor Vehicle Fuel Tax. The STA supports public transportation services, and is apportioned through the Regional Transportation Planning Agencies to their member agencies on a population basis, although some funds are apportioned directly to transit operators based on their farebox revenues.

STA funds may be used for mass transit (capital or operating expenses) or transportation planning. Passage of Proposition 116 disallows use of STA funds for streets and roads.

Motor Vehicle Fuel Tax

Approximately 51% of these revenues are retained by the State, with the remainder split between the counties and the cities. Funds are generated by the nine cents per gallon gasoline and diesel tax. The State uses these revenues for construction, operation, and maintenance of state highways. Cities and counties use the funds for roadway construction, operation, and maintenance.

Bicycle Transportation Account

The Bicycle Transportation Account (BTA) provides State funds for city and county projects that improve safety and convenience for bicycle commuters. To be eligible, a local agency must have an adopted Bicycle Transportation Plan. Eligible projects include but are not limited to: new bikeways serving major transportation corridors; new bikeways removing travel barriers to bicycle commuters; bicycle-carrying facilities on public transportation vehicles; installation of traffic control devices to improve the safety and efficiency; improvement and maintenance of bikeways and planning.

Environmental Enhancement and Mitigation Program

Administered through the State Department of Resources, the Environmental Enhancement and Mitigation (EEM) Program provides grants to State, local, and federal agencies, as well as non-profit organizations, to mitigate the environmental impact of modified or new public transportation facilities. To be eligible for consideration, each environmental enhancement and mitigation project must be directly or indirectly related to the environmental impact of the modification of an existing transportation facility or construction of a new facility.

AB 2766 Funds (Motor Vehicle Registration)

Assembly Bill 2766 (AB 2766) authorized air pollution control districts and air quality management districts to impose a $2 to $4 motor vehicle registration fee to provide funds to meet new responsibilities mandated under the California Clean Air Act. The San Joaquin Valley Air Pollution Control District (SJVAPCD) set the fee at $4 per registered motor vehicle for all eight counties in the District.

The California Health and Safety Code states that the fees shall be used to support district operated planning, monitoring, enforcement and technical studies necessary to implement the California Clean Air Act. Two additional uses allowed are: 1) to support programs that reduce air pollution from motor vehicles; and 2) to support implementation of the transportation control measures of the District's Air Quality Attainment Plan by a council of governments, regional agency, or local agency.

Abandoned Vehicle Abatement Program

Beginning in July 1, 2004, the Council of Fresno County Governments began to serve as the Abandoned Vehicle Abatement Authority for Fresno County. This program allows for collection of an additional $1 in motor vehicle registration fees, with the fee being used to establish an Abandoned Vehicle Abatement Program and Service Authority for Fresno County. The monies raised are to be used to remove abandoned vehicles from both private property and public rights-of way in Fresno County.

California Aid to Airports Program Acquisition and Development Program

This is a discretionary program governed by the State Aeronautics Board. A minimum of $10,000 per year in projects is required with a maximum annual expenditure of $500,000 on any airport. A matching requirement of at least 10% is stipulated for the non-federally funded portion.

Acquisition and Development funds are also available for the development of Airport Land Use Compatibility Plans (ALUCP). These funds are available on a limited basis and may involve a waiting period. The Aviation Funding Specialist within the Division of Aeronautics can provide additional details on this and other programs.

California Aid to Airports Program Annual Grant Program

These funds may be expended for capital improvements, operations, and maintenance. A grant of $10,000 per year is available for each publicly owned general aviation airport. California Aid to Airports Program (CAAP) allows an accumulation of annual grants up to five years for a total of $50,000. These funds are maintained by the State Department of Transportation, but must be expended in the year in which project funds are requested. There are no matching requirements.

California Aid to Airports Program Airport Loan Program

Loans are available to public entities for airport-related construction projects, land acquisition, and engineering costs. The loans are repayable over a twenty-five year period based upon the most recent rate for State bonds. Revenue-generating projects, however, must be repaid within ten years. A maximum of $5,000 is available for the preparation of engineering plans. The maximum loan amount for land acquisition and construction will be determined on an individual project basis.

Minor Program

Each fiscal year, Caltrans districts are given the authority to allocate limited funds to projects that meet the criteria for the Minor Program. The amount of dollars which are available are set by the CTC and change from year to year. The program is intended to allow the Caltrans districts the ability to resolve "minor" project issues without the formality of developing Project Study Reports and formally programming the project. The Caltrans Department Director approves the program and authorizes the project development process. There are two categories of minor projects. The *Minor A* category applies to projects with an engineer's estimate of $750,000 at the time of construction and the *Minor B* category for which the limit is set by the Caltrans director. Examples of projects which may be funded through the Minor Program include bridge rail upgrades, minor curve corrections, and signal light installations and upgrades.

Gas Tax Apportionments

These revenues are direct apportionments from the State of California to the cities and county. The apportionments are allocated through specific sections of the Streets and Highways Code. Specific examples include Sections 2105 and 2106 that provide designated funding for any street and road purpose. Section 2104 is restricted for county roads, Section 2107 for street purposes, and Section 2107.5 for city administration and engineering.

5.4.3 Local Programs

Fresno County Local Sales Tax--(Measure "C" Funds)

In 2006 voters of Fresno County approved a 20 year extension of a 1/2 percent local sales tax (Measure "C") for transportation purposes. The twenty-year tax is projected to generate approximately $1.7 billion in funding to be expended through the Fresno County Transportation Authority (FCTA). As the designated Regional Transportation Planning Agency for Fresno County, the Council of Fresno County Governments

is legislatively responsible for preparing an expenditure plan for use of the highway revenues.

Of the approximately $1.7 billion total to be collected over 20 years at least 34.6% of the tax will be allocated to local agencies for a wide variety of transportation programs and projects on their respective local transportation networks. The FCTA's oversight of this money involves identifying the amount of funding to be made available to the local agencies, managing the claims process, and annually auditing to insure that the funds were used for eligible transportation purposes. The balance of the revenue is allocated in the following manner: Regional Public Transit Program-24%; Regional Transportation Program-30.4%; Alternative Transportation Program-6%; Environmental Enhancement Program-3.5% and Administration/Planning Program-1.5%.

Monies Made Available by City Sources

There are a number of transportation funding sources which have their origins in city sources. These include general fund monies used for street purposes, revenues derived from use of gas tax monies, proceeds from bond sales for street purposes, street assessment levies and traffic safety fund monies used for street purposes.

Fresno-Yosemite International Passenger Facility Charge

Fresno-Yosemite International Airport currently charges a Passenger Facility Charge for every patron who uses the airport. The collection of these funds is authorized by the Federal Airports Administration and they are used to fund capital improvements at FYI.

5.5 Projected Revenues for the 2007 RTP

As required by federal transportation legislation, RTPs must be financially constrained. In order to be financially constrained a financial plan is required that demonstrates how new transportation projects can be constructed while the existing transportation system is being maintained and operated. Federal requirements state that there must be a "reasonable" relationship between existing and projected revenues, and the transportation projects that are to maintain, operate and improve the regional transportation network. The basic purpose of the Financial Element is to provide short and long-range assumptions of project costs and revenues available over the life of the plan.

5.5.1 Financial Revenue Projection Methodology

COG has assembled a comprehensive inventory of the current existing transportation revenue programs currently in use by all governmental entities (federal, State and local) and projected these revenues based on historical averages over the life of the plan. This is illustrated in Exhibit 5-1.

Exhibit 5-2 provides a breakdown of all "direct" monies made available to COG member agencies for transportation purposes. These funds flow directly to COG member agencies and is not subject to regional programming. The financial revenue projections developed for each revenue source are documented and based upon the best available data from existing sources (i.e. FHWA, Caltrans, COG historical data, member agency Capital Improvement Programs, Measure "C" Expenditure Plan, etc.). All funding projections are based upon renewal of current existing transportation revenue streams over the duration of the plan.

Exhibit 5-3 is a flow chart that identifies the funding process for each of the transportation funding programs.

Exhibit 5-1
Transportation Funding Categories

Federal Programs					
Program	**Allocation Process**	**Eligible Projects**	**Annual Funding Estimate**	**10 yr. Funding Estimate**	**Life of the RTP (24 Years)**
Air National Guard	Air national guard contributes $50,000 annually for general maintenance to FYI	Fresno Yosemite International Airport (FYI) maintenance & improvements	$50,000	$500,000	$1,200,000
Bridge Replacement/Rehabilitation (HBRR)	Competitive based on need and merit	Highway bridge rehabilitation & replacement	$2,109,333	$21,093,330	$50,623,992
Congestion Mitigation & Air Quality (CMAQ)	Competitive bid and fair share distribution	Transportation projects that reduce emissions and improve air quality	$15,486,008	$154,860,085	$371,664,203
Emergency Relief (ER)	Competitive based on need and merit	Repair damaged federal highways in federal disaster areas	$40,000	$400,000	$960,000
Federal Airport Improvement Program	Entitlements are based on passengers and air cargo pounds	Improvements at commercial, "reliever", and general aviation airports	$3,330,000	$33,300,000	$79,920,000
Federal Lands Program	Discretionary program	Highway improvements/construction projects for access to public lands	$800,000	$8,000,000	$19,200,000
Federal Transit Administration Section 5307	FTA gives urban area funds based on formula	Purchase of transit capital items	$7,751,883	$77,518,830	$186,045,190
Federal Transit Administration Section 5309	Projects identified through TEA-21 earmarks	Purchase of rail cars, buses, new rail systems & various equipment	Varies	Varies	Varies
Federal Transit Administration Section 5310	Competitive bid process	Purchase of transit capital items for needs of elderly & disabled persons	$985,525	$9,855,250	$23,652,600
Federal Transit Administration Section 5311	FTA allocated rural area funds for transit	Purchase of transit capital items and/or operating assistance	$100,000	$1,000,000	$2,400,000
Hazard Elimination and Safety Program (HES)	Competitive based on need and merit	Highway & roadway safety improvements	$590,000	$5,900,000	$14,160,000
Highway/Railroad Grade Crossing Safety Improvement Program	Competitive based on need and merit	Improve at-grade crossings between roads and railroad tracks	$1,440,000	$14,400,000	$34,560,000
Interstate Maintenance (IM) Program	Based on formula for each state	Interstate system maintenance projects	Included in Regional Choice Funds	Included in Regional Choice Funds	Included in Regional Choice Funds
$590National Highway System (NHS) Program	Based on formula for each state	SHOPP and STIP projects	Included in Regional Choice/SHOPP Funds	Included in Regional Choice Funds	Included in Regional Choice/SHOPP Funds
Pedestrian Safety Program	Competitive based on need and merit	Pedestrian safety projects	$189,600	$1,890,600	$4,550,400

Program	Allocation Process	Eligible Projects	Annual Funding Estimate	10 yr. Funding Estimate	Life of the RTP (24 Years)
Recreational Trails	Competitive based on need and merit	Bicycle, equestrian, and pedestrian recreation trails	$46,250	$462,500	$1,110,000
Regional Surface Transportation Program (RSTP)	Competitive bid and fair share distribution	Fed highway, bus terminals, transit, public road bridge	$14,446,710	$144,467,103	$346,721,046
Safe Routes to School Program	Competitive based on need and merit	Bicycle and pedestrian safety & traffic calming projects	$474,000	$4,740,000	$11,376,000
TEA-21 High Priority (Demonstration) Projects	Discretionary program	High priority projects identified by Congress	Varies	Varies	Varies
Transportation Enhancements (TE)	100% competitive	Aesthetic & environmental improvement projects	$1,562,465	$15,624,653	$37,499,166
FTA Sec 5316/5317	**Formula**	**Transit-JARC/New Freedom**	**$651,083**	**$6,510,830**	**$15,625,992**
Federal Total					**$1,201,268,589**

State Programs

Program	Allocation Process	Eligible Projects	Annual Funding Estimate	10 yr. Funding Estimate	Life of the RTP (24 Years)
AB 2766 Funds (Motor Vehicle Registration)	Competitive program	Air pollution reduction projects	$3,360,000	$33,600,000	$80,640,000
Bicycle Transportation Account	Competitive based on need and merit	Bicycle safety projects	$118,500	$1,185,000	$2,844,000
California Aid to Airports Program-Acquisition and Development	Competitive program	Capital improvements and maintenance of public airports	Varies	Varies	Varies
California Aid to Airports Program-Airport Loan Program	Selected by Caltrans based on nominations	Airport-related construction projects, land acquisition, and engineering costs	This program has not been utilized by Fresno County	This program has not been utilized by Fresno County	This program has not been utilized by Fresno County
California Aid to Airports Program-Annual Grant Program	Entitlement program subject to eligibility	Airport capital improvements and operations/maintenance projects	$40,000	$400,000	$960,000
Environmental Enhancement and Mitigation (EEM)	Selected by Caltrans based on need and merit	Environmental enhancement and mitigation projects	$250,000	$2,500,000	$6,000,000
Interregional Improvement Program	Selected by Caltrans based on project nominations	Rural state highway projects & urban projects that generate economic development	$10,000,000	$100,000,000	$240,000,000
Local Transportation Funds (LTF)	Population Formula	Public transportation projects for urban/rural areas based on population	$30,000,000	$300,000,000	$720,000,000

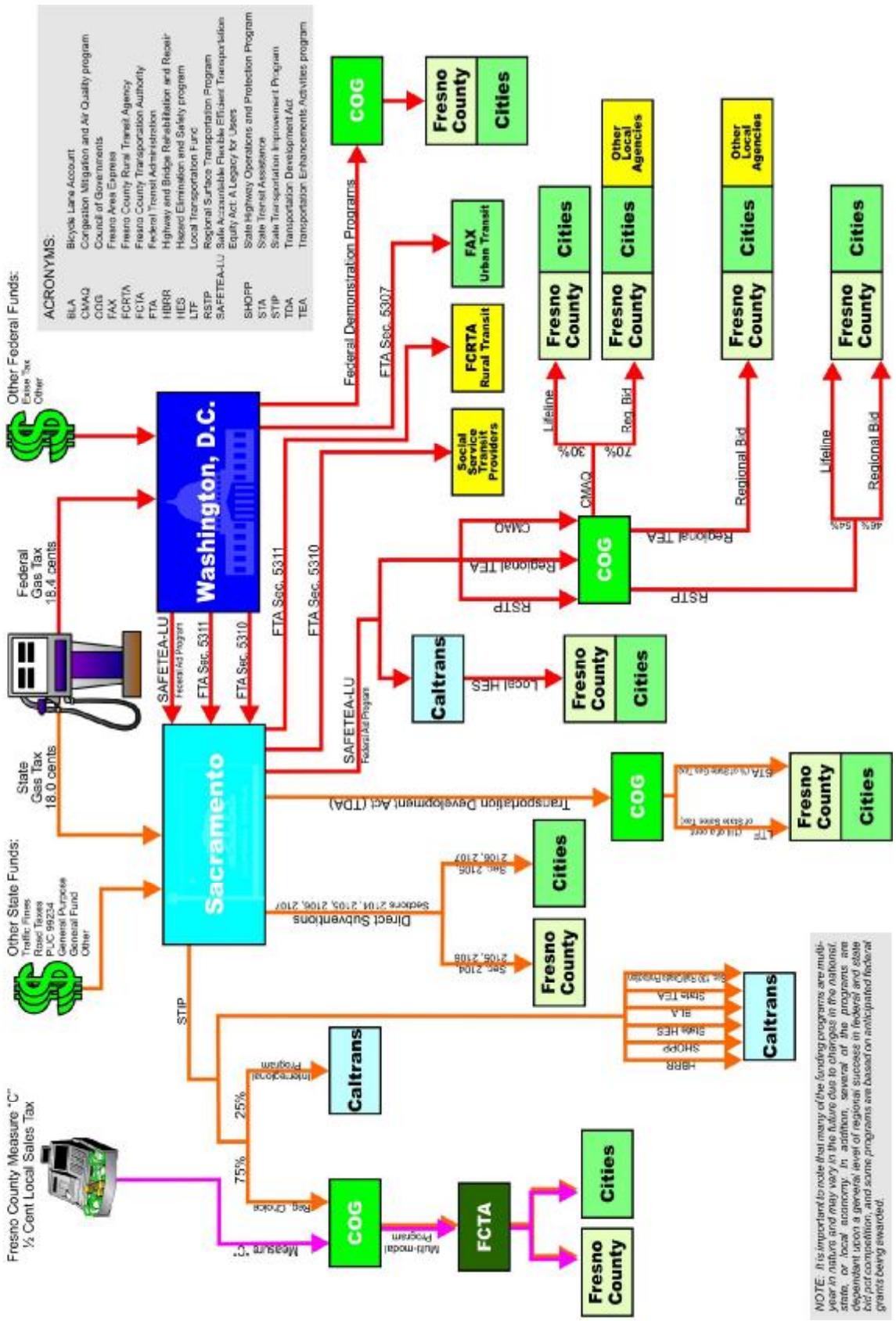
Program	Allocation Process	Eligible Projects	Annual Funding Estimate	10 yr. Funding Estimate	Life of the RTP (24 Years)
Minors Program	Selected by Caltrans based on project nominations	Projects that preserve the safety and the reliability of the State Highway System	$566,666	$6,496,191	$21,846,698
Petrol Violation Escrow Account (PVEA)	California Legislature decides based on merit	Projects that save energy	N/A	N/A	N/A
Regional Choice Funds	Competitive basis based on need and merit	Regional capital improvement projects	$24,000,000	$240,000,000	$576,000,000
SB 1266 –Prop 1B RTIP Augmentation	Regional Decision on Type of Project	Regional capital improvement projects	One time Only Funding	NA	$25,000,000
SB 1266-Prop 1B Transit Modernization	Formula Allocation to Transit Agencies	Transit Rehabilitation, Safety, Modernization, Capital Projects	One time Only Funding	NA	$49,999,989
SB 1266 Prop 1B Local Streets & Roads	Formula Allocation to Cities & County	Street & Road Capital Projects	One time Only Funding	NA	$54,538,662
SB 1266-Prop 1B SR 99 Bond Funding	Funding for Projects Identified in SR 99 Business. Plan	Capital Improvements on SR 99	One time Only Funding	NA	$93,000,000
State Emergency Repair Program	CTC decides allocations by vote	State Highway projects	$10,000	$100,000	$240,000
State Highway Operation and Protection Program (SHOPP)	Selected by Caltrans based on need & merit	State Highway System safety & preservation	$1,553,000	$15,530,000	$37,272,000
State Transit Assistance (STA)	Population formula and fare box revenues	Mass transit or transportation planning	$10,889,094	$108,890,940	$261,338,256
State Total					**$2,169,679,605**

Local Programs					
Program	**Allocation Process**	**Eligible Projects**	**Annual Funding Estimate**	**10 yr. Funding Estimate**	**Life of the RTP (24 Years)**
Chandler Airport User Fees	Fresno City Council Approves	Operations, maintenance and improvements at Chandler Airport	$200,000	$2,000,000	$4,800,000
Fresno County Local Sales Tax (Measure C) Local Share (67.9% of Total Meas. C Dollars)	Population and road miles formula	Highways, streets, rail, bus routes, park-and-ride lots, bicycle facilities, and railroad crossings	$58,394,000	$583,940,000	$1,167,880,000
Fresno County Local Sales Tax (Measure C) Regional Share (30.6% of Total Meas. C Dollars)	Based on Measure C Expenditure Plan prepared by Fresno COG	Regional highways	$26,010,000	$260,100,000	$520,020,000
Fresno-Yosemite International Passenger Facility Charge	FAA approves	Funds authorized improvements at FYI	$1,300,000	$13,000,000	$31,200,000
Regional Facilities Development Impact Fees	Fees Collected go to 2006 Measure C Projects	2006 Measure C Projects (Tier 1 & 2)	$4,250,000	$42,500,000	$102,000,000
Local Total					**$1,815,900,000**

Exhibit 5-2
Transportation Funding Provided Directly to Local Agencies
(Gas Tax, Motor Vehicle License In-Lieu-tax) PUC 99234, 99400(a), Bond Sales, General Fund, etc.)
Not Available for Regional Programming

Clovis	$1,459,450	$1,445,969	$8,379,235	$11,284,65
Coalinga	$306,164	$40,865	$625,027	$972,05
Firebaugh	$60,508	$0	$166,996	$291,16
Fowler	$209,251	$0	$108,230	$317,48
Fresno	$16,677,827	$7,358,965	$14,370,461	$38,407,25
Huron	$130,829	$0	$194,020	$324,84
Kerman	$198,722	$0	$378,285	$577,00
Kingsburg	$206,654	$37	$340,775	$547,46
Mendota	$160,892	$0	$236,679	$397,57
Orange Cove	$171,483	$0	$297,798	$469,28
Parlier	$226,935	$0	$483,518	$710,45
Reedley	$398,013	$0	$948,851	$1,346,86
Sanger	$916,483	$50,000	$1,005,000	$1,971,48
San Joaquin	$69,364	$0	$122,441	$191,80
Selma	$399,352	$686,341	$1,677,705	$2,763,39
Fresno County	$17,043,228	$2,679,301	$13,035,702	$32,758,23
Total	**$38,635,155**	**$12,261,478**	**$42,370,723**	**$93,331,01**

Exhibit 5-3
Transportation Funding Flow Chart



In November 2006, Fresno County voters reauthorized Measure "C", (½ cent sales tax dedicated to transportation purposes).for another twenty years. It is anticipated that approximately $1.7 billion in transportation revenues will be generated over the life of the Measure.

When making long-range transportation revenue projections for an RTP time frame there are a number of factors that need to be recognized. Foremost among these factors is that federal/state funding has a long history of not materializing as originally envisioned (promised) due to:

- Ever-changing political/economic/social conditions and resultant public policies that impact transportation funding.
- Gasoline-based fuel-efficient technologies that reduce gas tax revenue streams.
- Less than 100% federal allocation of transportation dollars.
- Escalation of project/administrative costs beyond original expectations.
- Increased costs based on additional federal/State regulations and environmental mitigation requirements.
- Unforeseen natural disasters (i.e. earthquakes) and the subsequent requirements (i.e. seismic retrofit) that take dollars away from programmed projects.
- Programming projects based on transportation financing estimates that assume voter passage of bond measures. When the bond measures fail those expected dollars are lost and "shortfall" impacts are felt.

These factors may create a situation where our RTP revenue projections are overstated. However, due to the fact that federal transportation legislation requires that planning agencies develop financially constrained RTPs, the revenue projections represent COG staff's best efforts at meeting those requirements.

Exhibit 5-4 provides a listing of all of the federal, state and local transportation funding programs and their projected revenues on three different levels, an average annual projection, a short-term projection (10 years) and a long term projection (24 years) covering the life of the plan. In total, those revenues are anticipated to be approximately $5.17 billion and are identified in a summary manner in Exhibit 5-4.

Exhibit 5-4
Total RTP Revenues (2007 thru 2030)

	Life of RTP (24 Year)
Federal	**$1,201,268,589**
State	**$2,169,679,605**
Local	**$1,815,900,000**
Total Revenue (All Sources)	**$5,176,848,194**

However, it is critical to note that each revenue stream has its own particular eligibility requirements, some are competitive bid pot programs and some are limited to specific modal uses i.e. Federal Transit Administration funds can only be used for transit projects and not on street and highway projects or other modes. In addition, some programs i.e. Congestion Mitigation & Air Quality can be used on any of the modes, provided the project provides a congestion mitigation or air quality benefit. However, because a portion of CMAQ funding is distributed through a cyclical regional competitive bid pot process, there is no way to project what percentage of the CMAQ funds will be used for streets and highways, transit or any of the other eligible modes over the life of the plan. With this is mind a total funding assumption is provided

with no attempt to break it down further into modal eligibility categories. Going further, it would be very misleading to assume that "all" revenues as projected will be available given the uncertainty inherent in projecting federal/state/local revenues over the life of the plan. Nonetheless, COG feels comfortable that the revenues projected are based on the best available data and planning assumptions.

5.6 Financially Constrained Project Lists

Exhibit 5-5 contains all of the financially constrained projects that are currently programmed within Fresno COG's current Federal Transportation Improvement Program between the years 2006/7 thru 2009/10 (costs listed are current total project costs). Projects identified include those from the current and future Measure C programs, Regional Choice program, RSTP, CMAQ, TE, SHOPP and various assorted federal and state programs. All candidate projects are consistent with those identified in the Caltrans Interregional Improvement Program (IIP) and the Regional Transportation Improvement Program (RTIP). In addition, all candidate projects are considered with the regional goals, policies, and objectives identified in Chapter 3.

Exhibit 5-6 is a complete listing of the candidate list of regional transportation projects that have been modeled for air quality conformity and are financially constrained based on anticipated available revenues over the life of the RTP. Exhibits 5-7 through 5-9 show the distribution of the capacity increasing projects over the course of the RTP.

Exhibit 5-10 is the multi-modal list of projects that have been identified for funding through the reauthorization of Measure "C". All projects on this $1.7 billion list are to be funded by future Measure "C" revenue. In total, all of the identified projects add up to approximately $4.48 billion. Additional information on the implementation of Measure C projects and programs is available in Appendix E and the Measure C Expenditure Plan.

Exhibit 5-5
Financially Constrained Federal Transportation Improvements Program Projects (2006/07 through 2009/10)
Streets and Highways

Agency	Route	Project Limits	Description	Total Cost	Program
Clovis, City of	Various Major Intersections	City of Clovis	In Clovis - Lump-Sum Traffic Flow Improvements. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3	$1,010,100	CMAQ
Clovis, City of	NA	NA	Purchase 16 CNG refuse trucks to replace 16 older diesel refuse trucks.	$3,118,000	CMAQ
Clovis, City of	Clovis Ave	Santa Ana to Dakota Aves	Constructing conduits on the east side of Clovis Ave. from Santa Ana to Dakota Ave. Pull boxes and fiber optic cable will be installed.	$416,200	CMAQ
Clovis, City of	NA	NA	Purchase of 2 CNG street sweepers and replace 2 diesel street sweepers.	$433,100	CMAQ
Coalinga, City of	Monterey Ave	Washington St to Cambridge Ave	In Coalinga - Construct Paved Shoulders for Bike Lane On Monterey Avenue from Washington Street to Cambridge Avenue.	$101,900	CMAQ

Firebaugh, City of	East Side of Fannon Rd	Northeast corner of Maldaonado Park	Reconstruct an existing parking lot located on the East Side of Fannon Rd at the northeast corner of Maldaonado Park for park and ride capability	$72,300	CMAQ

Fowler, City of	East side of Fowler Ave	SR 99 southbound onramp and Merced St; southside Adams b/w Fowler High School and Temperance	Class II Bicycle Lanes- Construct lanes along the east side of Fowler Ave b/w the State Highway 99 southbound onramp and Merced Street, and along southside Adams b/w Fowler High School and Temperance.	$106,400	CMAQ
Fresno Area Express (FAX)	NA	NA	Lease vans for downtown vanpool program. Final year of three year funding period.	$240,000	CMAQ
Fresno County	North and Maple Intersection	Fresno County	North and Maple intersection improvements. Construct left turn lane for eastbound traffic.	$133,700	CMAQ
Fresno County	Central and Willow Intersection	Fresno County	Central and Willow intersection improvements. Construct left turn lanes and pavement improvements and remove a four-way stop.	$99,300	CMAQ
Fresno County	Alta Ave	SR 63 - American Ave	Shoulder paving/ stabilization. Alta Ave. to SR 63 - American Ave.	$684,800	CMAQ
Fresno County	Golden State Boulevard	Mountain View Ave to Bethel Ave	Construct Class I bike path along Golden State Boulevard from Mountain View Ave to Bethel Ave.	$360,000	CMAQ
Fresno, City of	Chestnut Ave and Kings Canyon Rd	City of Fresno	In Fresno: At Intersection of Chestnut Avenue and Kings Canyon Road; Install Traffic Flow Improvements Including Dual Left-Turn Lanes & Intersection Improvements.	$1,129,800	CMAQ
Fresno, City of	Marks and Webber Ave Intersection	City of Fresno	In Fresno - At Marks and Webber Avenue Intersection - Install Traffic Flow Improvements Including Ultimate Build of Intersection & New Traffic Signal.	$894,500	CMAQ
Fresno, City of	Various	City of Fresno	In Fresno - Lump-Sum Construction of Grade Crossings Along Bike and Pedestrian Trails	$892,300	CMAQ
Fresno, City of	Willow and Shepherd Aves	City of Fresno	Improve traffic operations and relieve congestion at intersection of Willow and Shepherd Ave. Install traffic signal and modify approaches. Install median noses, curb returns with wheelchair ramps.	$2,010,500	CMAQ

Fresno, City of	Cedar at Shaw	City of Fresno	Cedar at Shaw Traffic Flow Improvements. Traffic flow improvements including installation of dual NB and SB lanes and separate right turn lanes.	$401,700	CMAQ
Fresno, City of	Herndon Ave	Adjacent to the Sierra Sky Park	Construct approximately 350' of missing Multi-Purpose Trail along Herndon Avenue adjacent to the Sierra Sky Park.	$123,600	CMAQ
Huron, City of	Lassen Ave	4th and 9th Sts	In Huron - Install Traffic Signals on Lassen Avenue at 4th and 9th Streets.	$451,000	CMAQ
Huron, City of	Central Ave	Huron and 9th Sts	In Huron - On Central Avenue Between Huron and 9th Streets - Provide Traffic Flow Improvements and Expand Park and Ride Lot	$129,300	CMAQ
Kerman, City of	Various	City of Kerman	In Kerman - Lump-Sum Traffic Flow Improvements On Various Eligible Routes. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$176,100	CMAQ
Kingsburg, City of	Golden State Blvd	Bethel Ave to Laurel St	Construct Class I bike path along Golden State Blvd from Bethel Ave to Laurel St. Will be located between existing eastern edge of shoulder and UPR tracks.	$309,600	CMAQ
Kingsburg, City of	10th Ave. (Academy Ave.)	Sierra St (SR 201) to Stroud Ave	Construct sidewalks along 10th Ave. (Academy Ave.) from Sierra St. (SR 201) to Stroud Ave.	$82,100	CMAQ
Kingsburg, City of	Sierra St	At the UPRR track crossing near Simpson St	Construct pedestrian facilities along Sierra Street at the UPRR track crossing near Simpson Street. Improvements include sidewalks, curb ramps and track platform improvements.	$110,300	CMAQ
Kingsburg, City of	Madsen Ave	Eastern edge of shoulder and the Cole Slough	Construct Class I bicycle and pedestrian pathway along Madsen Avenue between the eastern edge of shoulder and the Cole Slough.	$235,500	CMAQ
Mendota, City of	2nd and 5th Sts	City of Mendota	In Mendota - Construct At-Grade Pedestrian/Bike Crossing Across 2nd and 5th Streets Over Railroad Tracks.	$445,500	CMAQ
Mendota, City of	Various	City of Mendota	In Mendota - Lump-Sum Pedestrian Facilities On Various Eligible Routes. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$160,100	CMAQ
Mendota, City of	Various	Bounded by 7th Stand 8th St	Pave three unimproved alleys bounded by 7th Street	$182,000	CMAQ

			and 8th Street.		
Orange Cove, City of	BNSF rail line	Diagonal between Hills Valley Rd and Adams Ave	Rails to Trails project. One and one half mile bike and pedestrian trail along abandoned BNSF rail line at a diagonal between Hills Valley Rd and Adams Ave.	$1,021,000	CMAQ
Reedley, City of	Manning Ave	Between Frankwood and Buttonwillow Ave	Install sidewalks and ramps on both sides of Manning Ave. between Frankwood and Buttonwillow Ave.	$297,800	CMAQ
Reedley, City of	NA	NA	Purchase one "Green Diesel" PM-10 Efficient Street Sweeper.	$197,000	CMAQ
Sanger, City of	Various	City of Sanger	In Sanger - Lump-Sum Traffic Flow Improvements at Various Major Intersections. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$386,300	CMAQ
Southwest Transportation Agency	NA	NA	Purchasing a Rule 1186-certified CNG Street Sweeper to replace diesel sweeper.	$150,000	CMAQ
Fresno Area Express (FAX)	Various	City of Fresno	Peak Service Program. Increase the frequency of service from 30 min to 15 min intervals on two routes-Route 28 and Route 30. Final year of three year funding period.	$5,401,800	CMAQ Transit
Fresno Area Express (FAX)	NA	NA	Purchase 15 CNG buses to replace 14 diesel buses.	$4,622,400	CMAQ Transit

Fresno Area Express (FAX)	NA	NA	Purchase one 40 foot hydrogen powered hybrid electric transit bus and one electrolytic hydrogen fueling station.	$3,250,000	CMAQ Transit
Fresno County Rural Transit Agency	NA	NA	Purchase of four 35 passenger compressed natural gas powered buses.	$1,650,000	CMAQ Transit
Fresno County	Various	Fresno County	Rehabilitation, repair, and/or reconstruction of deficient two-lane roads that connect to Interstate 5, SR 180, SR 41 and SR 99 countywide.	$3,500,000	Demonstration Projects
Fresno County	Various	Fresno County	Rehabilitation, repair, and/or reconstruction of deficient two-lane roads that connect to Interstate 5, SR 180, SR 41 and SR 99 countywide.	$1,875,000	Demonstration Projects
Caltrans	Various	Fresno County	Various locations. Emergency Repair Program. Consistent with 40 CFR part 93.126, 127, 128 Exempt Tables 2 & 3.	$150,000	Emergency Repair Program

Caltrans	Various	Fresno County	Lump-Sum Highway Bridge Replacement/Rehabilitation Program (No additional travel lanes). Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$10,621,600	Highway Bridge Replacement / Rehabilitation Program
Fresno County Transportation Authority	Academy Ave	SR 180 Between SR 180 and Shaw Avenue and 2-Lanes Between Barstow Avenue and SR 168	Academy Road- Rural Program - Widen Existing 2-Lane Facility to 4-Lanes on SR 180 Between SR 180 and Shaw Avenue and 2-Lanes Between Barstow Avenue and SR 168	$12,934,000	Measure C
Fresno County Transportation Authority	Academy Ave	Between Mountain View and Manning, and 4-Lane Between Manning and SR 180	Academy Avenue- Rural Program - Construct/Improve 2-Lane Facility Between Mountain View and Manning, and 4-Lane Between Manning and SR 180	$30,070,000	Measure C

Fresno County Transportation Authority	SR 168	SR 180 to Shields	Urban Program - In the City of Fresno - SR 168 (SR 180 to Shields) Minor Property Management Cost and Landscaping/Irrigation Modification	$650,000	Measure C
Fresno County Transportation Authority	SR 168	Shields to Gettysburg	Urban Program - In the City of Fresno - SR 168 (Shields to Gettysburg) Minor Property Management Costs and Landscaping/Irrigation Modification	$696,000	Measure C
Fresno County Transportation Authority	SR 168	Gettysburg to Bullard	Urban Program - In the City of Fresno - SR 168 (Gettysburg to Bullard) Minor Property Management Costs and Landscaping/Irrigation Modification	$2,439,000	Measure C
Fresno County Transportation Authority	SR 168	Bullard to Fowler	Urban Program - In the City of Fresno - SR 168 (Bullard to Fowler) Minor Property Management	$843,000	Measure C

Fresno County Transportation Authority	SR 180	Temperance to Shepherd	Rural Program - In Fresno County - SR 180 (Temperance to Shepherd) Minor Property Management	$2,374,000	Measure C
Fresno County Transportation Authority	SR 180	Chestnut to Clovis	Urban Program - In the City of Fresno - SR 180 (Chestnut to Clovis) Minor Property Management	$1,234,000	Measure C
Fresno County Transportation Authority	SR 180	Clovis to Temperance	Urban Program - In the City of Fresno - SR 180 (Clovis to Temperance) Minor Property Management	$155,000	Measure C

Fresno County Transportation Authority	SR 180	Brawley Ave to Marks Ave and 6 Lane Freeway from Marks Ave to east of West Ave	Unconstructed to 4 Lane Freeway from Brawley Ave. to Marks Ave. and 6 Lane Freeway from Marks Ave. to east of West Ave.	$70,132,000	Measure C
Fresno County Transportation Authority	SR 41	SR 99 to North	Urban Program - In the City of Fresno - SR 41 (SR 99 to North) Minor Property Management landscape.	$735,000	Measure C
Fresno County Transportation Authority	Fresno County	Floral to Elkhorn	Rural Program - In Fresno County (Floral to Elkhorn) Minor Property Management and Landscaping (Environmental Mitigation)	$630,000	Measure C
Fresno County Transportation Authority	Fresno County	North to Floral	Rural Program - In Fresno County - SR 41 (North to Floral) Minor Property Management	$274,000	Measure C
Fresno County Transportation Authority	SR 43	Nebraska to SR 99	Rural Program - In Fresno County - SR 43 (Nebraska to SR 99) Minor Property Management	$388,000	Measure C
Clovis, City of	Various	City of Clovis	In Clovis - Lump-Sum A/C Overlays On Various Eligible Routes (No Additional Travel Lanes). Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$1,690,700	RSTP
Clovis, City of	Herndon Ave	Willow Ave and Clovis Ave	Herndon Ave. between Willow Ave. and Clovis Ave. Widen from two lanes to three lanes of travel in each direction, construct curb & gutter & bicycle lanes, install street lights.	$3,080,000	RSTP
Clovis, City of	Clovis Old-Town trail	Peach and Alluvial Ave	Clovis Old-Town trail at Peach and Alluvial Avenues crossing. Design and install in-pavement crosswalk lights.	$105,700	RSTP
Clovis, City of	Ashlan Ave	Peach and Minnewawa	Road repair along Ashlan Ave between Peach and Minnewawa.	$187,800	RSTP
Clovis, City of	Peach Ave	Alluvial and Teague Ave.	Road repair along Peach Ave. between Alluvial and Teague Avenues.	$806,700	RSTP
Clovis, City of	Shaw	Peach and Minnewawa Ave	Road repair along Shaw with reconstruction activities between Peach and Minnewawa Avenues.	$1,036,100	RSTP
Coalinga, City of	Various	City of Coalinga	In Coalinga - Lump-Sum Various AC Overlays/Reconstruction on Eligible Routes. Consistent with 40 CFR part 93.126, 127, 128 exempt tables 2&3.	$274,000	RSTP

Coalinga, City of	SR 33	City of Coalinga	In Coalinga: Intersection Beautification Project--Install New or Reconstruct Failed Curb, Gutter, and Sidewalks. Provide New Landscaping and Irrigation Facilities and Pedestrian Facilities.	$603,800	RSTP
Firebaugh, City of	13th St	N Street (SR 33) to 400 ft east of P St	Reconstruct 13th Street between N Street (SR 33) to 400 ft east of P Street.	$406,300	RSTP
Fowler, City of	Various	City of Fowler	In Fowler - Lump-Sum A/C Overlays On Various Eligible Routes (No Additional Travel Lanes) and Provide Curb, Gutter, and Sidewalks. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$151,000	RSTP
Fowler, City of	Manning Ave	SR 99 northbound ramps to 0.25 miles east of Golden State Blvd	Manning Ave, from SR 99 northbound ramps to 0.25 miles east of Golden State Blvd. Reconstruct approaches to RR crossing; upgrade, interconnect & synchronize traffic signals; signage & striping.	$643,000	RSTP

Fresno County	Various	City of Orange Cove	Orange Cove/ Fresno Co - Lump-Sum A/C Overlays and Necessary Reconstruction On Eligible Routes for Safety (No Additional Travel Lanes). Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2	$488,400	RSTP
Fresno County	Various	Fresno County	Lump-Sum A/C Overlays and necessary reconstruction on Various Eligible Routes (No Additional Travel Lanes). Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$4,886,800	RSTP
Fresno County	Manning Ave.	Crawford to Hill Ave	Manning Ave. from Crawford to Hill Ave. Reconstruct existing 2-lane road to current standards -widening travel way, paving shoulders an improving structural section.	$1,645,200	RSTP
Fresno, City of	Various	City of Fresno	In Fresno - Lump-Sum Sound Walls. Use for City Match To Caltrans Projects On Freeways for Noise Attenuation. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$1,016,600	RSTP
Fresno, City of	Various	City of Fresno	In Fresno - Lump-Sum Traffic Signals At Major Eligible Road Intersections. Consistent with 40 CFR part	$3,992,200	RSTP

			93.126, 127, 128, exempt tables 2&3.		
Fresno, City of	Various	City of Fresno	Cold pavement recycling of existing major streets within South Fresno Industrial "Regional Jobs Initiative" Area.	$1,206,200	RSTP
Fresno, City of	Various	City of Fresno	Cold pavement recycling of existing major streets within Fresno-Yosemite International Airport Business Park. "Regional Jobs Initiative" Area.	$600,800	RSTP
Fresno, City of	Fresno Ave	At Sierra Ave	Fresno Ave. at Sierra Ave. Additional turning lane and light turn phasing.	$680,000	RSTP
Fresno, City of	Herndon	Marks to Valentine	Herndon from Marks to Valentine-Widening to six lanes. Traffic signal modifications and landscaping.	$1,957,100	RSTP
Fresno, City of	Herndon	SR 99 to Weber and Golden State Blvd.	Herndon from SR 99 to Weber and Golden State Blvd. Addition of through lanes (2LU to 4LD), turn lanes, bus bays. Modification of at grade railroad crossing. Addition of medians and landscaping.	$3,180,000	RSTP
Fresno, City of	Willow Ave	Nees to Shepherd	Operational improvements to relieve congestion and reduce delay on Willow Ave. This project will add a second southbound lane within the project limits.	$2,852,400	RSTP
Fresno, City of	Kings Canyon Rd	Cedar and Chestnut Ave	Cold pavement recycling of Kings Canyon Road between Cedar and Chestnut Avenue.	$1,525,900	RSTP
Fresno, City of	Shaw Ave	Blackstone Avenue and Highway 168	Repair failed asphalt at ten intersections along Shaw Avenue between Blackstone Avenue and Highway 168.	$1,100,000	RSTP
Fresno, City of	Clovis Ave	McKinley Ave to Shields Ave	Cold pavement recycling of Clovis Avenue between McKinley Ave. to Shields Ave.	$1,254,000	RSTP
Fresno, City of	McKinley Ave and Echo Ave	City of Fresno	Install a traffic signal at the intersection of McKinley Ave. and Echo Ave.	$280,000	RSTP
Huron, City of	Various	City of Huron	In Huron - Lump-Sum Construction of Median Islands and Landscaping on Eligible Routes. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$239,700	RSTP

Kerman, City of	S/S Whitesbridege	west of Vineland to Vineland	S/S Whitesbridege from 900 ft. west of Vineland to Vineland. Widen existing pavement & install curb, gutter, sidewalk, & streetlights to provide right-turn only for E/B Whitesbridge to Vineland.	$542,400	RSTP
Kerman, City of	W. Kearney Blvd	3rd St. to Del Norte Ave	On W. Kearney Blvd. from 3rd St. to Del Norte Ave. Install median islands with landscaping, grind, and regrade existing pavement and install 3" AC pavement.	$392,000	RSTP
Kingsburg, City of	18th Ave	Stroud Ave. to Tulare St	On 18th Ave. from Stroud Ave. to Tulare St. Pavement reconstruction and drainage improvements.	$345,600	RSTP
Mendota, City of	9th St	Oller St to Marie St	On 9th Street from Oller St. to Marie St. Reconstruction and resurfacing of existing road.	$314,900	RSTP
Orange Cove, City of	South Ave	Anchor Ave to Monson Ave	South Ave. from Anchor Ave. to Monson Ave. Reconstruction to standard and widen shoulder.	$977,000	RSTP
Reedley, City of	Buttonwillow and Dinuba Aves	City of Reedley	In Reedley - Install Traffic Signal at Intersection of Buttonwillow and Dinuba Avenue. Widen and Improve Intersection Approaches.	$396,800	RSTP

Reedley, City of	Frankwood Ave	Parlier to Manning	Frankwood Ave. from 900 ft north of Parlier to Manning. Reconstruct & overlay, remove & replace curb, gutter & sidewalks, ROW acquisition.	$939,900	RSTP
Reedley, City of	N. Frankwood Ave	between Manning Ave and Myrtle Ave	N. Frankwood Ave. to Manning Ave. Move east curb line between Manning Ave. and Myrtle Ave. back to its proper alignment matching the existing curb returns on street.	$855,100	RSTP
Reedley, City of	N. Reed Ave.	between Manning Ave to the south and South Ave to the north	N. Reed Ave. between Manning Ave. to the south and South Ave. to the north. Acquire right of way and widen Reed Ave. from two lanes undivided to four lanes divided.	$2,621,800	RSTP

Sanger, City of	Various	City of Sanger	In Sanger - Lump-Sum A/C Overlays and Necessary Reconstruction on Eligible Routes for Safety (No Additional Travel Lanes). Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$366,600	RSTP
Sanger, City of	North Ave	Academy to Bethel Ave.	City of Sanger/ County of Fresno Joint Project. North Ave. from Academy to Bethel Ave. Reconstruct existing two-lane road.	$771,500	RSTP
Sanger, City of	Academy Ave	North and 11th	Academy Ave between North and 11th. Combination overlay/ reconstruction and widening.	$1,604,000	RSTP
Selma, City of	Various	City of Selma	In Selma - Reconstruct curb, gutter, sidewalk, wheelchair ramps, A/C Overlay, on McCall Avenue (From Valley View Street to Whitson Street) For Safety (No Additional Travel Lanes)	$296,000	RSTP
Selma, City of	Floral Ave./ Selma Branch Canal Crossing	City of Selma	In Selma - Reconstruct Floral Ave./ Selma Branch Canal Crossing. 6 ft. block wall, wheelchair ramps, in-pavement crosswalk lights, split-rail fencing, warning signs.	$130,600	RSTP
Selma, City of	Floral Ave	between McCall Ave and Dockery Ave	Floral Ave. between McCall Ave and Dockery Ave. Cold plane pavement, overlay, construct/reconstruct handicapped access ramps and place in-pavement crosswalk with advance warning lights.	$851,000	RSTP
Selma, City of	Wright St	Arrants St and Dinuba Ave	Wright St between Arrants St. and Dinuba Ave. Cold plane pavement, overlay, construct/reconstruct handicapped access ramps and place in-pavement crosswalk with advance	$1,294,100	RSTP
Caltrans	Various	Fresno County	Lump-Sum "Bridge Preservation" Category SHOPP: Non-capacity increasing projects roadside rehabilitation. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$4,991,997	SHOPP

Caltrans	Various	Fresno County	Lump-Sum "Mobility" Category SHOPP: Non-capacity increasing projects roadside rehabilitation. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$25,746,992	SHOPP

Caltrans	Various	Fresno County	SHOPP- Emergency Response Non-capacity increasing projects roadside rehabilitation. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$384,000	SHOPP
Caltrans	SR 180	Belmont Ave to Whitesbridge	180 Near Mendota- Belmont Ave. to Whitesbridge San Joaquin Valley Railroad. Rehabilitate roadway.	$16,442,999	SHOPP
Caltrans	SR 180	west and east of Marks Ave	180 In Fresno- west and east of Marks Avenue- widen shoulders, signalize, channelize intersection and raise profile.	$104,000	SHOPP
Caltrans	SR 41	at McKinley Ave and Shields Ave	41 In Fresno- at McKinley Avenue and Shields Avenue. Widen on-ramps and install ramp metering systems.	$9,540,997	SHOPP
Caltrans	SR 41	Bullard Ave to Herndon Ave	41 In Fresno- Bullard Avenue to Herndon Avenue and northbound Herndon off-ramp- add auxiliary lane	$13,540,997	SHOPP
Caltrans	Various	Fresno County	Lump-Sum "Roadside Preservation" Category SHOPP: Non-capacity increasing projects roadside rehabilitation. Consistent with 40 CFR part 93.126, 127, 128, exempt tables 2&3.	$20,281,000	SHOPP
Caltrans	SR 180	Fresno County	180 In Fresno County - Data and Physical Survey of Native American Cultural Site Archaeological Site Inventory	$1,877,004	STIP - Interregional
Caltrans	SR 41	Kings County Line to Elkhorn Ave	41 Near Fresno, from the Kings County Line to Elkhorn Avenue. Widen from 2-lane to 4-lane expressway.	$11,080,000	STIP - Interregional
Caltrans	SR 41	Friant Road Interchange	41 In Fresno County on Route 41 at and near the Friant Road interchange. Tree planting.	$1,533,000	STIP - Interregional
Caltrans	SR 99	Route 99/201 Separation to north of Floral Ave	99 In Fresno County from the Route 99/201 Separation to north of Floral Ave OC. Replacement planting.	$1,499,000	STIP - Interregional
Caltrans	SR 99	Route 201	99 Route 201 in Fresno County (PM 0.0/ R1.0)- widen 4-lane to 6-lane freeway.	$1,000	STIP - Interregional

Caltrans	SR 180	Teilman Ave OC to the G St.	In Fresno, on Route 180 from the Teilman Ave OC to the G St. UC and on Route 99 from 0.2 km north of El Dorado St. to the Nielsen Ave UC. Highway planting.	$2,260,000	STIP / Regional Choice
Caltrans	SR 180	Route 168 to Clovis Avenue.	In Fresno on Route 180, from Route 168 to Clovis Avenue. Highway planting.	$5,038,000	STIP / Regional Choice

Caltrans	SR 180	Chestnut Ave to Clovis Ave	In Fresno, from Chestnut Avenue to Clovis Avenue. Relinquishment of existing Route 180.	$1,695,000	STIP / Regional Choice

Caltrans	SR 180	Clovis Ave to Temperance Ave	180 In and near Fresno from Clovis Ave to Temperance Ave. Construct 6-lane freeway from Clovis Ave to Fowler Av and 4-lane freeway from Fowler Ave to Temperance Ave.	$98,530,170	STIP / Regional Choice
Caltrans	SR 180	Temperance Ave to Frankwood Ave	180 Near Centerville and Minkler from Temperance Avenue to Frankwood Avenue. Required environmental mitigation work.	$1,000,000	STIP / Regional Choice
Caltrans	SR 180	Academy Ave to Trimmer Springs Rd	180 Near Centerville from Academy Avenue to Trimmer Springs Road. Construct 4-lane expressway on existing alignment.	$5,603,000	STIP / Regional Choice
Caltrans	SR 180	Trimmer Springs Rd to east of Frankwood Ave	180 Near Centerville & Minkler on Route 180 from Trimmer Springs Road to east of Frankwood Avenue. Construct 2 to 4-lane expressway on existing alignment.	$2,357,000	STIP / Regional Choice
Council of Fresno County Governments	Various	NA	Planning, Programming and Monitoring.	$1,978,000	STIP / Regional Choice
Clovis, City of	Enterprise Canal	East of Temperance Ave and south of Nees Ave	In the City of Clovis, east of Temperance Avenue and south of Nees Avenue along the Enterprise Canal. Construct a class I bicycle/pedestrian trail.	$260,000	TE
Clovis, City of	Ashlan Ave	Whittier Ave and McKelvy Ave	In the City of Clovis, on Ashlan Avenue between Whittier Avenue and McKelvy Avenue. Construct a median island with landscaping and irrigation.	$465,300	TE
Clovis, City of	Trail Head/ Rest Area	SWC Sunnyside & Shepherd Aves.	Trail Head/ Rest Area, SWC Sunnyside & Shepherd Aves.	$1,772,300	TE
Clovis, City of	Clovis Ave	4th and 5th St	Enhance "Gateway to the Sierras" Sign, Clovis Ave. between 4th and 5th Streets.	$154,300	TE
Fowler, City of	Merced St	3rd & 5th St	Landscaping & sidewalks, Merced Street between 3rd & 5th Streets.	$203,300	TE
Fresno County	Along the San Joaquin River	Kerchoff Reservoir to the Upper Redinger Reservoir	Along the San Joaquin River from the Kerchoff Reservoir to the Upper Redinger Reservoir. Construct multi-modal trail.	$537,000	TE

Fresno County	Kearney Blvd	Marks and Westlawn Aves.	Plant Palm Trees, Kearney Blvd. between Marks and Westlawn Aves.	$647,200	TE
Fresno, City of	Shaw Ave	Route 99 and Golden State Blvd	In and near Fresno, on Shaw Avenue between Route 99 and Golden State Blvd. Construct median island with landscaping and irrigation.	$281,000	TE
Fresno, City of	Santa Fe Depot	Santa Fe Ave. and Tulare St.	Rehabilitate 2nd Floor of Historic Santa Fe Depot, Santa Fe Ave. and Tulare St.	$1,486,400	TE
Fresno, City of	Clovis Ave	Kings Canyon and McKinley Aves	Median Island Landscaping, Clovis Ave. Between Kings Canyon and McKinley Aves.	$485,700	TE
Fresno, City of	Shields Ave	Palm Ave. and BNSF Railroad.	Median Island Enhancement, Shields Ave. Between Palm Ave. and BNSF Railroad.	$164,900	TE
Fresno, City of	Ventura Ave	Broadway and SR99.	Install and landscape median island, Ventura Ave. between Broadway and SR99.	$105,000	TE
Fresno, City of	Sugar Pine Trail Improvements	Nees & Chestnut Aves	Sugar Pine Trail Improvements, Between Nees & Chestnut Aves.	$185,900	TE
Kingsburg, City of	18th Ave	Hayward St to Stroud Ave	In the City of Kingsburg, on 18th Avenue, from Hayward Street to Stroud Avenue. Construct median island with landscaping and irrigation.	$154,100	TE
Kingsburg, City of	Sierra St	Bethel Ave and SR99	Install and landscape median island, Sierra Street between Bethel Ave. and SR99	$420,200	TE
Mendota, City of	Derrick Ave	(SR33) 7th St Intersection	Beautification/Reconstruction of Derrick Ave. (SR33) 7th St. Intersection.	$282,400	TE
Selma, City of	Selma Branch Canal	Floral Ave to Lincoln Middle School	In Selma, along the Consolidated Irrigation District's Selma Branch Canal from Floral Avenue to Lincoln Middle School. Construct class I bicycle path.	$752,300	TE
Selma, City of	NA	North and Third St	Class I Bikeway and two Rest areas, between North and Third Streets.	$283,600	TE
Selma, City of	NA	Floral Ave and Stillman St	Class I Bikeway, Selma Branch Canal between Floral Ave. and Stillman Street.	$765,800	TE
			Total:	**$454,667,156**	

Exhibit 5-5 (cont.)
Financially Constrained Federal Transportation Improvements Program Projects (2006/07 through 2009/10)

Transit Funds

Jurisdiction/Agency	Description	Estimated Cost
FCRTA	Programs 2006/07 FTA Section 5311 Apportionment - Annual Operating Assistance	$2,150,000
FCRTA	Programs 2006/07 FTA Section 5311 Apportionment - Annual Capital Assistance	$1,245,000
Fresno Area Express (FAX)	Capital Lease-Handy Ride Facility	$349,800
Fresno Area Express (FAX)	Capital Lease-Vehicle Tire Lease	$868,200
Fresno Area Express (FAX)	Various Planning Projects/FAX Staff/Annual Planning O & M Expenses and Special Projects	$2,497,300
(FAX)	Contracted Paratransit Service Operations	$15,057,700
Fresno Area Express (FAX)	Preventive Maintenance Expense	$31,956,400
Fresno Area Express (FAX)	Non-Revenue Vehicle Service Expansion/Replacement (18 Vehicles)	$400,000
Fresno Area Express (FAX)	Purchase of 4 Non-Revenue Vehicles	$4,800,000
Fresno Area Express (FAX)	Passenger shelters/structures, benches, trash receptacles and lighting; on-street signs; bus stop repairs; and miscellaneous amenities to benefit transit passengers	$600,000
Fresno Area Express (FAX)	FAX Facility Upgrades To Include Portable Life Equipment; Farebox Systems; Life Pump and Cylinders; Automated Passenger Counters; Bus Washer; Passenger Information Kiosks; etc.	$500,000
Fresno Area Express (FAX)	Paratransit Vehicle Service Expansion/Replacement of 17 Vehicles	$961,500
Fresno Area Express (FAX)	Various Planning Project/FAX & COFCG Staff/Annual Planning O & M Expenses and Special Projects	$2,550,000
Fresno Area Express (FAX)	Intermodal Transit Facility at Community Medical Center	$500,000
Fresno County Economic	Large Buses/Lift Equipment	$567,300
Westcare California	Minivan	$48,600
	Total	$65,051,800

Exhibit 5-6
REGIONALLY SIGNIFICANT PROJECTS

Jurisdiction/ Agency	RTP Project ID	CTIPs Project ID	Facility Name/ Route	Project Limits	Type of Improvement	Project Cost
County of Fresno	510	20300000144	Academy	Manning to Mountain View	Improve 2 lane facility	$8,000,000
County of Fresno	514	20300000144	Academy	Manning to SR 180	2 LU to 4 L Expressway	$21,000,000
Sanger	1046	20300000419	Academy	11th to North	Overlay/Reconstruct 4 LU to 4 L w/2WLTL	$1,000,000
County of Fresno	521		Alta	Manning to Floral	2 LU to 4 LD	$4,000,000
Clovis	401		Ashlan	McKelvy to Temperance	3 LD to 4 LD	$810,000
Clovis	400		Ashlan	Armstrong to McKelvy	3 LD to 4 LD Incl Median Landscaping	$600,000
Clovis	305		Ashlan	Dewolf to Leonard	2 LU to 4 LD	$3,500,000
Clovis	271		Ashlan	Locan to Dewolf	3 LU to 4 LU	$2,000,000
Clovis	303		Ashlan	Leonard to McCall	2 LU to 4 LD	$7,000,000
City of Fresno	208		Ashlan	Grade separation @ UPRR & SR 99 interchange	Interchange Improvements	$25,000,000
City of Fresno	940		Ashlan	Garfield to Grantland	Unconstructed to 4 LD	$1,000,000
City of Fresno	196		Ashlan	Polk to SR 99	2 LU to 4 LD	$1,000,000
City of Fresno	108		Ashlan	Grantland to Polk	2 L to 4 LD	$2,000,000
County of Fresno	564		Auberry	Copper to Millerton (W)	2 LU to 4 LD	$22,250,000
City of Fresno	153		Brawley	Palo Alto to Herndon	2 LU to 4 LD	$300,000
City of Fresno	212		Brawley	S of Shaw to Ashlan	2 LU to 4 LD	$1,000,000
City of Fresno	198		Cedar	Belmont to SR 180	Widen to 6 L	$5,000,000
City of Fresno	229		Cedar	Grant to Belmont	4 LD to 6 LD	$1,000,000
County of Fresno	513		Central	SR 99 to Clovis	2 L to 4 LD	$3,000,000
County of Fresno	529		Central	Maple to Golden State	2 LU to 4 LD	$1,000,000
County of Fresno	515		Central	Goldenstate to Clovis	2LU to 4 LD	$1,000,000
County of Fresno	512		Chestnut	American to SR 99	Widen to 4 LD Highway	$800,000
City of Fresno	205		Clovis	McKinley to City of Clovis	4 LD to 6 LD	$3,400,000
City of Fresno	139		Clovis	Kings Canyon to McKinley	4 LD to 6 LD	$3,500,000
Clovis	410		Clovis	Nees to Teague	Unconstructed to 4 LD	$1,200,000
Clovis	293		Clovis	Copper to Shepherd	Construct new 6 L divided arterial	$17,000,000
City of Fresno	1045		Copper	Cedar to Willow	2 LU to 4 LD	$3,500,000
City of Fresno	1048		Copper	Cedar to Willow	4 LD to 6 LD	$1,500,000
Clovis	286		Copper	Willow to Clovis	2 LU to 4 LDU	$9,750,000
Clovis	309		Copper-Clovis Couplet	Construct Beltway Interchange at Clovis and Shepherd	Unconstructed to 6 LD	$10,000,000
City of Fresno	921		Divisadero	SR 41 on/off ramps	Additional SB off lane and dual lefts on Divisadero at NB on ramp	$2,000,000
City of Fresno	964		Elm	Central to North	2 LU to 4 LD	$1,000,000
County of Fresno	537		Friant	Millbrook/Copper to North Fork/Millerton	2 LU to 4 LD	$19,500,000
City of Fresno	248		Friant	Shepherd to Copper	4 LD to 6 LD	$18,000,000
City of Fresno	920		Friant	SR 41 to Audubon	6 LD to 8 LD	$3,000,000
City of Fresno	974		Grantland	Shaw to Parkway	2 LU to 4 LD	$1,800,000
City of Fresno	975		Grantland	Shaw to Veterans	2 LU to 4 LU	$600,000
City of Fresno	234		Grantland	Shields to Ashlan	2 LU to 6 LD	$4,000,000
City of Fresno	976		Grantland	Belmont to Shields	2LD to 4 LD	$1,000,000
City of Fresno	119		H St	Belmont to Ventura	2 LU to 4 LD	$10,000,000
Clovis	326	20300000334	Herndon	Willow to Clovis	4 L Expressway to 6 L Expressway	$3,200,000
City of Fresno	1034		Herndon	Polk to Weber	2 LU to 4 LD	$2,300,000
City of Fresno	156		Herndon	Cedar to Willow	4 LD to 6 LD	$2,750,000
City of Fresno	1032	20300000370	Herndon	SR 99 to Weber	2 LU to 4 LD	$3,200,000
City of Fresno	1031	20300000369	Herndon	Marks to Valentine	4 LD to 6 LD	$1,900,000
Clovis	288		Herndon	Clovis to Tollhouse	4 LD to 6 LD	$4,500,000
City of Fresno	1033		Herndon	Valentine to Milburn	4 Ld to 6 LD	$5,000,000
City of Fresno	200		Herndon	SR 41 to Fresno	Add new WB auxiliary lane for SB on-ramp	$1,500,000
City of Fresno	1035		Herndon	Polk to Weber	4 LD to 6 LD	$2,000,000
City of Fresno	1036		Herndon	Milburn to Polk	4 LD to 6 LD	$3,500,000

Exhibit 5-6
REGIONALLY SIGNIFICANT PROJECTS
(CONTINUED)

Jurisdiction/ Agency	RTP Project ID	CTIPs Project ID	Facility Name/ Route	Project Limits	Type of Improvement	Project Cost
City of Fresno	115		Hughes	Neilsen to McKinley	2 LU to 4 LD	$3,000,000
City of Fresno	1023		Hughes	Church to Whites Bridge	2 LU to 4 LU	$1,500,000
Caltrans	62		I 5	Kings County line to Merced County line	4L Freeway to 6 L Freeway	$198,000,000
County of Fresno	539		Jayne	SR 33 to I5	Widen to 4 Lane Divided	$12,600,000
City of Fresno	260		Jensen	Fruit to Martin Luther King Blvd	2 LU to 4 LD	$1,500,000
City of Fresno	237		Jensen	Cherry to Clovis	4 LD to 6 LD	$25,000,000
City of Fresno	121		Jensen	Clovis to McCall	4 LD to 6 LD	$4,000,000
County of Fresno	541		Jensen	West to Brawley	Widen from 2 LU to 4-lane divided highway	$2,400,000
City of Fresno	118		Jensen	Marks to Fruit	2 LU to 4 LD	$3,000,000
County of Fresno	565		Jensen	Brawler to Dickenson	2 LU to 4 LD	$12,000,000
City of Fresno	194		Kings Canyon	Fowler to Temperance	2 LU to 4 LD	$1,000,000
City of Fresno	125		Kings Canyon	Chestnut to Fowler	2 LU to 6 LD	$25,000,000
City of Fresno	123		Kings Canyon	Temperance to Dewolf	2 L to 4 LU	$1,500,000
County of Fresno	543		Manning	Buttonwillow to Alta	2 LU to 4 LD	$3,000,000
Reedley	675		Manning	Reed to Columbia	2 LU to 4 LD	$3,495,000
County of Fresno	542		Manning	Alta to Hill	2 LU to 4 LD	$6,000,000
County of Fresno	1047		Manning	.25 mi w/o I-5 to .25 mi e/o I-5	2 lane to 4 lane	$1,000,000
City of Fresno	116		Marks	Jensen to Whitesbridge	2 LU to 4 LD	$3,000,000
City of Fresno	987		Marks	Weber to Dakota	2 LU to 3 LU	$350,000
City of Fresno	117		Marks	Neilsen to McKinley	2 LU to 4 LD	$2,400,000
City of Fresno	142		Marks	McKinley to Parkway	2 LU to 4 LD	$1,900,000
City of Fresno	986		Marks	North to Jensen	2 LU to 4 LU	$1,300,000
Clovis	338		McCall	Griffith to Shaw	2 LU to 6 LD	$6,700,000
Clovis	444		McCall	Herndon to Shepherd	2 LU to 6 LD	$30,000,000
Clovis	337		McCall	Bullard to Herndon	3 LU to 6 LD	$10,300,000
Clovis	336		McCall	Shaw to Bullard	2 LU to 6 LD	$8,300,000
City of Fresno	238		McKinley	Grantland to Golden State	2 LU to 4 LD widen SR 99 bridge	$15,000,000
County of Fresno	548		Mendocino	Kingsburg City Limit (Kamm) to Manning	2 Lane to 4 LD	$10,800,000
County of Fresno	549		Millerton	Friant to Table Mountain	2 LU to 4 LD	$8,600,000
County of Fresno	511		Millerton	Table Mountain Rd to Auberry Road	2 LU to 4 LD	$4,400,000
City of Fresno	112		Motel Dr.	Herndon to Ashlan	2LD to 4 LD	$5,100,000
County of Fresno	553		Mountain View	Bethel to e/o Smith (Tulare County Line)	2 LU to 4 LD	$8,000,000
City of Fresno	261		North	Orange to Cedar	2 LU to 4 LD, improve SR 99 interchange	$12,500,000
City of Fresno	239		North	Cedar to Chestnut	2 LU to 4 LU	$1,500,000
City of Fresno	994		North	Walnut to Hwy 41	2 LU to 4 LD	$2,500,000
City of Fresno	192		Peach	Butler to Belmont	2 LU to 4 LD	$10,000,000
City of Fresno	193		Peach	Jensen to Butler	2 LU to 4 LD	$1,500,000
City of Fresno	1002		Peach	North to Jensen	2 Ld to 4 LD	$700,000
City of Fresno	913		Polk	Olive to Belmont	Unconstructed to 4 LD	$1,000,000
City of Fresno	1001		Polk	Olive to McKinley	2 LD to 4 LD	$500,000
City of Fresno	131		Polk	Gettysburg to Shaw	2 LU to 4 LD	$5,000,000
City of Fresno	161		Polk	Shields to Gettysburg	2 LU to 4 LD	$1,500,000
City of Fresno	220		Polk	McKinley to Shields	2 LU to 4 LD	$1,000,000
Reedley	676	20300000417	Reed	Manning to South	2 LU to 4 LD	$3,495,000
Reedley	677		Reed	Olson to 11th St	2 LU to 4 LD	$3,500,000
County of Fresno	556		Reed	Reedley City Limit(South ave.) to Goodfellow	2 LD to 4 LD	$6,000,000
County of Fresno	914		Reed	Goodfellow to SR 180	2 LU to 4 LD	$7,000,000
Clovis	412		Shaw	Coventry to Locan	4 LU to 6 LD	$850,000
Clovis	908		Shaw	Locan to Dewolf	2 LU to 6 LD	$4,100,000
Clovis	931		Shaw	DeWolf to Highland	2 LU 6 LD	$8,300,000
Clovis	392		Shaw	Clovis to Temperance	4 LD to 6 LD	$2,000,000
City of Fresno	265		Shaw	Garfield to Grantland Diagonal	2 LU to 4 LD	$1,000,000
Clovis	354		Shaw	Highland to McCall	2 LU to 6 LD	$12,300,000
County of Fresno	559		Shaw	Dewolf to McCall	2 LU to 4 LD	$3,000,000

Exhibit 5-6
REGIONALLY SIGNIFICANT PROJECTS
(CONTINUED)

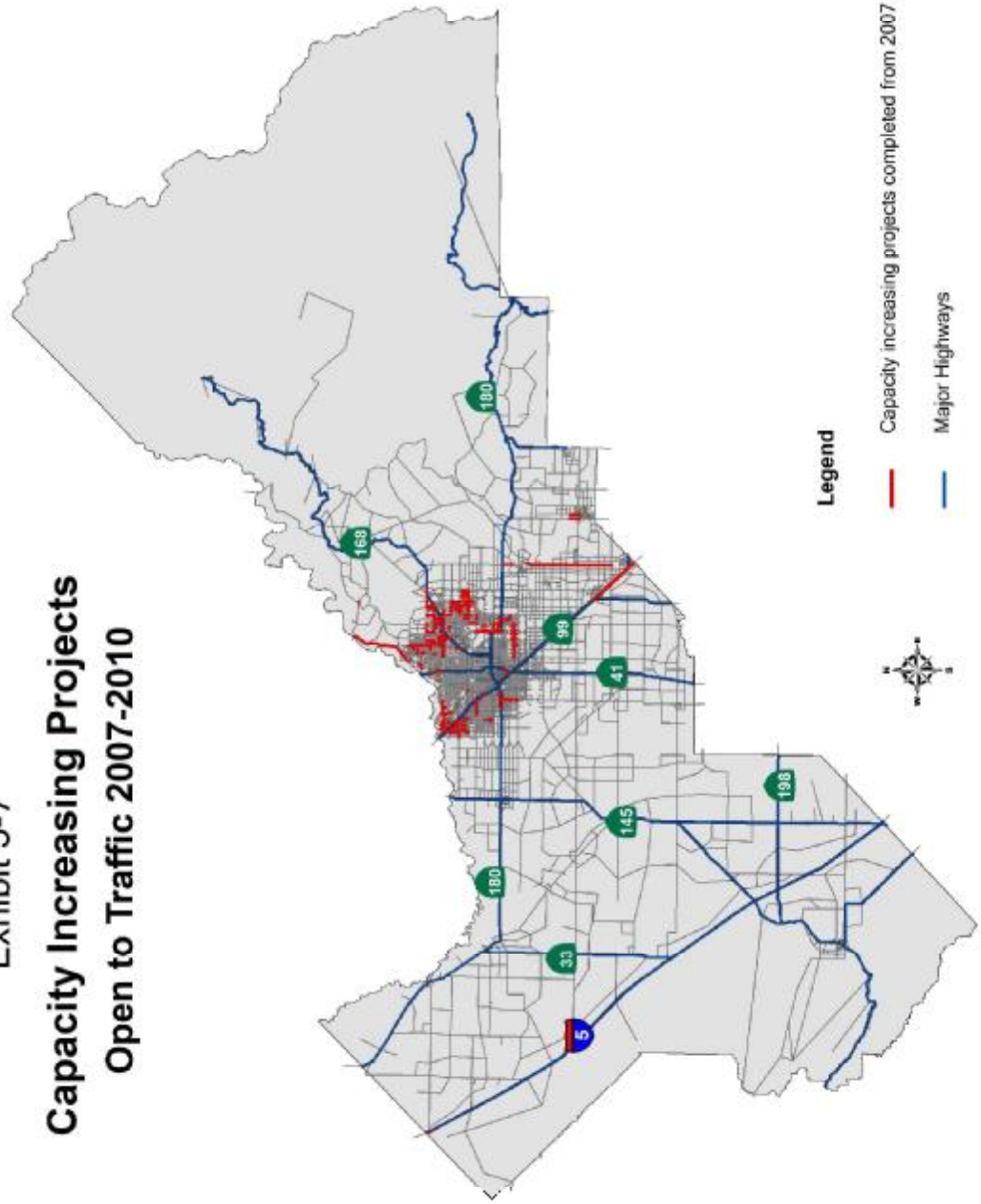
Jurisdiction/ Agency	RTP Project ID	CTIPs Project ID	Facility Name/ Route	Project Limits	Type of Improvement	Project Cost
City of Fresno	243		Shaw	Veterans Blvd to Golden State	2 LU to 6 LD	$4,000,000
County of Fresno	557		Shaw	Garfield to Dickenson	2 LU to 4 LD	$2,000,000
County of Fresno	560		Shaw	Dickenson to W of Biola	Widen to 4-lane divided highway	$4,000,000
County of Fresno	558		Shaw	McCall to Academy	2 LU to 4 LD	$6,000,000
Clovis	357		Shepherd	Dewolf to Tollhouse	2 LU to 4 LD	$10,000,000
Clovis	909		Shepherd	Clovis to Fowler	2 LU 3 LD	$2,600,000
Clovis	393		Shepherd	Willow to Clovis	3 LU to 4 LD	$4,000,000
Clovis	370		Shepherd	Temperance to Dewolf	3 LD to 4 LD	$1,300,000
City of Fresno	166		Shepherd	Chestnut to Willow	2 LU to 4 LD	$500,000
City of Fresno	132		Shepherd	Cedar to Maple	2 LU to 4 LD	$500,000
Clovis	911		Shepherd	Fowler to Armstrong	3 LD to 4 LD	$1,600,000
Clovis	910		Shepherd	Clovis to Fowler	3 LD to 4 LD	$2,600,000
Clovis	356		Shepherd	Armstrong to Temperance	2 LU to 4 LD	$1,400,000
City of Fresno	122		Shields	Armstrong to Temperance	2 LD to 4 LD	$2,000,000
City of Fresno	113		Shields	Cornelia to Parkway	2 LU to 4 LD	$3,000,000
City of Fresno	100		Shields	Fowler to Armstrong	2 L to 4 L	$3,000,000
City of Fresno	147		Shields	Sunnyside to Fowler	2 LU to 4 LD	$1,000,000
City of Fresno	247		Shields	Grantland to Cornelia	2 LU to 4 LD	$2,500,000
City of Fresno	47		Shields	At SR 99	Construct overcrossing	$12,000,000
Caltrans	1018		SR 145	SR 180 to Shaw	2 LU to 4 LU	$42,000,000
Caltrans	96		SR 168	Shepherd to Millerton	Construct 2 L expressway on new alignment of 4 L freeway ROW	$67,500,000
Caltrans	92		SR 168	Millerton to Lodge	Construct 2 L expressway on new alignment of 4 L freeway ROW	$52,500,000
Caltrans	10		SR 180	SR 41 to SR 168	Construct Braided Ramps	$25,000,000
Caltrans	38	20300000177	SR 180 E	Academy to Trimmer Springs	2 LU to 4 L Expressway on 4 L ROW	$65,393,000
Caltrans	43	10300000175	SR 180 E	Clovis to 0.8 km east of Temperance	Unconstructed to 6L Freeway on 8L ROW Clovis to Fowler Unconstructed to 4L Freeway on 6L ROW Fowler to Temperance	$47,673,000
Caltrans	53	10300000176	SR 180 E	Temperance to Academy	2 LU to 4 L Expressway on existing alignment	$46,951,000
Caltrans	54	10300000178	SR 180 E	Trimmer Springs to Frankwood	2 LU to 4 L Expressway on 4 L ROW	$23,375,000
Caltrans	56		SR 180 E	Frankwood to Cove	2 LU to 2 L Expressway on new alignment	$15,000,000
Caltrans	12	20300000377	SR 180 W	Brawley to Hughes/West	Unconstructed to 4 L Freeway between Brawley and Marks and 6 lanes between from Marks to Hughes/West	$32,075,000
Caltrans	52		SR 180 W	Dickenson to Brawley	2 LU to 4 LU expressway	$50,000,000
Caltrans	57		SR 180 W	I 5 to SR 33 (Traversable Highway)	2 LU on existing alignments.	$13,800,000
Caltrans	63		SR 180 W	Sequoia to Dickenson	2 LU to 4 LU	$94,000,000
Caltrans	1019		SR 198	Interchange at I-5	Widen bridge to 4 lanes	$5,000,000
Caltrans	64		SR 33	In Mendota - Intersection of SR 33 and SR 180 to Northern City	2 LU to 4 L	$8,250,000
Caltrans	1052	10300000194	SR 41	Alluvial to Friant	Aux Lanes	$6,000,000
Caltrans	11	10300000194	SR 41	Herndon to Audubon	Modify Friant interchange (NB off-ramp. Add auxiliary lane from Herndon to Friant)	$8,500,000
Caltrans	1051	10300000249	SR 41	McKinley to Shields	Widen on Ramps at both interchanges	$8,200,000
Caltrans	49	10300000174	SR 41	Kings County line to Elkhorn	2 L Expressway to 4 L Expressway	$40,131,000
Caltrans	107	20300000439	SR 41	Bullard to Herndon	Construct NB auxiliary lane	$5,143,000
Caltrans	1015	10300000194	SR 41	Friant to Herndon	Add 1 SB Auxiliary Lane	$7,000,000
Caltrans	1049		SR 41	Ashlan to Shields	Add 1 NB Auxillary Lane	$6,000,000
Caltrans	1050		SR 41	Shaw to Bullard	1 NB Aux Lane	$6,000,000
Caltrans	1016		SR 41	McKinley to Shields	Add 1 NB and 1 SB Auxiliary Lane	$16,000,000

Exhibit 5-6
REGIONALLY SIGNIFICANT PROJECTS
(CONTINUED)

Jurisdiction/ Agency	RTP Project ID	CTIPs Project ID	Facility Name/ Route	Project Limits	Type of Improvement	Project Cost
Caltrans	1014		SR 41	Divisadero to O Street	Add SB Auxiliary Lane	$7,000,000
Caltrans	1013		SR 41	Ashlan to Shaw	Add 1 NB Auxiliary Lane	$7,000,000
Caltrans	42		SR 41	Divisadero to Shields	6 L Freeway to 8 L Freeway & widen SB off-ramp at Divisadero	$43,000,000
Caltrans	5		SR 41	Shields to Ashlan	7 L Freeway to 8 L Freeway Additional NB lane added in 2015	$16,800,000
Caltrans	7		SR 41	Shaw to Bullard	7 L Freeway to 8 L Freeway	$16,800,000
Caltrans	60		SR 41	Interchange at Central	Add Interchange at Central	$15,000,000
Caltrans	6		SR 41	Ashlan to Shaw	6 L Freeway to 8 L Freeway	$16,800,000
Caltrans	9		SR 41	Herndon to Friant	6 L Freeway to 8 L Freeway	$16,800,000
Caltrans	8		SR 41	Bullard to Herndon	6 L Freeway to 8 L Freeway	$16,800,000
Caltrans	59		SR 41	Interchange at American	Add Ramps to Interchange at American	$10,700,000
Caltrans	61		SR 41	Interchange at Manning	Add Interchange at Manning	$15,000,000
Caltrans	50		SR 43	Kings County line to Selma City limits	2 LU to 4 LD	$66,401,000
Caltrans	14	10300000156	SR 99	SR 201 to SR 43	4 L Freeway to 6 L Freeway	$41,208,000
Caltrans	55	20300000444	SR 99	Tulare County Line to SR 201	4 L Freeway to 6 L Freeway & Widen Bridge to 6 L	$31,800,000
Caltrans	46		SR 99	Interchange at Shaw	Improve interchange	$32,000,000
Caltrans	39		SR 99	Ashlan to Madera County line	Widen from 4 L Freeway to 6 L Freeway	$25,000,000
Caltrans	3		SR 99	Fresno to Clinton	Add NB and SB Auxiliary Lanes	$132,000,000
Caltrans	90		SR 99	Jensen to Central	6 L to 8 L	$25,000,000
Caltrans	917		SR 99	SR 99 and Cedar/North Ave.	Upgrade Interchange	$25,000,000
Caltrans	45		SR 99	Interchange at Grantland Diagonal	Construct Interchange	$32,000,000
Caltrans	1017		SR 99	Central and Chestnut Interchange	Upgrade Interchange	$25,000,000
Caltrans	48		SR 99	Jensen to Bullard	6 L Freeway to 8 L Freeway	$266,000,000
Caltrans	1030		SR 99	SR 43/Floral Rd Interchange	Replace bridge structures and widen Floral	$10,000,000
City of Fresno	268		SR99 @ Montery St	Broadway to Golden State	Update closed bridge structure Closed 6 LD to Open 4 LD	$1,800,000
Clovis	287		Temperance	Ashlan to Gettysburg	2 LUto 4 LD	$900,000
Clovis	294		Temperance	Bullard to Herndon	2 LU to 4 LD	$1,000,000
Clovis	363		Temperance	Nees to Lexington	3 LD to 4 LD	$300,000
Clovis	362		Temperance	Enterprise Canal to Nees (Just south of Nees)	3 LD to 4 LD	$500,000
Clovis	364		Temperance	Heritage Ln to Shepherd	3 LU to 4 LD	$1,000,000
Clovis	932		Temperance	Ashlan to Gould Canal	2 LU to 4 LD	$500,000
City of Fresno	263		Temperance	Belmont to Dakota	2 LU to 6 LD	$8,000,000
City of Fresno	250		Temperance	Jensen to Belmont	2 LU to 6 LD	$10,000,000
Clovis	282		Tollhouse	Third to Herndon	2 LU to 4 LU	$1,400,000
City of Fresno	1037		Veteran's Blvd	Ashlan to Gettysburg	New 6 LD Superarterial	$1,500,000
City of Fresno	1038		Veteran's Blvd	Gettysburg to Barstow	New 6 LD Superarterial	$3,000,000
City of Fresno	1039		Veteran's Blvd	Barstow to Bullard-Bryan	New 6 LD Superarterial	$60,000,000
City of Fresno	1040		Veteran's Blvd	Bullard-Bryan to Herndon	New 6 Ld Superarterial	$2,200,000
City of Fresno	181		Weber	Marty to Clinton	2 LU to 4 LD	$3,000,000
City of Fresno	224		Weber	Belmont to Olive	2 LU to 4 LD	$1,000,000
City of Fresno	114		West	Jensen to Kearney	2 LU to 4 LD	$3,000,000
City of Fresno	1007		West	Kearney to Whites Bridge	2 LU to 4 LU	$900,000
City of Fresno	1008		Whitesbridge	State Rt 180 E/O Brawley to Valentine	2 LU to 4 LD	$500,000
City of Fresno	264		Whitesbridge	Valentine to Fruit	2 LU to 4 LD	$3,000,000
Clovis	368	20300000381	Willow	Powers to Shepherd	2 LU to 6 LD - Clovis half only	$1,000,000
City of Fresno	134		Willow	Herndon to Alluvial	2 LU to 6 LD	$800,000
City of Fresno	369		Willow	Nees to Powers	2 LD to 6 LD	$1,000,000
Clovis	99		Willow	Shepherd to Copper	2 LU to 6 LD - Clovis half only	$6,700,000
City of Fresno	124		Willow	Shepherd to Copper	2 LD to 6 LD	$3,000,000
					TOTAL PROJECT COSTS	**$2,526,850,000**

Exhibit 5-7

Capacity Increasing Projects
Open to Traffic 2007-2010



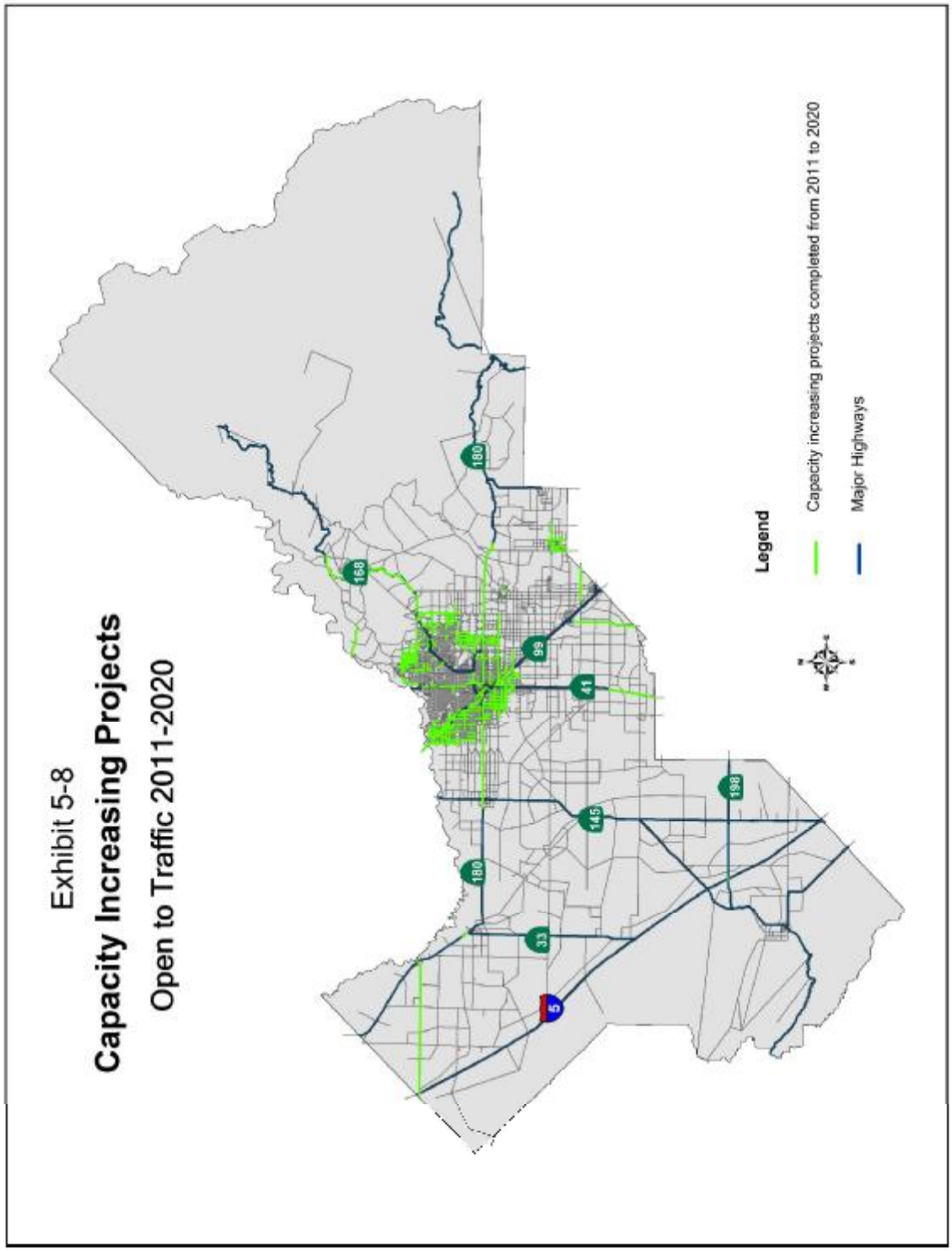


Exhibit 5-8
Capacity Increasing Projects
Open to Traffic 2011-2020
5
33
180
145
41
99
168
180
198
Legend
Capacity increasing projects completed from 2011 to 2020
Major Highways

Exhibit 5-9

Capacity Increasing Projects

Open to Traffic 2021-2030

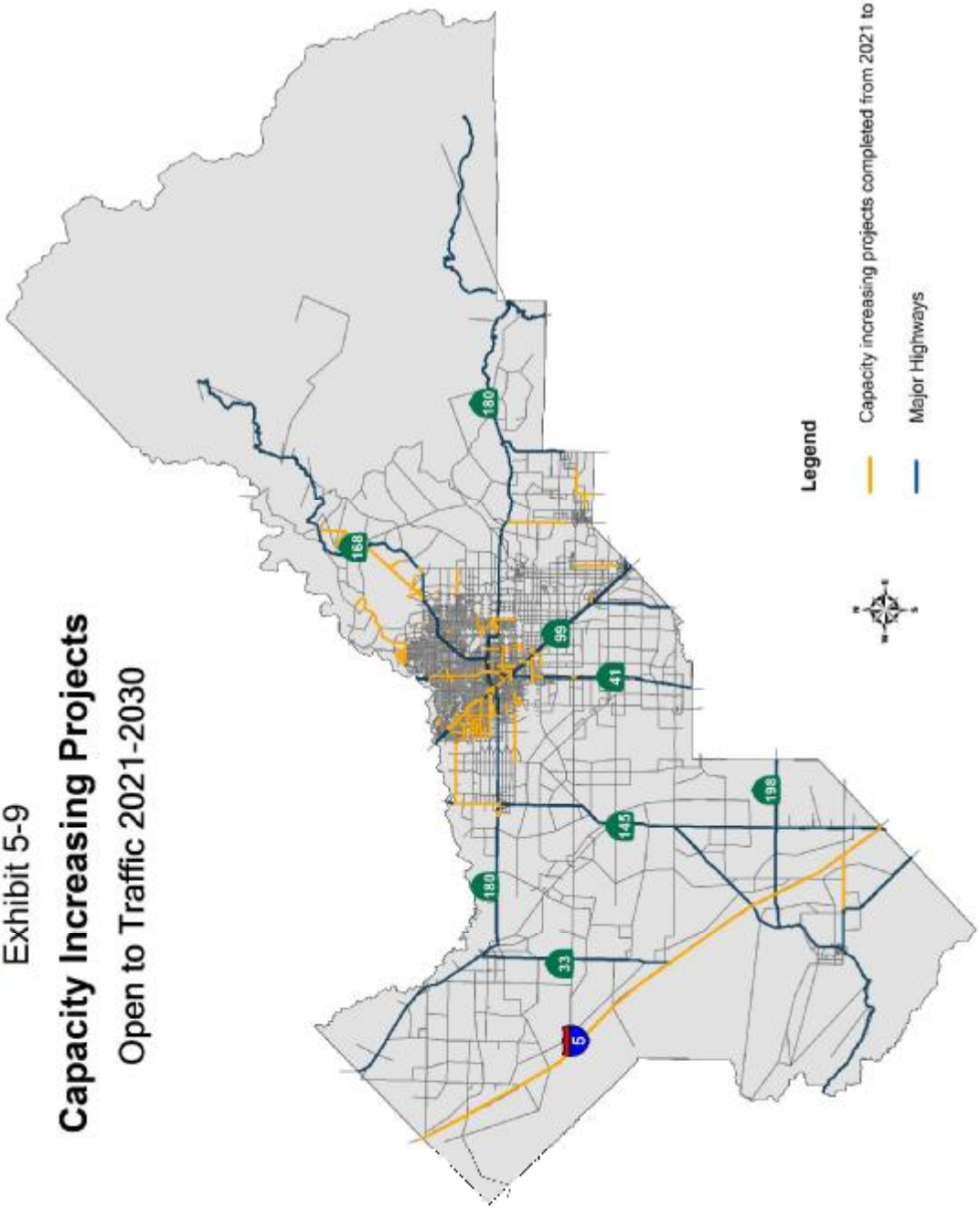


Exhibit 5-10
MEASURE "C" EXTENSION PLAN
Multi-Modal Funding Allocation Program

MEASURE "C" REAUTHORIZATION SALES TAX REVENUE	20 YEAR MEASURE "C" FUNDING TOTAL	AVERAGE ANNUAL MEASURE "C" FUNDING TOTAL	% OF MEASURE "C" FUNDING
	$1,714,400,000	$85,720,000	100.00%
FUNDING ALLOCATION PROGRAMS			
1. Regional Public Transit Program	**$412,100,000**	**$20,605,000**	**24.0%**
Public Transit Agencies	***$337,100,000***	***$16,855,000***	***19.7%***
Fresno Area Express (FAX)	$235,000,000	$11,750,000	13.7%
Clovis Transit	$33,700,000	$1,685,000	2.0%
Fresno County Rural Transit Agency (FCRTA)	$68,400,000	$3,420,000	4.0%
Public Transportation Infrastructure Study (PTIS) / Transit Consolidation	***$5,100,000***	***$255,000***	***0.3%***
ADA / Seniors / Paratransit	***$13,700,000***	***$685,000***	***0.8%***
Farmworker /Car/Van Pools	***$19,900,000***	***$995,000***	***1.2%***
Farmworker Van Pools	$9,950,000	$497,500	0.6%
Car/Van Pools	$9,950,000	$497,500	0.6%
New Technology Reserve (If construction is not imminent in 15 years, money will be reallocated based on greatest need)	***$36,300,000***	***$1,815,000***	***2.1%***
2. Local Transportation Program	**$593,600,000**	**$29,680,000**	**34.6%**
Local Allocation	***$525,300,000***	***$26,265,000***	***30.6%***
Street Maintenance (50% of Local Allocation)	$262,650,000	$13,132,500	15.3%
ADA compliance (1.75% of Local Allocation) *1	$9,192,750	$459,638	0.5%
Flexible Funding (48.25% of Local Allocation)	$253,457,250	$12,672,863	14.8%
Pedestrian/Trails	***$53,300,000***	***$2,665,000***	***3.11%***
Urban (Clovis and Fresno Spheres of Influence)	$37,000,000	$1,850,000	2.16%
Rural	$16,300,000	$815,000	0.95%
Bicycle Facilities	***$15,000,000***	***$750,000***	***0.9%***
3. Regional Transportation Program	**$520,800,000**	**$26,040,000**	**30.4%**
Urban (50%)	***$251,900,000***	***$12,595,000***	***14.7%***
Rural (50%)	***$251,900,000***	***$12,595,000***	***14.7%***
Fresno Airports	***$17,000,000***	***$850,000***	***1.0%***
4. Alternative Transportation Program	**$102,500,000**	**$5,125,000**	**6.0%**
Rail Consolidation (If construction is not imminent in 15 years, money will be used for grade separations instead)	***$102,500,000***	***$5,125,000***	***6.0%***
5. Environmental Enhancement Program	**$59,800,000**	**$2,990,000**	**3.5%**
School Bus Replacement	***$39,900,000***	***$1,995,000***	***2.3%***
Transit Oriented Infrastructure for In-Fill *2	***$19,900,000***	***$995,000***	***1.2%***
6. Administration/Planning Program	**$25,600,000**	**$1,280,000**	**1.5%**
Fresno County Transportation Authority (FCTA)	***$17,000,000***	***$850,000***	***1.0%***
Council of Fresno County Governments (Fresno COG)	***$8,600,000***	***$430,000***	***0.5%***

*1 *Jurisdictions receiving less than $200,000 annually from the total local transportation funds available will be exempt from the provision. (Likely exempt jurisdictions would be Firebaugh, Fowler, and San Joaquin).*

*2 *Name of Funding Program to be determined.*

ESTIMATED TOTAL MEASURE "C" PROGRAM ALLOCATIONS - URBAN 67.5%, RURAL 32.5%

Exhibit 5-11
2007 RTP
Financial Constraint Summary

Projected Revenues

Funding Source	Life of RTP (24 Year)
Federal	**$1,201,268,589**
State	**$2,169,679,605**
Local	**$1,815,900,000**
Total Revenue (All Sources)	**$5,176,848,194**

Projected Expenditures

	Life of RTP (24 Year)
FY 2006/07-2009/10 Federal Transportation Improvement Program	$519,718,956
Financially Constrained List of RTP Projects-Modeled for Air Quality Conformity	$2,526,850,000
2006 Measure C Extension Expenditure Plan	$1,700,000,000
Total Expenditures (All Sources)	**$4,746,568,956**

5.7 Long-Term Transportation Needs for Fresno County

As part of the update for this edition of the RTP, Fresno COG solicited near and long-term multimodal candidate regional projects from Caltrans and its member agencies. The projects identified are all located on the Fresno County Regionally Significant System as defined in Chapter 4 and are found in Appendix D. All projects were evaluated using an evaluation methodology that was endorsed by the RTP Steering Committee and is explained in detail in the appendix. The purpose of the evaluation exercise was to help establish some level of priority for future regional transportation funding.

5.7.1 Statewide Perspective

California's economic vitality in the 21st century will depend to a great degree on the investments that are made in the transportation system today. If California is to maintain its prominence as a major crossroads within a global economy, it will depend to a great degree on our willingness to recognize our transportation system's *future* needs and plan accordingly.

California's transportation system is integral to the performance of the state's economy in two significant respects. The first relates to the economic impact of the construction of transportation facilities. Public works construction, of which transportation is the most significant aspect, is the largest component of non-residential construction in the state. The second aspect is the importance of transportation to business in the state. Transportation supports existing businesses by providing the mobility needed to move raw materials and finished products throughout the state and into national and international markets. In addition, less congestion on freeways and additional transportation alternatives to the public ensures that millions of workers will get to their jobs in a timely fashion. In addition, an effective

transportation system is frequently cited as a key factor that attracts new business investments. Finally foreign trade, which is expected to be among the most significant growth sectors of California's economy over the next two decades, relies heavily upon the state's transportation system.

Unfortunately, the state's transportation system is straining at the seams. Growth in California's population continues to place demands on the system that exceed its capacity, especially in large urban areas, but increasingly so in smaller metropolitan and rural areas as well. Due to the state's need to focus on capacity enhancing projects to keep pace with population growth, maintenance and rehabilitation projects on the existing system have been deferred to the point of putting facilities at risk and therefore jeopardizing the *existing* transportation system, which is arguably the investment cornerstone of the state's economy.

For most of the twentieth century, California has experienced large population growth, and up until the 1960's citizens of California responded to this growth by expanding public facilities and services, including construction of the state freeway system. Unfortunately highway construction in California peaked in 1965 and since that time transportation infrastructure spending has not kept pace with the non-stop growth.

5.7.2 Unmet Needs in Fresno County

Fresno County and its incorporated cities are not unlike other areas in the State of California when it comes to unmet needs with regards to the rural, metropolitan and regional transportation networks. As the region continues to experience significant population growth, additional demands will be placed on the transportation system. Fresno County's economic vitality in the coming years is dependent upon the investments that are made today in the region's transportation network infrastructure. Currently, the local transportation networks within Fresno County are struggling to cope with increased population growth, deferred maintenance, and lack of investment in necessary improvements. Clearly, if Fresno County is to remain economically competitive, solutions (construction of new facilities, maintenance, preservation and rehabilitation of the existing system) will need to be addressed.

In the Fresno-Clovis Metropolitan Area of Fresno County and the smaller outlying rural communities as well, the demands on the urban transportation networks have been increasing as population continues to grow and urban development takes place. Increased growth inevitably brings with it increased demands on the transportation network, and a subsequent requirement for capacity enhancements and increased maintenance and rehabilitation.

Exhibit 5-12
Fresno COG Member
Agency Road Mileage

Member Agency	Road Miles
Clovis	208.5
Coalinga	37.4
Firebaugh	15.6
Fowler	31.8
Fresno	1,618.5
Huron	28.8
Kerman	24.5
Kingsburg	38.0
Mendota	30.1
Orange Cove	26.3
Parlier	28.1
Reedley	65.5
Sanger	67.5
San Joaquin	15.4
Selma	71.1
County of Fresno	3,615.7

The Fresno County Road System with approximately 3,600 miles of roads and approximately 550 bridges, has the largest county road network (in terms of mileage) of any county within the State of California. Exhibit 5-12 lists the approximate road miles of each of COG's member agencies. This extensive road system represents an approximately one billion dollar infrastructure investment on the part of the citizens of Fresno County. The county road system provides for the majority of intra-county travel in terms of the movement of both people and goods within the 6,000 square mile county and also plays a vital role in the multi-billion dollar agricultural economy of Fresno County. As the number one agricultural county in the world ($4 billion+ annually), a great deal of the region's economy is dependent upon the efficient movement of goods from farm to market. In addition, the county road system serves the entire business community of Fresno County and provides public mobility to the far reaching corners of Fresno County. Clearly if Fresno County is to maintain its number one ranking and remain economically competitive on a global scale it must (in addition to construction of new transportation facilities) maintain its existing transportation system in good operating condition, in order to serve the public and maximize the return on its existing one billion dollar transportation infrastructure investment. The lack of adequate funding to protect the millions of dollars worth of improvements completed on the county road system over the past forty years, is probably the single greatest unmet need that currently faces Fresno County road system providers.

5.7.3 Maintenance/Rehabilitation Needs

Senate Resolution 8 (Senators Burton and Karnette), passed by the State Senate on February 19, 1999, required the CTC in cooperation with Caltrans and RTPAs to develop a long-range (10 year) inventory of estimated multimodal transportation needs. The report was intended to serve as quantitative evidence for the state legislature that a significant shortfall exists with regards to funding long-range transportation infrastructure need throughout the State of California.

Statewide results of the SR 8 survey show unfunded state highway and local street and road needs for rehabilitation and new facilities over the next decade at approximately $81.6 billion. Survey results for Fresno County indicated unfounded rehabilitation, maintenance, and operations needs of the existing system at 1.5 billion. Unfunded high-priority capital projects needs in Fresno County totaled more than $1.7 billion. Including rail, public transit, bicycle, and pedestrian needs the total estimated statewide need is about $118 billion over the next 10 years. As a follow-up to the SR 8 survey, the Regional Transportation Planning Agencies, the League of California Cities and the California State Association of Counties are currently in the process of developing a comprehensive statewide inventory of all "Local" maintenance and rehabilitation needs.

Currently, taking into account all sources of local, state, and federal funds, there exists a significant revenue shortfall in the billions of dollars compared to the needs to enhance capacity and properly maintain the existing system.

Fresno County estimates that the current shortfall to provide preventative maintenance service to the County road system is upwards of $31 million dollars annually. Fresno County is also responsible for road reconstruction, safety and capacity improvements on the County road system when there are available revenues. The current shortfall on County-maintained roads that need reconstruction and system safety and congestion management improvements is estimated to be upwards of $20 million dollars annually. Preventive maintenance expenditures are essential for the efficient use of the available funds in order to avoid more costly repairs or reconstruction if pavement is allowed to deteriorate beyond a maintainable level. Studies show that reconstruction costs are approximately five times the cost per mile of preventative maintenance. There are two primary factors which contribute to the degradation of the road system, traffic increases and increases in truck traffic. In recent years, the amount of average daily traffic (ADT) on the Fresno County road system has increased dramatically. As an example, in less than twenty years, Fresno County roads have experienced traffic volume that has almost doubled. Projections by the State Department of Finance indicate that Fresno County's population will continue to increase, which will lead to large increases in traffic and frequent loads, both of which cause damage to the road system and shorten its useful life.

In recent years, truck traffic has increased at a faster rate than automobile traffic on many miles of County roads. This is especially troubling when you consider that truck traffic is far more destructive to roads than automobile traffic. Engineering studies show that typical 18-wheel semi-trailer trucks have the equivalent loading effect of between 3,000 and 6,000 passenger vehicles. Due to economic growth in the agricultural industry it is predicted that "farm to market" trips on the road system will continue to grow. As many of the rural, less structurally sound roads are exposed to increases in heavy truck traffic "exponential" damage to the road system may occur.

The urban communities within Fresno County also face difficult revenue shortfalls. Within the city of Fresno, there is an existing circulation system which consists of 1,618 miles of local and major streets, i.e. expressways, super arterials, arterials, and collectors. The metropolitan circulation system is faced (like the county road system) with extensive maintenance and rehabilitation needs in order to keep the system functioning at maximum capacity and efficiency. These maintenance needs consist of repairing potholes, sealing cracks in the pavement, asphalt concrete overlays, maintenance of drainage pipelines and inlets and other routine maintenance.

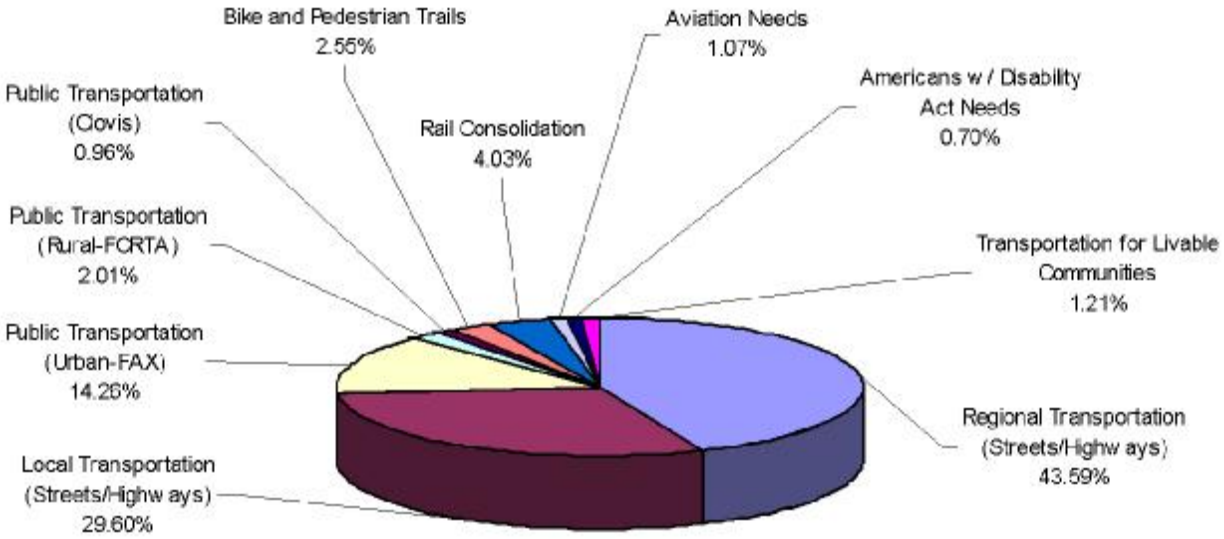
5.8 Capacity Enhancement / Multimodal Needs

In 2006 voters of Fresno County reauthorized a 1/2 percent local sales tax (Measure "C") for transportation purposes. The approximately $1.7 billion worth of revenue raised over the 20 year life of the tax will be used to construct a wide variety of multi-modal transportation improvements throughout Fresno County as illustrated in Exhibit 5-7.. Of course complete build-out of the plan requires consistent state financial participation over the 20 year life of the plan. The current state emphasis on economic development within the state focuses primarily on business and commerce (primarily urban activities) and tends to short change counties which rely on agriculture, ranch, timber and mineral products and materials for their economic growth and development. As a region whose economy is quite dependent on agriculture, this is a serious concern for Fresno County.

Exhibit 5-13
Estimated Total Modal Needs for Fresno County
(2007-2030)

Modal Category	Estimated Costs (Life of the RTP)	% of Overall Needs
Regional Transportation (Streets/Highways)	$2,996,584,615	43.59%
Local Transportation (Streets/Highways)	$2,035,035,692	29.60%
Total Streets/Highways	$5,031,620,308	**73.20%**
Public Transportation (Urban-FAX)	$980,584,615	14.26%
Public Transportation (Rural-FCRTA)	$138,461,538	2.01%
Public Transportation (Clovis)	$66,145,615	0.96%
Total Public Transportation	$1,185,191,769	**17.24%**
Bike and Pedestrian Trails	$175,384,615	2.55%
Rail Consolidation	$276,923,077	4.03%
Aviation Needs	$73,846,154	1.07%
Americans w/ Disability Act Needs	$48,092,308	0.70%
Transportation for Livable Communities	$83,076,923	1.21%
Total Other Modes	$657,323,077	**9.56%**
Total	$6,874,135,154	**100.00%**

Exhibit 5-14
Percentage of Total Needs by Mode and Program



5.9 Potential New Revenue Sources for Financing the Transportation Network

5.9.1 Overview

As stated throughout this planning document, overall, even given the increased sources of local, state, and federal funds that have materialized over the last decade, the current transportation funding situation for regional and local agencies results in a revenue shortfall both in the areas of new construction for capacity enhancements and maintenance and rehabilitation. It is anticipated that this shortfall will continue for two very basic reasons: (1) The revenues to support the maintenance and improvement of the transportation network are not increasing enough to keep pace with inflation, and (2) The demands for higher levels of maintenance and improvement have expanded above the normal rate of inflation. Originally, transportation funding was established with a strong connection between revenue measures and use. Unfortunately, with increased auto fuel efficiency, fuel taxes not indexed for inflation, and a new reliance on sales taxes, this previously strong connection has deteriorated. The following text provides a listing of a variety of financing mechanisms being explored, that offer potential relief for the transportation revenue shortfall that currently faces Fresno County and the State of California.

Vehicle Miles Traveled Fee

This financing mechanism is a vehicle use fee based on the number of miles driven. This type of fee generates substantial revenues, implements policy goals of increased mobility and is strongly related to transportation demand and congestion. Vehicle Miles Traveled (VMT) fees would appear to be a stable and growing source of revenue given Californians' propensity to use their automobiles. VMT fees also would maintain an ability to capture revenues from a growing fleet of alternative fuel vehicles within the state.

A VMT fee program could be linked to the vehicle smog certification program. Although the mileage data is currently not collected by the Department of Motor Vehicles, the state is moving toward improved data bases and auto manufacturers are making vehicles with sealed, "tamper resistant" odometers. Proposals to implement VMT fees could also be adjusted for low income and rural drivers.

Emissions Fee

An emissions fee could work in a manner similar to the VMT fee program except that user charges could be based on the levels of emissions rather than miles traveled. The Measure could be taken at the time the vehicle is smog checked and the driver would pay a fee based on a sliding scale. Revenue formulas would have to be adjusted due to the fact that the California vehicle fleet is becoming "cleaner" as older, more polluting vehicles are retired and replaced with vehicles that have improved emission technology.

Motor Vehicle Taxes and Fees (Statewide, Regionally or Locally)

There is an array of fees and taxes on motor vehicles which could be increased and implemented statewide, regionally or locally to generate transportation funds. Examples include vehicle registration surcharges (similar to the Air District's AB 2766 fees currently collected), increased surcharges on driver's license fees, mileage taxes, parts and repair excise taxes, heavy vehicle taxes, fees for "vanity plates," tire taxes, and personal property taxes on motor vehicles. One of the drawbacks to this approach involves the need for enabling legislation (statewide, regionally or locally).

"Local" Motor Vehicle Fuel Tax

SB 215 gives counties the ability to hold general elections to determine if taxing "local" sales of motor vehicle fuel (gasoline, diesel) is a desired local option to finance their regional transportation network. The uses, method of implementing, advantages and disadvantages are similar to that of a sales tax. One advantage of this type of charge is that it is user oriented. Fuel consumption is related to road use, thus

heavier users bear a higher burden of the cost commensurate with their use.

As a user fee, instituting a local gas tax is a relatively equitable local financing option. Motor fuel taxes are easily administered, and since they are tied to fuel prices, tend to rise with inflation. Some of the issues related to this type of program include:

- Placement on the ballot requires approval of a majority of the cities having the majority of the population within the county.
- Majority of the cities within the county representing a majority of the population, ***and*** the county must agree on a distribution formula before the Measure can be placed on the ballot.
- Two thirds majority required for approval
- Statutes do not limit the amount of tax increase that may be voted upon.

"Additional" Local Dedicated Sales Tax

Currently Fresno County collects a 1/2 percent local sales tax (Measure "C") for transportation purposes. The recently reauthorized twenty-year tax is projected to generate approximately $1.7 billion over the 20 year life span of the tax (2007/08 - 2027/28). Sales tax revenues are always susceptible to revenue fluctuations which coincide with the region's economic health over the life span of the tax.

Regional Transportation Facilities Impact Fee

A regional transportation facilities impact-fee would distribute the costs of regional transportation facilities among all ***new*** development within the region, using the size of a proposed development or estimates of a project's trip generating capacity as criterion. This type of development impact fee would be required to meet AB 1600 nexus findings in order to be implemented. The reauthorization of Measure "C" requires that all local agencies must adopt a regional transportation impact fee by January 1, 2009 or risk losing their local street maintenance and rehabilitation funding authorized by the Measure.

A similar mechanism is for developers to make dedications in lieu of paying development fees, such as land dedications, construction of public utility infrastructure, local roads or whatever type of public improvement is needed. The dedications ***must*** be linked to the impacts of the development on the regional transportation network in order to meet AB 1600 requirements. The use of development assessments with land use incentives can be used to encourage more transit-oriented and pedestrian-oriented development, which would reduce the demand, and subsequent need for extensive highway and road construction.

Benefit Assessment District Fees

An assessment district is an area of land specifically benefiting from a public improvement. An assessment is levied against each parcel benefited by the improvement, in proportion to the benefit. Bonds are then sold to finance the improvements, and the land owners in the assessed districts repay the bonds over time. Traditionally this approach has been used to finance urban public improvement projects (i.e. sewer, water, curbs, gutters, etc.) on a community or neighborhood level. One of the difficulties in utilizing this approach on a **"***regional***"** basis is that you are dealing with multiple legislative bodies (i.e. City Councils, Boards of Supervisors, etc.) and there is likely to be difficulty in achieving political consensus. In addition, there could be great difficulty in establishing a zone of benefit on a regional level.

Toll Facilities

Tolls allow the financing of the construction, operation or maintenance of roadway facilities. This is a familiar source of funding for bridges, tunnels, and turnpikes primarily in the eastern portion of the United

States, however more and more toll facilities are beginning to be constructed in California. For new facilities, it provides a means of generating up-front debt funding to construct transportation facilities without disturbing existing governmental agency budgets and programs, or requiring new or additional taxes. The financing costs in terms of interest on debt over the period that bonds are outstanding can be substantial. After the toll facility is completed, tolls usually provide income to operate and maintain the facility, as well as amortize the outstanding debt.

With the new emerging electronic technologies of toll collection, toll roads may be more feasible than before. Federal Highway officials are reconsidering the merits of toll roads to supplement urban transportation facilities. The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) abolished the restraints against tolls on interstate facilities and allowed federal agencies to support toll roads and to participate in their financing. Problems that may face this region are the limited number of high volume facilities in this region which would justify toll collection, and the direct and indirect costs involved in collecting tolls.

Congestion Pricing Strategies

Congestion-pricing (also known as peak-hour pricing) involves charging higher fees or fares to transportation system users during peak hours. Often the demand for a service exhibits a peaking system characteristic related to time of day or seasonal time of the year. For instance, the twice daily journey-to-work trip places significant demand peaks on the region's transportation network. The impact on the system to provide for peak period system capacity can be recovered from peak period users rather than the system users as a whole, by charging a higher fare during the peak period. Currently there are few, if any, facilities in this region which operate consistently at level of services which would warrant congestion pricing.

Public and Private Parking Fees

This mechanism includes increasing public and private parking charges and instituting parking fees where parking is now free. Most cities in California have become more aggressive in pricing downtown parking, both at meters and in lots in the post-Proposition 13 financial environment. In some cities, extended hours of parking lot operation and substantially increased enforcement have increased revenues from parking fees. Often these funds are treated as a general fund source rather than tied to specific transportation expenditures.

If public parking fees were to be initiated, several issues would need to be addressed. For example, the fees would probably have to be implemented on a countywide or regionwide basis in order to address issues of equity and consistency among the local jurisdictions. In addition to representing a potential source of revenue, parking pricing has also been shown to be one of the most significant factors in reducing drive-alone trips and is used as a common transportation demand management strategy.

Regional Transient Occupancy Tax (Hotel/Motel)

The Transient Occupancy Tax is a tax on visitor accommodations. These visitor-based taxes can be imposed on hotel/motel establishments in two different ways. One method is to tax each lodging establishment annually on a per unit basis. Another method is a tax charged directly to the patron for each night of lodging. An advantage is the fact that the tax does not directly affect local residents. Its major disadvantages are its susceptibility to fluctuations in the tourist economy and the need to have the fees implemented on countywide or regionwide basis in order to address issues of equity and consistency among the local jurisdictions.

5.10 Need for a Comprehensive & Equitable Solution

Fresno County's economic vitality in the 21st century is dependent to a great degree upon the investments that are made today in its transportation infrastructure. Clearly, based on population growth projections and projected transportation revenue streams, additional transportation funding must be identified and delivered if Fresno County is to remain economically competitive in the next century. Currently, Fresno County's transportation network is suffering the negative impacts of continued growth, deferred maintenance and lack of investments in necessary improvements. Fresno County, the cities within Fresno County and the State of California are jointly responsible for maintaining the existing transportation system in good operating condition in order to serve the public and maximize the return on their enormous investments. Maintenance of the existing transportation system limits the cost of future repairs and minimizes delay or interruptions of service for travelers, commuters and delivery of goods. Failure to adequately maintain the system will significantly burden the state's economy due to increased travel times, delay, and the increased cost to move goods.

Future capacity enhancements and the effective operation and maintenance of Fresno County's transportation system are dependent upon sufficient revenues and a reliable, stable funding source. Ideally this funding source would include a predictable, stable, dedicated, flexible source of revenue for each of the system's elements that can be periodically adjusted to renew and expand the system as required. In reality, the solution to the transportation funding crisis that faces California lies in the development of a comprehensive approach involving more efficient management of the existing system as well as additional revenues.

In 17 or more counties, local agencies and civic groups have succeeded in passing local sales tax measures, raising substantial funds to deal with regional transportation problems. Fresno County is, to a large degree, self-funding a freeway system which had awaited construction for over thirty years, as available funding went instead to the interstate system. Passage of local tax measures has not been easy in this era of profound resistance to paying for public programs and facilities, and promises to be even more difficult with the passage of the *Guardino* decision in Santa Clara County. The Guardino decision requires that passage of local sales tax measures achieve passage by a super-majority of voters (66%) rather than a simple majority (51%).

Fortunately, Fresno County, through a coordinated effort of the Chamber of Commerce, local agency staff and interested citizens was able to convince the electorate of the benefits of taxing themselves for needed system improvements. ***However, in no instance was this local effort intended to free the state government from their traditional responsibilities for state facilities or resolution of statewide transportation problems***. If California is to ever achieve an equitable, comprehensive solution to adequate funding of the transportation network, the following issues related to equity must be addressed:

In California, cities and counties have primary land use permitting authority within their jurisdictions. These same entities work together with Caltrans to provide a coordinated, comprehensive approach to both local and regional transportation needs. However, other agencies also play a major role in land use decisions and related traffic generation. As examples, school districts, and State and Federal government facilities are not subject to city or county land use controls. This situation creates a problem in that various governmental and educational facilities are allowed to build new facilities that generate significant traffic, yet they are not subject to the traffic mitigation process.

Caltrans does not currently have a "uniform statewide" Capital Facilities Fee Program to ensure equality among all jurisdictions, or to meet the nexus requirement of AB 1600 legislation. In the absence of a statewide fee, the local jurisdictions and Caltrans must confirm the nexus requirement of AB 1600 and delineate the current deficiencies which are not the responsibility of new development.

The state's road capacity is utilized on a first-come, first-served basis. Projects which are constructed first bear no traffic impact costs because they utilize capacity which was designed for by Caltrans in the

Project Study Report (PSR). When capacity is used up, any new development must contribute to the needed improvements even though that development may have been part of the original plan and covered by the PSR.

Often times, regional traffic with a particular destination (i.e. city parks) in mind, may use various highways and interchanges to get there. However, these destination cities are usually not required to contribute to the traffic mitigation requirements which are imposed on jurisdictions in which the transportation facilities are located.

The design of various transportation facilities are supposedly based on “full build-out” of various planning areas (General, community, etc.). However, oftentimes Caltrans is requesting impact fees for facilities which are at capacity even though the Plan area has significant areas of undeveloped land.

State law prohibits using fuel tax revenue to fund transit operations. Instead, local transit agencies must rely largely on local revenues and the Transportation Development Act (TDA) 1/4 cent sales tax. Unfortunately, the existing revenue sources are insufficient to meet overall transit needs.

Clearly, if California is to develop a comprehensive equitable solution to its transportation funding problems, a partnership approach between local, regional and state entities is required. Preferably one piece of the solution would involve a “uniform statewide traffic impact fee” that provides for equality among all jurisdictions. Additional help could materialize in the development of a “statewide capital facilities fee” program that would provide the nexus determination, and document the public concerns being addressed by the fee.

In summary, the Council of Fresno County Governments has at this time chosen not to adopt a particular position on any of the potential “new” revenue sources being explored throughout the state. Instead COG wishes to focus on ensuring that whatever “new” revenue sources are identified for eventual implementation, are in fact “equitable” for the citizens of Fresno County. At a minimum the COG feels that any type of development impact fees related to its transportation network should be administered equitably **“statewide”**. As a self-help county, Fresno is particularly sensitive to any revenue alternatives which do not take into account the financial burden Fresno County residents have already placed on themselves through implementation of Measure “C”.

Chapter 6
Public Participation

6.1 Introduction

Public involvement in transportation planning has always been an integral part of the overall transportation planning process. A citizen involvement process is also called for in the Joint Powers Agreement that the Council of Fresno County Governments (Fresno COG) has with its member agencies. However, since the passage of ISTEA, a significant emphasis has been placed on public involvement efforts. Federal regulations to implement ISTEA, TEA-21 and SAFETEA-LU call for comprehensive proactive public involvement procedures which respond not only to federal transportation legislation but also those of related federal acts, such as the Clean Air Act and the Americans with Disabilities Act (ADA).

A combination of factors involved in the transportation planning process warrant public involvement procedures which strive to build public acceptance and support. These factors include limited environmental resources, declining transportation funding availability, and a mind set that transportation programs and projects cannot proceed without an early, inclusive, proactive, ongoing, and comprehensive public involvement effort aimed at generating generalized public acceptance and support.

In keeping with the intent of SAFETEA-LU, Fresno COG is committed to a public participation process which enhances the role of citizens and interest groups in a manner designed to include early, open, and meaningful involvement in the development of plans from the beginning of the process to its end. Fresno COG, in keeping with this commitment, adopted Public Involvement Procedures (PIP) in May 2003. The 2007 RTP includes additional outreach to comply with the new requirements of SAFETEA-LU legislation. Appendix C includes the SAFETEA-LU Gap Analysis, which indicates that Fresno COG will update the Public Involvement Procedures in 2007. This is part of a commitment for regular updates and review of the procedures, as well as an opportunity to incorporate any additional issues identified in SAFETEA-LU.

Fresno COG includes the Native American tribal groups and communities in the transportation planning process. Fresno COG also works with the federal, state, and regional governments and the Native American tribal governments/groups to develop strategies that address the transportation issues of importance to the Native American communities. This effort promotes direct involvement by the Native American community in transportation planning and project selection and other issues that affect them.

6.1.1 Fresno COG Committee Process

The Council of Fresno County Governments has standing committees which review materials and issues monthly, before forwarding them to the legislative body, the Fresno COG Policy Board, for action. The first of these committees, the Transportation Technical Committee (TTC), is made up of member agency staff, other governmental agency staff, representatives from the Building Industry Association, California Highway Patrol, Caltrans, Fresno Chamber of Commerce, Fresno Cycling Club, Fresno Area Residents for Rail Consolidation and the League of Women Voters. The second group consists of city managers or their representatives, meeting as the Policy Advisory Committee. Status reports have been given monthly to these committees, and are forwarded to the Fresno COG Policy Board.

6.2 RTP Summary of Outreach

The development of the 2007 RTP has been ongoing since the approval of the last RTP in 2004. The process of educating the public on the existing Measure C expenditure plan and development of the expenditure plan for the Measure C extension provided significant opportunity for public involvement.

The ½ cent sales tax was initially approved in 1986, and recently extended for 20 years in 2006. Beginning in 2005 and continuing through 2007, Fresno COG began working with the Fresno County Transportation Authority (FCTA) to seek input from Fresno County residents on transportation issues in relation to "high profile" projects. FCTA sponsored "Roadshows" throughout the Valley, designed to educate residents on Measure C. FCTA's public outreach budget covered all costs involved with Roadshow implementation, therefore it proved to be a cost-effective way for Fresno COG to reach all segments of the communities within Fresno County.

As discussed in earlier chapters, Fresno COG is an active participant in the San Joaquin Valley Blueprint Planning Process. This has provided a unique opportunity to outreach and receive input from traditional and non-traditional organizations involved in the planning process. While several years from completion, the Blueprint has already involved numerous individuals in visioning and values exercises that will guide the land use, transportation and air quality decisions in the future.

Finally, Fresno COG staff held public meetings specifically related to the development of the 2007 RTP, FTIP, Draft EIR, and Conformity Analysis. These public meetings will be followed by a public comment period and public hearings in March and April 2007.

6.2.1 Measure C Outreach

The Measure C Roadshow is a four-in-one traveling educational tool on wheels. The Roadshow delivered information to educate residents on Measure "C" through entertainment, including visuals and audio, to Fresno County's 15 cities and its communities.

The truck consists of a 16-foot stage equipped with a nine screen television panel. It is also equipped with a surround sound system to accommodate any type of entertainment or ceremony, and the satellite located on the roof of the truck enables the crew and its audience to listen to almost any broadcast station and play anything on the TV panels.

The Roadshow crew was made up of nine hard working and talented bilingual individuals that travel to many cities and participate in their local events and functions. Flyers, pamphlets, booklets, goodie bags, among other items, were distributed to the audiences to serve the purpose of delivering Measure "C" educational information straight into their hands. Furthermore, an updated video of Measure "C" played continually on the nine screen panel.

A component of the Roadshow was Club Amigitos where parents had their children's fingerprints and a sample of DNA taken for identification purposes in case of an abduction. This safety measure is processed digitally so that a parent may update a child's file easier.

During events and festivals, raffles took place of which prizes consisted of sporting event tickets, autographed footballs or baseballs, t-shirts, cooler bags, gift bags, smaller items like fans, book markers, pencils, etc. All these services were FREE and the only thing community residents had to do was show up to the venues.

The following is the schedule of Roadshow events that have occurred since 2005:

Date	City	Name of Event	Potential People Reached
9/17/05	Sanger	Sanger Harvest Festival	5,000
9/18/05	Kerman	Kerman Harvest Festival	5,000
10/08/05	Reedley	On the Move to Reedley	6,000
10/15/05	Fresno	Fresno Fair	175,000

10/16/05	Fresno	Fresno Fair	175,000
10/19/05	Fresno	Fall-Tini Downtown	2,000
10/22/05	Fresno	Zainy Days Roeding Park	4,500
11/11/05	Fresno	Veterans Day Parade	30,000 + Nat. TV
12/11/05	Kerman	Punjabi Cultural Event	2,500
12/10/05	Huron	Huron Christmas Festival	4,500
12/15/05	San Joaquin	San Joaquin Christmas Festival	4,500
12/18/05	Fresno	Riverpark-Marines Toys for Tots	2,500
02/25/06	Unknown	Colorful Heritage	Unknown
04/08/06	Coalinga	Coalinga Centennial Celebration	Unknown
04/22/06	Fresno	CSUF Vintage Days	5,000
04/23/06	Fresno	CSUF Vintage Days	50,000
04/29/06	Clovis	Clovis Rodeo Parade	50,000
07/03/06	Orange Cove	Orange Cove Independence	1,000
07/04/06	Reedley	Reedley Fireworks Celebration	1,000
07/16/06	Fresno	Fresno Storyland Community Event	Unknown
07/22/06	Mendota	Mendota Fiesta Carnival	Unknown
07/28/06	Firebaugh	Firebaugh Cantaloupe Round-up	Unknown
09/28/06	Fresno	Transportation Forum	150

Continuing Measure C

Fresno County voters passed the original (1987-2007) Measure C half-cent sales tax in 1986, to improve roads and transportation in Fresno County. That measure is scheduled to expire in June 2007. However, a new expenditure plan was renewed by the voters of Fresno County in November 2006.

In consideration of Fresno County's projected population growth over the next twenty years (44% to 1.33 million), the Council of Fresno County Governments fulfilled a request by community stakeholders in 2005 to establish the Measure C Reauthorization Steering Committee. This 24-member, community-based committee spent close to a year crafting the 2006 Measure C Extension Expenditure Plan that will generate more than $1.7 billion for local transportation projects over the next 20 years.

Members of the Steering Committee included representatives from a variety of community organizations such as the League of Women Voters, the Sierra Club, the Valley Taxpayer's Coalition, the Coalition for Community Trails and faith-based organizations. It also included several elected officials from around the County, individuals representing industries such as trucking and farming, and members of the business community. While crafting the Measure C Extension Expenditure Plan, over 26 Steering Committee general and subcomittee meetings were held throughout the county. A community workshop was also held in June 2005 for the Steering Committee and community members to hear about transportation projects included in Measures around the state.

Scientific Surveys of the Fresno County Community

To assist the Steering Committee in crafting an expenditure plan that met the expressed desires of the community, Fresno COG contracted with Strategy Research Institute (a professional firm specializing in data collection and interpretation) to conduct two scientifically valid surveys of resident's transportation needs and desires.

An initial survey was conducted in July/August 2005. The telephone survey was comprised of a random sample of approximately one thousand completed interviews; of which, 702 were high and moderate voters and 301 via Random Digit Dialing, thus, representative of the community-at-large. Thus, the "findings" from the present research effort are highly "representative" of the respective populations from

which the samples were drawn. Special care was taken to ensure that appropriate measurement "scales" were employed in order to maximize the "reliability" (accuracy) and "validity" (truthfulness) of the responses.

Once the framework of the expenditure plan was put together based on the data from the Initial Survey, a Follow-up Survey was conducted in November 2005 to ensure the plan was, in fact, following the expressed wishes of the Fresno County electorate. The second survey assessed Fresno County residents' response to the types of projects in the draft plan and the percentage of funds being allocated to those projects.

The initial survey provided significant information on the priorities and thoughts of Fresno County residents on the transportation system. Some of the information collected during the Initial Survey includes:

Top 10 Spending Priorities

	Community At-Large	Voters
Improve air quality	66%	63%
Repair potholes / maintain streets	55%	59%
Increase trail, bike paths, and bike lanes	53%	53%
Increase para-transit services	54%	51%
Improve freight and rail transportation	45%	47%
Upgrade 180 East	40%	43%
Repair / improve rural roads	44%	40%
Improve Airport	40%	33%
Enhance 180 West	32%	32%
Improve Local Bus Service	33%	32%

Most Preferred Communications Channel for Fresno County Residents Concerning Public Transportation (1st + 2nd Choices)

	Community At-Large	Voters
The Fresno Bee	70%	61%
Comcast Channel 14	40%	39%
Fresno COG Website	20%	22%
Talking w/ Friends and Family	20%	20%
Direct Mail	18%	20%
Community Newspaper	15%	15%

# of Persons Commute

One	**22%**
Two	**28%**
Three	**13%**
Four or more	**11%**
None	**25%**
Refused	**1%**

Transport to School

Walk	**2%**
Bicycle	**<1%**
Bus	**6%**
Car Pool	**3%**
Driven by Parent	**12%**
Other	**2%**
No response	**75%**

Type of Commute Transportation	
Drive Alone	75%
Car Pool	8%
Van Pool	<1%
Ride the Bus	3%
Bicycle	1%
Other Mode of Transport	3%
Refused	10%

Ethnicity	
Caucasian	74%
Hispanic	12%
Black	2%
Asian	2%
American Indian	2%
Other	2%
Refused	6%

Gender	
Male	60%
Female	40%

6.2.2 San Joaquin Valley Blueprint Public Outreach

Fresno COG officially kicked-off the San Joaquin Valley Blueprint Planning Process at a valleywide summit on June 28, 2006. The event was a great success, with nearly 700 participants in attendance. The day consisted of several informative presentations followed by interactive workshop sessions aimed at engaging participants. The Blueprint Process is guided by several committees that incorporate local and regional input into the planning process.

- Fresno COG's Blueprint Roundtable is the local, 32-member committee that will provide advice for Fresno area public outreach activities. As visions are articulated through community input, the information gathered will go before the Roundtable to be formed into a preferred growth "scenario". Once a scenario is agreed upon, it will be forwarded to the Blueprint Regional Advisory Committee (BRAC) which will work with the Great Valley Center to craft the larger valley wide vision. The first meeting of Fresno COG's Blueprint Roundtable was held on August 23, 2006. The committee represents a cross-section of business, environmental and transportation sectors.

- The purpose of the San Joaquin Valley Regional Blueprint Advisory Committee (BRAC) is to make regional recommendations pertaining to the creation of the San Joaquin Valley Regional Blueprint. Each of the eight Valley COG Directors recommended community members to sit on the BRAC. In addition, one elected official is included from each county.

From October 2006 to January 2007 Fresno COG conducted 20 public outreach events to assess the “vision” and “values” of our community-at-large. Fifteen of the 20 meetings were attended by Fresno County “stakeholders” representing 40 community, governmental and business organizations. Three of the events were large general public events, and two were community events targeted specifically on addressing the Blueprint process. In all, 2,340 participant surveys were received and used to develop a list of values statements later prioritized by community members.

A Blueprint Workshop was held January 11, 2007 at the University of California Center. The workshop was hosted by Fresno COG as part of the Blueprint Planning Process. Over 165 people participated in the interactive polling process to collect and discuss their opinions on community values, long-range planning, transportation, housing and future growth issues. On March 2, 2007, Fresno COG and other planning agencies from the San Joaquin Valley met with state and federal resource agencies, as well as other interested parties, to discuss modeling and planning activities related to future growth in the region.

6.2.3 Regional Transportation Plan Public Outreach Meetings

Consistent with Fresno COG's PIP, three public open house style meetings were held to present the RTP process and candidate project lists to the public and solicit input. Meetings were intentionally scheduled at schools/facilities accessible by public transit and were held in various locations throughout the County. They were held as follows:

- Wednesday, February 28, 2007 from 3:30 – 5:30 p.m. at Selma Arts Center.
- Thursday, March 1, 2007 from 4:00 - 6:00 p.m. at Kerman Community Teen Center.
- Saturday, March 3, 2007 from 11:00 a.m. - 1:00 p.m. at Fresno's Manchester Gate School

The RTP meetings were announced to the public through the following means:

- Fresno COG purchased advertisements in the Sunday and Wednesday editions of the Fresno Bee's local section, the weekly edition of Vida En El Valle Hispanic newspaper, and postings on Fresnobee.com. The total reported readership for all advertisements was 752,687.

Delays on local roads or highways?
Trouble getting where you need to go?
Good bus service?
Can you walk or bike safely?

With new transportation funding from Measure C and Propositions 1A & 1B, new roads will be built and others will be improved. Transit service will be improved, and curbs, sidewalks and bikeways built.

All regional transportation projects for Fresno County must be a part of the **Regional Transportation Plan** or **RTP**. The **RTP** will shape your ability to travel in and around Fresno County from now through 2030.

The **RTP** is being updated now and needs your ideas on how to make our communities better. Your input will make a big difference.

Come by an open house in one of these communities:

- Wed., February 28, 3:30-5:30 p.m. At Selma Arts Center, 1045 Rose Avenue, Selma
- Thurs., March 1, 4:00-6:00 p.m. At Kerman Community Teen Center, 15101 W. Kearney, Kerman
- Sat., March 3, 11:00 a.m. - 1:00 p.m. at Fresno's Manchester Gate School, 2307 E. Dakota (Dakota and Fresno)

More opportunities to view the RTP and comment are available online at **www.fresnocog.org**, or by calling Fresno COG at **(559) 233-4148**

Council of Fresno County Governments

Fresno COG will provide a translator/interpreter for non-english speaking and hearing impaired individuals if requested in advance.

- COG staff developed designated public input sections on the COGView internet website, including detailed information on the Regional Transportation Plan. Public meeting information was posted in the Announcements, Get Involved and Calendar sections of the website.

- Email invitations to the public meetings were sent to 673 people who have already expressed interest in the future of Fresno County's transportation system. This email list included print and electronic media, planning staff, elected officials, industry groups, nonprofit agencies, environmental justice, and local resource agencies.

Appendix A
Compliance with the California Transportation Commission's RTP Guidelines Checklist

Regional Transportation Plan Checklist

Name of MPO/RTPA: Council of Fresno County Governments

Date Draft RTP Completed: March 13, 2007

RTP Adoption Date: May 31, 2007

Environmental Document (ED) Certification Date (if applicable): May 31, 2007

Identify where the ED is located (in the RTP, separate document, etc.): Separate Document

By completing this checklist, the MPO/RTPA verifies the RTP addresses all of the following required information within the RTP.

A. Regional Transportation Plan Components

1. Explain how the RTP provides a coordinated and balanced transportation system.
The 2007 Fresno COG RTP provides Policy and Action Elements for both the Fresno County region (Chapters 3 and 4) and for the San Joaquin Valley (Chapter 1). Regional, State and Federal issues are addressed in Chapter 5.

2.	Contains a short-term (10-year) time horizon.	Page # Ch. 4&5
3.	Contains a long-term (20-year) time horizon.	Page # Ch. 4&5
4.	Considers strategies to meet the seven planning factors specified in Title 23, 1134(f) of the U. S. Code. ((**MPOs only)**	Page # 2-20
5.	Identify where the RTP describes how it is consistent with the Civil Rights Act as identified in Title 23, CFR § 450.316(b)(2). **(MPOs only)**	Page # 2-9
6.	Specify where the RTP identifies actions necessary to meet the ADA as identified in Title 23 CFR § 4450.316(b)(3). **(MPOs only)**	Page # 5-40
7.	Explain how the RTP considers, analyzes and reflects the following social and environmental effects. **(MPOs only)**	
	a) Housing	Page # 2-16
	b) Employment	Page # 1-6
	c) Community development	Page # 2-16
	d) Land Use	Page # 2-16
	e) Central city development goals	Page # N/A

8. Other social and environmental effects (identify and specify page number)
Environmental Justice - Page 2-9
Native American Outreach – Page 2-12
Title VI - Page 2-9
Environmental Streamlining - Page 2-21
Safety in Transportation - Page 2-20

B. Public Involvement

1.	Includes a public involvement program that meets the requirement of Title 23, CFR § 450.316(b)(1) **(MPOs only)**	Page # 6-1
2.	Where there are Native American Tribal Governments within the RTP boundaries, the tribal concerns have been addressed and the Plan was developed in cooperation with the Tribal Government(s) and the Secretary of the Interior (Bureau of Indian Affairs) (title 23, CFR § 134, 135 (e)).	Page # 2-12
3.	Identify where the RTP describes the public involvement efforts the MPO/RTPA used during the development of the Plan.	Page # Ch. 6
4.	Identify where the RTP describes the private sector involvement efforts the MPO/RTPA used during the development of the Plan.	Page # Ch. 6
5.	The RTP describes the coordination efforts of MPO/RTPA with regional air quality planning authorities. **(federal nonattainment and maintenance areas only)**	Page # 4-105
6.	Specify where the RTP addresses efforts concerning interagency coordination.	Page # Ch. 1, 2 & 4

C. Policy Element

1.	Identify where the regional transportation issues are addressed in the Policy Element.	Page # 3-1
2.	Specify where the regional needs are identified in the Policy Element.	Page # Ch. 3
3.	Identify where the regional transportation issues are described in the RTP.	Page # Ch. 1, 3, & 4
4.	Identify where the objectives in the RTP are linked to a 10-year time frame.	Page # Ch.4&5
5.	Identify where the objectives in the RTP are linked to a 20-year time frame.	Page # Ch. 4&5

D. Action Element

1.	Where are the transportation needs as discussed in the Policy Element identified in the RTP.	Page # Ch. 4
2.	Specify where the RTP describes that it is consistent with the adopted regional transportation goals and policies?	Page # Ch. 4&5

3.	Identify where the RTP conforms to the projected revenues.	Page # Ch. 4&5
4.	Where does the RTP identify consistency with the projected constrained financial revenues.	Page # Ch. 4&5
5.	Includes a discussion of highways.	Page # 4-10
6.	Includes a discussion of mass transportation.	Page # 4-32
7.	Includes a discussion of the regional airport system.	Page # 4-67
8.	Includes a discussion of regional pedestrian needs.	Page # 4-78
9.	Includes a discussion of non-motorized transportation.	Page # 4-78
10.	Includes a discussion of rail transportation.	Page # 4-83
11.	Includes a discussion of maritime transportation.	Page # N/A
12.	Includes a discussion of goods movement.	Page # 1-35 & 4-83

E. Consistency Requirement

1.	Where does the RTP state the first four years of the fund estimate is consistent with four year STIP fund estimate adopted by the CTC.	Page # 5-12
2.	Where does the RTP state the goal, policy and objective statements is consistent with the Financial Statement.	Page # 5-11
3.	Where does the RTP state the projects included in the ITIP are consistent with those included in the RTP.	Page # 5-18
4.	Where does the RTP identify the projects included in the RTIP are consistent with the RTP.	Page # 5-18

F. Performance Measurement

1.	Identify the objective criteria for measuring the performance of the transportation system in the RTP.	Page # App. D

G. Environmental Considerations

1. How were the environmental impact considerations of the RTP addressed **(Choose A or B)**:

   a) It was determined through the Initial Study (IS) process the projects in the RTP will not impact the environment, therefore, a Negative Declaration was prepared.

   b) The MPO.RTPA prepared a program EIR in accordance with CEQA guidelines. √

2. Specify where the RTP identifies how it will conform to the State Implementation Plan (SIP). **(Federal nonattainment and**

maintenance areas only) Page # 4-101

3. Specify where the RTP identifies TCM's to be implemented in the region.
(Federal nonattainment and maintenance areas only) Page # 4-95

4. Identify where the RTP addresses efforts to coordinate with the regional Air Pollution Control District and the Calif. Air Resources Board (CARB) to Ensure conformity with the SIP.
(Federal nonattainment and maintenance areas only) Page # 4-104

I have reviewed the above information and concur that it is correct and complete.

Tony Boren, Deputy Director May 31, 2007

(Must be signed by MPO/RTPA Executive Director or designated representative) Date

Tony Boren Deputy Director

Print Name Title

Appendix B
Fresno COG Policy Board, Committees, and Staff

Fresno COG Policy Board

Fresno COG is a voluntary association of local governments formed to assure areawide planning for the Fresno County Region. Voting members include Fresno county and its fifteen incorporated cities: Clovis, Coalinga, Firebaugh, Fowler, Fresno, Huron, Kerman, Kingsburg, Mendota, Orange Cove, Parlier, Reedley, San Joaquin, Sanger and Selma.

Chairman: Trinidad Rodriquez
Vice-Chairman: Dennis Lujan
Executive Director: Barbara Goodwin

City of Clovis
Mayor Nathan Magsig

City of Coalinga
Mayor Trish Hill

City of Firebaugh
Mayor Craig Knight

City of Fowler
Mayor Rico Aguayo

City of Fresno
Mayor Alan Autry
(A) Councilmember Henry T. Perea

City of Huron
Mayor Ramon Dominguez

City of Kerman
Mayor Trinidad Rodriguez

City of Kingsburg
Mayor Leland Bergstrom

City of Mendota
Mayor Robert Silva

City of Orange Cove
Mayor Victor Lopez

City of Parlier
Mayor Armando Lopez

City of Reedley
Councilmember Scott Brockett

City of Sanger
Mayor Mike Montelongo

City of San Joaquin
Mayor Amarpreet Dhaliwah

City of Selma
Mayor Pro Tem Dennis Lujan

County of Fresno
Supervisor Bob Waterston

Caltrans District 6
Malcolm Dougherty, District Director
(A) Alan McCuen

Fresno COG Policy Advisory Committee

Chairman: Jose A. Ramirez
Vice-Chairman: Ron Manfredi

City of Clovis
Kathy Millison, City Manager

City of Coalinga
Steve Julian, City Manager

City of Firebaugh
Jose A. Ramirez, City Manager

City of Fowler
David Elias, City Manager

City of Fresno
Bruce Rudd, Assistant City Manager

City of Huron
Alan Bengyel, City Manager

City of Kerman
Ron Manfredi, City Manager

City of Kingsburg
Don Pauley, City Manager

City of Mendota
Gabriel Gonzalez, City Manager

City of Orange Cove
Bill Little, City Manager

City of Parlier
Lou Martinez, City Manager

City of Reedley
Brian Nakamura, City Manager

City of Sanger
Jim Drinkhouse, City Manager

City of San Joaquin
Cruz Ramos, City Administrator

City of Selma
D.B. Heusser, City Manager

County of Fresno
Brandi Orth, Principal Admin. Officer

Caltrans District 6 Planning Division
Ken Okereke, Transportation Planner

Fresno COG Transportation Technical Committee

Chairman: Renee Mathis
Vice-Chairman: Janet Dailey
Note: (A) = Alternate

Building Industry Association
Bret Giannetta
(A) Mike Prandini

California Highway Patrol
Captain Gary Fief

Caltrans, District 06
Ken Okereke, Trans. Planner

City of Clovis, Planning & Dev. Serv. Dept.
Renee Mathis, Public Works
John Wright, Director of Planning

City of Clovis, Public Utilities Department
Mike Leonardo, Dir. of Utilities
(A) Steve White, Engineer

City of Coalinga
Steve Julian, City Manager

City of Firebaugh
Jose A. Ramirez, City Manager

City of Fowler/Mendota/Parlier
Kenneth Hutchings, Consultant/Engineer

City of Fresno, Public Works Department
Bruce Rudd, Assistant City Manager
(A) Jon Ruiz, Interim Dir. of Public Works

City of Fresno, Development Dept.
Nick Yovino, Planning & Development Director
(A) Darrell Unruh, Planning Manager

City of Fresno, Fresno Area Express
Ken Hamm, Dir. of Transportation

City of Kerman
Alan Jacobsen, Dir. of Public Works

City of Kingsburg
Don Pauley, Public Wks. Dept.

City of Reedley
Rocky Rogers, Public Works Director

City of San Joaquin
Leo Cantu, Director of Public Works

City of Sanger
John White, Dir. Of Public Works
(A) John Mulligan, Deputy Dir. Of Public Works

City of Selma
Robert Weaver, Public Wks. Dir.
(A) Bruce Webber, Engineer

Fresno County
Lynn Gorman, Transp. Policy Specialist
(A) Mergo Lerwill, Sr. Staff Analyst

Fresno County Public Works & Planning
Lynn Gorman, Deputy Director of Planning
(A) Stan Nakagawa, Prin. Engineer
Alan Weaver, Director
(A) Janet Dailey, Design Engineer

Fresno County/City Chamber of Commerce
Debbie Hunsaker, Transp. Chairman
(A) Al Smith, Executive Dir.

Fresno County EOC/CTSA
Gary Joseph, General Manager

Fresno County Rural Transit Agency
Jeffrey D. Webster, General Manager

Fresno County Transportation Authority
Ron Peterson, Executive Director

Fresno Cycling Club
Nicolas Don Paladino

Fresno-Madera Area Agency on Aging
Melinda Jo Johnson, Executive Dir.

High Speed Rail Authority
Ed Graveline

League of Women Voters
John Donaldson, Ph.D

San Joaquin Valley Air Pollution Control District
Lauren Dawson, Air Quality Specialist
(A) Tom Jordan, Senior Planner

Fresno COG Staff

Barbara Goodwin	Executive Director
Tony Boren	Deputy Director
Les Beshears	Finance Director
Mike Bitner	Senior Transportation Planner
Barbara Steck	Senior Transportation Planner
Kathy Chung	Planning Coordinator II, Demographer
Jason Paukovits	Planning Coordinator II
Kristine Cai	Planning Coordinator II
Clark Thompson	Planning Coordinator II
Renee DeVere	Planning Coordinator II
Brenda Lauchner	Planning Coordinator I
Todd Sobrado	Planning Coordinator I
Tom Webster	Planning Coordinator II
John Downs	Senior Transit Planner
Jeffrey Long	Planning Coordinator II
Sonia Moreno	Senior Transit Surveyor
Mary Lopez	Administrative Assistant
Marla Day	Executive Assistant
Dottie Wright	Secretary
Stephanie Maxwell	Receptionist

Appendix C
Fresno COG Gap Analysis

March 7, 2007

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
UPDATE CYCLES § Long-range statewide transportation plans [23 U.S.C. 135/49 U.S.C. 5304(f)(1)] § Metropolitan transportation plans [23 U.S.C. 134/49 U.S.C. 5303(i)(1)] § TIPs and STIPs [23 U.S.C. 134/49 U.S.C. 5303(j)(1)(D) and 23 U.S.C. 135/49 U.S.C. 5304(g)(1)]	Long-range statewide transportation plan ♦ No key change in update cycle (as needed or appropriate).	♦ State DOT should review and/or establish a regular update cycle.	♦ Not Applicable
	Metropolitan transportation plans in air quality nonattainment and maintenance areas ♦ To be updated every four years (as opposed to the former requirement of every three years).	♦ This SAFETEA-LU provision took effect on August 10, 2005. MPOs in nonattainment and maintenance areas should be reviewing and revising the update cycles for the metropolitan transportation plans.	♦ Fresno COG initiated a full RTP/TIP update in 2006 to comply with SAFETEA-LU by the July 1, 2007 deadline.
	Metropolitan transportation plans in air quality attainment areas ♦ No key change (to be updated every five years).	♦ No additional steps for update cycles are likely necessary for MPOs in attainment areas.	♦ Not Applicable
	Transportation Improvement Program (TIP) ♦ To be updated every four years (as opposed to the former requirement of every two years). ♦ Span of TIP increased from 3 to 4 years	♦ Develop an approvable TIP with projects/project phases covering four years.	♦ Fresno COG 2007 TIP contains 4 federally approved program years, with 2 additional informational years. A SAFETEA-LU compliant TIP will be submitted in conjunction with the 2007 RTP Update to meet the SAFETEA-LU Compliance deadline of July 1, 2007.
	Statewide Transportation Improvement Program (STIP) ♦ To be updated every four years or more frequent if Governor so elects (as opposed to the former requirement of every two years). ♦ Span of STIP increased from 3 to 4 years	♦ Develop an approvable STIP with projects/project phases covering four years.	♦ Fresno COG 2007 TIP contains 4 federally approved program years, with 2 additional informational years. A SAFETEA-LU compliant TIP will be submitted in conjunction with the 2007 RTP Update to meet the SAFETEA-LU Compliance deadline of July 1, 2007.
ANNUAL LISTING OF PROJECTS [23 U.S.C. 134/49 U.S.C. 5303(j)(7)(B) and 23 U.S.C. 135/49 U.S.C. 5304(g)(4)(B)]	♦ New project element to be specifically included (pedestrian walkways and bicycle transportation facilities).	♦ Publish list identifying all bicycle/pedestrian projects for which Federal funds were obligated in the preceding program year.	♦ Annual Listing of Projects submitted to FHWA in early 2007 included obligated bicycle/pedestrian projects.
	♦ Added requirement for cooperative development by MPO partners (i.e., State and public transportation operators).	♦ MPO (with State(s) and public transportation operator(s)) should review existing process for developing the Annual Listing.	♦ Documentation of the process to develop the Annual Listing of Projects was included in the report due to FHWA in early 2007.

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
METROPOLITAN AND STATEWIDE TRANSPORTATION PLANNING FACTORS [23 U.S.C. 134/49 U.S.C. 5303(h)(1) and 23 U.S.C. 135/49 U.S.C. 5304(d)(1)]	♦ Added a new stand-alone factor "increase the safety of the transportation system for motorized and non-motorized users."	♦ Review current safety goals, objectives, performance measures, and strategies. ♦ Ensure that adequate safety data are available to support development of a safety element in statewide and metropolitan transportation plans. ♦ Ensure outreach to and input from safety stakeholders. ♦ Incorporate the SHSP element into statewide and metropolitan transportation plans (for metropolitan transportation plans, use the portion of the SHSP related to the MPO region). ♦ Incorporate the transit System Safety Program Plan (if available) into statewide and metropolitan transportation plans. ♦ Review TIP/STIP project selection criteria to ensure they reflect safety priorities (e.g., SHSP and/or MPO region's priorities).	♦ Fresno COG is reviewing the goals, policies, performance measures, and strategies as part of the 2007 RTP Update. This includes a review of the safety-related performance measures and data availability. The review will incorporate updates into the 2007 RTP, as well as identify needs for future improvement. ♦ Fresno COG's 2007 RTP will document consistency with the State's Strategic Highway Safety Plan and transit safety plans, as applicable. ♦ The 2007 update to the Public Participation Plan will include an updated list of stakeholders, including those agencies involved in safety of the transportation system.
	♦ Added a new stand-alone factor "increase the security of the transportation system for motorized and non-motorized users."	♦ Review current statewide and metropolitan transportation plans for emergency planning/security elements. ♦ Define the role of the public transportation operators/MPO/State in promoting security (e.g., review State/local legislation for roles and responsibilities). ♦ Identify critical facilities and transportation system elements (e.g., transit system, rails, ports, Interstate system, NHS routes, and STRAHNET routes). ♦ Develop security goals and appropriate strategies (this may be an important role for MPOs and/or States that are near or on the Mexico/Canada borders).	♦ The 2007 RTP Update will document efforts to review and incorporate emergency planning and security issues. ♦ Transit Security Program Plans will be incorporated where applicable.

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
FISCAL CONSTRAINT [23 U.S.C. 134/49 U.S.C. 5303(i)(2)(C); (j)(1)(C); (j)(2)(B); and (j)(3)(D) and 23 U.S.C. 135/49 U.S.C. 5304(f)(5); (g)(4)(E); and (g)(4)(F)]	♦ No significant changes in SAFETEA-LU.	♦ Review and reaffirm fiscal constraint of transportation plans and programs as they are updated or amended. ♦ Confirm revenues and costs related to system operations and maintenance activities covered in transportation plans and programs. ♦ *Refer to the FHWA/FTA Interim Guidance on Fiscal Constraint of Transportation Plans and Programs (http://www.fhwa.dot.gov/planning/fcindex.htm or www.fta.dot.gov* **à** *Grant Programs* **à** *Transportation Planning & Environment* **à** *Statewide & Metropolitan Planning)*	♦ Fiscal constraint will be documented in the 2007 RTP. ♦ Revenues and costs associated with maintenance and operations activities will be reflected in the fiscal constraint demonstration. ♦ Fresno COG will continue to refine and develop a methodology to ensure accurate operations and maintenance estimates are included in future plans.
ENVIRONMENTAL MITIGATION ACTIVITIES [23 U.S.C. 134/49 U.S.C. 5303(i)(2)(B) and 23 U.S.C. 135/49 U.S.C. 5304(f)(4)]	♦ Metropolitan and statewide transportation plans shall include "discussion" of environmental mitigation activities. ♦ This "discussion" shall be developed with Federal, State, and Tribal wildlife, land management, and regulatory agencies.	♦ Metropolitan and statewide transportation plans must include a generalized discussion of potential mitigation activities (at the policy/strategy-level, not project-specific). ♦ Compare transportation plans with available State conservation plans, maps, and inventories.	♦ Fresno COG is preparing a Program Environmental Impact Report in conjunction with the 2007 RTP. That document includes discussion of environmental impacts of the proposed program. ♦ Fresno COG's 2007 RTP will also include a discussion of environmental issues. ♦ As part of the Blueprint process, Fresno COG will continue development of relationships and resources to identify resources for environmental mitigation. ♦ Additional discussion of MPO staff efforts to compare the 2007 RTP Update with available State conservation plans, maps, and inventories will be documented in the 2007 RTP.
CONSULTATION AND COOPERATION § Transportation Plans [23 U.S.C. 134/49 U.S.C. 5303(g) and (i)(4)	♦ Consultation with non-metropolitan local officials and Tribal governments in the development of the long-range statewide transportation plan and STIP. ♦ MPOs and State DOTs shall consult with local/State land use management, natural resource, historic and other agencies in the development of	♦ Continuing consultation with partners (i.e., State, MPOs, non-metropolitan local officials, and Tribal government) [no change]. ♦ Compare transportation plans with available conservation plans and maps and/or compare with available inventories of historic or natural resources.	♦ Fresno COG continues to outreach to existing partner as part of the 2007 RTP Update, and will include expanded consultation efforts with additional agencies. The process will be documented in the 2007 RTP. The 2007 RTP Update will also include listings of the agencies, organizations, and stakeholders contacted as part of the expanded

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
and 23 U.S.C. 135/49 U.S.C. 5304(f)(2)] § TIP and STIP [23 U.S.C 134/49 U.S.C. 5303(j)(1)(C) and 23 U.S.C. 135/49 U.S.C. 5304(g)(2)] § Land Use Management and other Resource Agencies [23 U.S.C. 134/49 U.S.C. 5303(i)(4) and 23 U.S.C. 135/49 U.S.C. 5304(f)(2)(D)]	transportation plans.		consultation process. ♦ Additional information is included under "Interested Parties and Participation". ♦ Documentation of the 2007 RTP Update comparison with conservation plans, maps, and/or available inventories of historic or natural resources is included in the 2007 RTP Update Programmatic Environmental Impact Report. ♦ The Program EIR is developed and submitted through the statewide clearinghouse, and received input from state and local agencies, including those involved in historic and natural resources.

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
AIR QUALITY[1] CONFORMITY [23 U.S.C. 134(i)(3)]	♦ Requirement to determine conformity is now every four years (instead of every three years). ♦ Allowance of a 1 year "grace period" before conformity lapse (in certain instances)	♦ Determine conformity on a SAFETEA-LU compliant transportation plan and TIP (beginning on and after July 1, 2007).	♦ The 2007 RTP Update will include a SAFETEA-LU compliant Air Quality Conformity Determination.
PUBLIC TRANSIT ELEMENT	♦ Coordinated Public Transit-Human Services Transportation Plan (per 49 U.S.C. 5310, 5316, and 5317).	♦ Entity responsible for developing the Coordinated Public Transit-Human Services Transportation Plan is not defined in SAFETEA-LU. ♦ Solicitation for projects from plan to be done in cooperation with MPO.	♦ The 2007 RTPs will document the region's efforts, progress, and schedule for developing and completing the SAFETEA-LU required Coordinated Public Transit-Human Services Transportation Plan. ♦ Fresno COG and Fresno Area Express (FAX) anticipate the plan will be complete by Fall 2007.
TRANSIT MAJOR CAPITAL IMPROVEMENTS (aka New Starts)	Two additional criteria added to Basic criteria for rating projects: 4) Economic Development Potential 5) Reliability of Ridership and Cost Forecasts	"Economic Development" should be added as a criterion for application and selection of New Starts projects. An analysis of the reliability of ridership and cost forecasts is required. Alternatives Analysis" is defined in SAFETEA-LU as a study using an established planning process. Note: The "Small Starts" set-aside is reserved for projects that use less than $75 million in Federal funds and have a total cost of less than $250 million. The Small Starts program has a simplified selection criteria and implementation process.	♦ Fresno Area Express (FAX), Fresno County Rural Transit Agency (FCRTA), and Clovis Transit will be reviewing their Long Range Transit Plans in 2007 and modifying grant applications to address the new criteria as appropriate.

[1] *Section 6011 of SAFETEA-LU contained other transportation conformity provisions. USDOT and USEPA issued joint "Interim Guidance for Implementing the Transportation Conformity Provisions in the SAFETEA-LU" on February 14, 2006. The Interim guidance is available at:* *http://www.fhwa.dot.gov/environment/conformity/sec6011guidmemo.htm*

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
TRANSPORTATION FACILITIES [23 U.S.C. 134/49 U.S.C. 5303(i)(2)(D);23 U.S.C. 134/49 U.S.C. 5303(k)(3); 23 U.S.C. 135/49 U.S.C. 5304(f)(7); and 23 U.S.C. 135/49 U.S.C. 5304(i)]	♦ Operations and management strategies in metropolitan transportation plans and long-range statewide transportation plans.	♦ Determine if the current transportation plan adequately address operations and management strategies (for both the transit and highway network). ♦ Develop/confirm performance measures for the transportation system operations and management, with the focus on mobility and safety. ♦ Consider and develop strategies and costs (capital and operational investment) to preserve the existing transportation system.	♦ The 2007 RTP Update will include determinations from local agencies that the operations and management strategies included in the 2007 RTP Update are adequate. ♦ The performance measures included in the 2007 RTP Update reflect measures that address operations and maintenance issues, as well as mobility and safety. ♦ Costs to preserve the existing transportation system will be reflected in the fiscal constraint documentation, based on State expenditure reports on how much cities and counties spend on local street maintenance. ♦ Strategies to preserve the existing transportation system will be discussed in the text of the RTP, and based on city and county input as derived from capital improvement programs. ♦ Additional strategies and updates will be reviewed as part of the CMP update discussed below.
	♦ Congestion Management Process in Transportation Management Areas (formerly known as Congestion Management System (CMS) in ISTEA/TEA-21).	♦ Review the existing CMS and its application within the TMA planning process and the metropolitan transportation plan(s). ♦ Review State laws, rules, and regulations to ensure consistency with the SAFETEA-LU revised statutory language on the Congestion Management Process. ♦ Identify operations partners (e.g., traffic operations centers, ITS, and traffic engineers). ♦ Identify travel demand reduction and operation management strategies to be implemented. ♦ Work with partners to develop projects, priorities and schedule for implementation.	♦ The 2007 RTP Update will provide documentation of the existing CMS, an assessment of its consistency with SAFETEA-LU, and the schedule for implementation. ♦ The 2007 RTP Update will also identify the relevant stakeholders in the CMS. ♦ Fresno COG will update the Congestion Management System during the 2007/08 fiscal year as indicated in the OWP.
INTERESTED PARTIES AND	♦ Definition of "interested parties" to be engaged in statewide and metropolitan	♦ State DOTs and MPOs should review current public involvement plan/procedures and	♦ Fresno COG is updating the Public Participation Plan to include a wide variety of

Statutory Planning and Programming Requirements	Key Changes Between ISTEA/TEA-21 and SAFETEA-LU	Potential SAFETEA-LU "Closing the Gap" Steps	Coordinated SJV MPO Gap Closure Efforts [Specific MPO additions]
PARTICIPATION [23 U.S.C. 134/49 U.S.C. 5303(i)(5), (i)(6), and (j)(4) and 23 U.S.C. 135/49 U.S.C. 5304 (f)(3) and (g)(3)]	transportation planning has been expanded. ♦ Participation Plan (required for MPOs) - Shall be developed in consultation with "interested parties." - Publish or make available for public view transportation plans, STIPs and TIPs. - Hold public meetings at convenient and accessible times and locations. ♦ Publication of statewide and metropolitan transportation plans, and TIP… to the maximum extent practicable. - Make information available in electronically accessible formats (e.g., world wide web). ♦ Employ visualization techniques to depict statewide and metropolitan transportation plans.	make necessary changes to reflect SAFETEA-LU provisions. ♦ Confirm that stakeholders, interest groups, general public had/have opportunity to comment on public involvement plans and transportation plans/programs. ♦ Where not apparent, give groups/general public opportunity to review/comment; update or amend participation plan, as needed. ♦ To maximum extent practicable, statewide and metropolitan transportation plans and programs (with the exception of the STIP) shall be available in electronic formats (e.g., on a website). ♦ Refer to FHWA Scenario Planning website (www.fhwa.dot.gov/planning/scenplan/index.htm) or Land Use/Transportation Tool Kit and (www.fhwa.dot.gov/planning/landuse/tools.cfm) for examples of visualization techniques.	new stakeholders and ensure compliance with SAFETEA-LU. The current Public Involvement Plan contains most, if not all of the requirements for SAFETEA-LU. This update will begin in July 2007 and conclude by late Summer/early Fall 2007. Any documents prepared prior to that time (e.g., RTP) will include extended outreach to resource and other agencies. ♦ The updated Public Participation Plan will include documentation of the process and stakeholders involved in developing and commenting on the PPP. ♦ The process for updating the PPP will include opportunities for agencies and the public to comment prior to the required 45-day comment period. ♦ All materials associated with the 2007 RTP Update will be available in electronic format and posted on the Fresno COG website in an easily accessible format. ♦ Fresno COG currently uses a number of visualization techniques, including color maps, website posting and presentations. Fresno COG is increasing the use of GIS applications for our projects, and is currently in the process of hiring additional staff with expertise in GIS.

Appendix D
Fresno County 2007 RTP Performance Measures

APPLICABLE TO: Rehab/ Safety Projects?	Capacity Increasing Projects?	PERFORMANCE INDICATORS	EVALUATION CRITERIA	OBJECTIVE/ BENEFIT
No	Yes	**Mobility – Accessibility – Customer Satisfaction** The need for improved access to the transportation system and the safe, convenient and economical movement of people and goods. The application of transportation and land use measures that minimize travel time and cost.	Improvement in Travel Time and Speed	Reduced travel time and improved access to the transportation system. Improved access to work and other services.
Yes	Yes	**Environmental Quality** The transportation system should address the needs of land use development, include appropriate maintenance efforts, and reduce impacts on the environment.	Improved AQ Emissions Extent of Other Environmental Impacts	Meet the Air Plan Emission Budget/Address Environmental Impacts
No	Yes	**Reliability** The transportation system should meet the minimum LOS standard to the extent feasibly possible.	Highway LOS	Achieve Minimum LOS
Yes	Yes	**Safety and Security** The transportation system should be safe by reducing accidents, deaths and injuries to the extent possible. The transportation system should be monitored to the extent possible to identify potential safety issues.	Meet design standards Improve safety	Reduced fatalities, injuries and accidents.
Yes No	Yes Yes	**Equity/Environmental Justice – Economic Well-Being** Transportation investments and impacts should be distributed among all ethnic, age, and income groups. **Equity/Geographic Equity** Transportation system improvements shall be geographically equitable within the County.	Create a Balance in Transportation Investments by Income Group, Ethnicity and Age. Transportation Investments Serve Major Employment Areas	Equitable distribution of benefits. Equitable distribution of benefits.
Yes	Yes	**Sustainability** Preservation of the transportation system and the environment in a condition which will meet the needs of the present without compromising the ability of future generations to meet their mobility needs.	Project Maintenance is Funded Over Time	Projects will be maintained over time.
Yes	Yes	**Cost-Effectiveness** Benefits vs. Cost considering: **q** Operations **q** Maintenance **q** Safety	Benefit/Cost Ratio	Optimize return on transportation investments

The California Transportation Plan, Transportation System Performance Measures Report (August 1998) identifies the following, "desired outcomes" for the transportation system, which *may* be addressed in each region's RTP:

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

Evaluation of Candidate Projects

Once a full range of candidate regional highway and arterial projects was identified for the 2007 RTP update by Caltrans and each of the local agencies, an analysis framework consisting of measurable criteria was developed to establish project priorities.

In order to evaluate the regional candidate street and highway projects, quantitative and qualitative evaluation criteria were used for both capacity increasing projects and rehabilitation/safety projects. These evaluation criteria were developed in correlation with the suggested performance indicators that have been identified in the RTP Guidelines i.e. mobility, environmental quality, reliability, safety and security, etc.

One of the most important quantitative evaluation criteria utilized to evaluate regional capacity increasing projects is a cost-benefit analysis that compares the benefit of the project to actual cost. Each rehabilitation/safety and capacity increasing project was evaluated using a cost-benefit methodology that takes into consideration the safety, operational and maintenance benefits of the project over its design life. COG Regional Traffic Model output adjusted to reflect year 2030 volumes was then used to identify the average daily traffic (ADT) applied in the equations. In addition to the quantitative evaluation criteria described above, a list of qualitative and performance-based criteria was prepared considering important data/information that should be considered as part of the evaluation process. The criteria are considered qualitative because they are based upon expert or subjective judgment to evaluate the measures. Both the qualitative and performance-based criteria consider relevant and recent issues of concern to residents and decision makers in Fresno County, i.e. desire to improve air quality, improve travel speeds, improve safety along major regional routes.

In brief, the 10 step candidate project evaluation process utilized the following methodology:

1. Solicit candidate projects from Caltrans and member agencies
2. Determine project costs
3. Identify the Average Annual Daily Traffic (AADT) volumes for year 2030
4. Determine the project length in miles
5. Determine the safety benefits (value) of each project
6. Determine the operational benefits
7. Determine the maintenance benefits
8. Sum the project benefits and divide by the total project cost

9. Apply the scoring criteria

10. Sum all criteria scores resulting from Step 9 to determine the total project score

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Project Evaluation Criteria for Capacity Increasing Projects

	Points Applied		
1	***Cost Benefit/Usage: (considers Year 2025 traffic)***		
	4	Has a Cost/Benefit Ratio of 20.1 or higher.	
	3	Has a Cost/Benefit Ratio of 10.1 to 20.0.	
	2	Has a Cost/Benefit Ratio of 5.1 to 10.	
	1	Has a Cost/Benefit Ratio of 1.0 to 5.0.	
	0	Has a Cost/Benefit Ratio less than 1.0.	
		A cost/benefit ratio of 1.0 establishes a cost effective improvement project.	
2	***Improved Level of Service***		
	10	Urban - LOS F to A	Rural - LOS E or F to LOS A
	9	Urban - LOS F to B	Rural - LOS E or F to LOS B
	8	Urban - LOS E to A	Rural - LOS E or F to LOS C
	7	Urban - LOS F to C	Rural - LOS D to LOS A
	6	Urban - LOS E to B	Rural - LOS E or F to LOS D
	5	Urban - LOS F to D	Rural - LOS C to LOS A
	4	Urban - LOS E to C	Rural - LOS D to LOS B
	3	Urban - LOS F to E	Rural - LOS C to LOS B
	2	Urban - LOS E to D	Rural - LOS D to LOS C
	1	Urban - LOS D or C to Better	Rural - LOS B to A
	0	Urban - LOS B to A	Rural - LOS not Improved
		Improves existing congestion and delay at the most critical locations.	
3	***Improves Air Quality***		
	10	New facility/gap that reduces VMT/delay.	
	8	Lane widening project.	
	6	Change in facility classification.	
	4	Traffic signal or coordinated signal system.	
	2	New facility to new development.	
	1	Emission neutral.	
	0	Increases emissions.	
		Reduces nonattainment air emissions.	
4	***Is Environmentally Sensitive***		
	2	No significant impact on the environment or exempt from CEQA/NEPA.	
	1	Minimal impact on the environment. Neg. Declaration or FONSI required.	
	0	Significant impact on the environment. EIR or EIS required.	
		The project has the ability to be implemented without significant mitigation costs and environmental assessment.	
5	***Serves a Major Employment Center***		
	2	Directly serves an employment center.	
	1	Indirectly serves an employment center.	

	0	Does not directly or indirectly serve an employment center.
		Improves the economic well being of the adjacent area.
6	***Provides Improved Access to Essential Services***	
	2	Directly serves a hospital or major government, office or shopping center.
	1	Indirectly serves a hospital or major government, office or shopping center.
	0	Does not directly or indirectly serve a hospital or major government, office or shopping center.
		Improves the access to major services through an improved and expanded street and road system.
7	***The Entity is Able to Demonstrate Maintenance can be Accomplished Over Time***	
	2	Yes.
	0	No.
		Insures that the project can be sustained over time.
8	***Project Improves Safety***	
	5	Rural facility.
	4	Urban 2 lane facility.
	3	Urban 4 lane facility.
	2	Urban 4 or 6 lane expressway.
	1	Urban freeway facility.
		Safety is improved with roadway widening.
9	***Supports Other Modes of Transportation including Transit and Trail/Bike/Pedestrian Facilities***	
	2	Yes - Project includes the construction of planned trail/bike lanes, sidewalks, transit amenities, or other modal improvements.
	1	Yes - Project provides for future planned trail/bike lanes, sidewalks, transit amenities, or other modal improvements within ROW.
	0	No.
		Addresses multi-modal policies in the RTP.

KEY TO RATINGS: [4, 3, or 2] Extremely or Very Positive; [1] Positive; [0] Not Positive or Not Applicable.

Capacity-Increasing Candidate RTP Projects
(Ranked by Score)

													Criteria and Ranking										
													1	2	3	4	5	6	7	8	9		
	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Less Local Share	Final Model ADT	LOS W/O PROJ.	LOS W/ PROJ.	Benefit / Cost Ratio	Ben. / Cost	Improves LOS	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Mainten. Funded	Improves Safety	Supports Other Modes of Transp.	Total Score	Cumulative Total Cost
1	537.0	County of Fresno	Friant	Millbrook/Copper to North Fork/Millerton	2006	7.8	2 LU to 4 LD	$10,725,000	27437	F	B	3.60	1	9	8	2	2	2	2	5	2	33	$10,725,000
2	New	Clovis	Shaw	DeWolf to Leonard	2007	1.0	Construct Grade Separated Crossing	$1,300,000	35669	E	B	4.92	1	9	10	1	2	2	2	4	2	33	$12,025,000
3	338.0	Clovis	McCall	Griffith to Shaw	2018	2.0	2 LU to 6 LD	$4,875,000	20843	F	A	1.56	1	10	8	1	2	2	2	4	2	32	$16,900,000
4	931.0	Clovis	Shaw	DeWolf to Highland	2010	1.0	2 LU to 6 LD	$975,000	35669	F	B	6.57	2	9	8	1	2	2	2	4	2	32	$17,875,000
5	354.0	Clovis	Shaw	Highland to McCall	2015	1.5	2 LU to 6 LD	$2,925,000	25549	F	A	2.37	1	10	8	1	2	2	2	4	2	32	$20,800,000
6	932.0	Clovis	Temperance	Ashlan to Gould Canal	2005	0.2	2 LU to 4 LD	$195,000	27175	F	B	5.03	2	9	8	1	2	2	2	4	2	32	$20,995,000
7	513.0	County of Fresno	Central	Golden State to Clovis	2030	2.3	2LU to 4 LD	$2,200,000	13403	F	A	2.59	1	10	8	1	2	2	2	5	0	31	$23,195,000
8	553.0	County of Fresno	Mountain View	Bethel to e/o Smith (Tulare County Line)	2015	4.0	2 LU to 4 LD	$5,500,000	20978	F	A	2.77	1	10	8	1	2	2	2	5	0	31	$28,695,000
9	261.0	City of Fresno	North	Orange to Cedar	2008	1.0	2 LU to 4 LD, improve SR 99 interchange	$11,000,000	45617	F	A	0.74	0	10	8	1	2	2	2	4	2	31	$39,695,000
10	908.0	Clovis	Shaw	Locan to DeWolf	2015	0.5	2 LU to 6 LD	$975,000	31400	F	B	2.90	1	9	8	1	2	2	2	4	2	31	$40,670,000
11	359.0	Clovis	Shepherd	Willow to Clovis	2006	3.0	2 LU to 4 LD	$2,795,000	21917	F	B	4.27	1	9	8	1	2	2	2	4	2	31	$43,465,000
	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Less Local Share	Final Model ADT	LOS W/O PROJ.	LOS W/ PROJ.	Benefit / Cost Ratio	Ben. / Cost	Improves LOS	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential	Mainten. Funded	Improves Safety	Supports Other Modes of	Total Score	Cumulative Total Cost

																		Services			Transp.		
12	910.0	Clovis	Shepherd	Clovis to Fowler	2008	1.0	2 LU to 3 LD	$1,365,000	18692	F	B	2.50	1	9	8	1	2	2	2	4	2	31	$44,830,000
13	909.0	Clovis	Shepherd	Clovis to Fowler	2020	1.0	3 LD to 4 LD	$910,000	18692	F	A	3.75	1	10	8	1	2	2	2	3	2	31	$45,740,000
14	12.0	Caltrans	SR 180 W	Brawley to Hughes/West	2009	2.4	Unconstructed to 4 L Freeway on 8 L ROW. Includes auxiliary lanes at 99/180 Interchange	$32,075,000	52601	F	F	0.70	0	9	10	0	2	2	2	5	1	31	$77,815,000
15	287.0	Clovis	Temperance	Ashlan to Gettysburg	2005	0.5	2 LU to 4 LD	$910,000	25175	F	B	2.50	1	9	8	1	2	2	2	4	2	31	$78,725,000
16	294.0	Clovis	Temperance	Bullard to Herndon	2005	1.0	2 LU to 4 LD	$2,340,000	26389	F	B	2.04	1	9	8	1	2	2	2	4	2	31	$81,065,000
17	529.0	County of Fresno	Central	Maple to Golden State	2012	0.3	2LU to 4 LD	$350,000	24376	F	A	3.78	1	9	8	1	2	2	2	5	0	30	$81,415,000
18	916.0	County of Fresno	Herndon	.25 e/o Locan to McCall	2030	3.5	2 LU to 4 LD	$3,000,000	26239	F	B	5.53	2	8	8	1	2	2	2	5	0	30	$84,415,000
19	438.0	Clovis	Herndon	Locan to DeWolf	2020	0.5	2 LU to 4 LD	$650,000	19953	F	A	2.80	1	10	8	1	2	2	2	4	0	30	$85,065,000
20	324.0	Clovis	Herndon	Temperance to Locan	2006	0.5	2 LU to 4 LD	$520,000	28414	F	A	4.93	1	10	8	1	2	2	2	4	0	30	$85,585,000
21	325.0	Clovis	Herndon	Tollhouse to Temperance	2008	0.5	2 LU to 4 LU	$975,000	28414	F	A	2.63	1	10	8	1	2	2	2	4	0	30	$86,560,000
22	118.0	City of Fresno	Jensen	Marks to Fruit	2010	1.5	2 LU to 4 LD	$2,640,000	19193	F	A	1.99	1	10	8	1	2	2	2	4	0	30	$89,200,000
23	541.0	County of Fresno	Jensen	West to Brawley	2020	2.0	2 LU to 4 LD	$2,400,000	23032	F	B	3.48	1	9	8	1	2	2	2	5	0	30	$91,600,000
24	260.0	City of Fresno	Jensen	West to Martin Luther King Blvd	2013	1.5	2 LU to 4 LD	$1,320,000	19079	F	A	3.95	1	10	8	1	2	2	2	4	0	30	$92,920,000
25	412.0	Clovis	Shaw	Coventry Ave. to Locan	2007	1.0	5 LD to 6 LD	$1,365,000	34976	F	B	4.60	1	9	8	1	2	2	2	3	2	30	$94,285,000
26	47.0	City of Fresno	Shields	At SR 99	2015	1.0	Construct overcrossing	$10,560,000	33633	F	B	0.57	0	9	10	0	2	2	2	4	1	30	$104,845,000
27	113.0	City of Fresno	Shields	Cornelia to Parkway	2006	1.9	2 LU to 4 LD	$2,400,000	21744	F	B	3.13	1	9	8	1	2	2	2	4	1	30	$107,245,000
	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Less Local Share	Final Model ADT	LOS W/O PROJ.	LOS W/ PROJ.	Benefit / Cost Ratio	Ben. / Cost	Improves LOS	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Mainten. Funded	Improves Safety	Supports Other Modes of Transp.	Total Score	Cumulative Total Cost

	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Less Local Share	Final Model ADT	LOS W/O PROJ.	LOS W/ PROJ.	Benefit / Cost Ratio	Ben. / Cost	Improves LOS	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Mainten. Funded	Improves Safety	Supports Other Modes of Transp.	Total Score	Cumulative Total Cost
28	36.0	Caltrans	SR 180 W	Hughes/West to SR 99 (including Hughes/West Connector)	2004	1.5	Unconstructed 4 L Expressway on 8 L ROW Hughes/West to Teilman and Unconstructed to 6 L Freeway on 8 L ROW Teilman to SR 99	$35,397,000	80312	F	D	0.60	0	9	10	0	2	2	2	4	1	30	$142,642,000
29	263.0	City of Fresno	Temperance	Belmont to Dakota	2011	2.5	2 LU to 6 LD	$7,040,000	29616	F	B	1.89	1	9	8	1	2	2	2	4	1	30	$149,682,000
30	1008.0	City of Fresno	Whitesbridge	Blythe to Valentine	2015	1.0	2 LD to 4 LD	$880,000	20751	F	B	4.29	1	9	8	1	2	2	2	4	1	30	$150,562,000
31	369.0	City of Fresno	Willow	Nees to Powers	2015	1.2	2 LD to 6 LD	$1,637,000	50929	F	B	6.88	2	9	8	1	1	1	2	4	2	30	$152,199,000
32	124.0	City of Fresno	Willow	Shepherd to Copper	2008	2.0	2 LD to 6 LD	$2,400,000	40122	F	B	5.99	2	9	8	1	1	1	2	4	2	30	$154,599,000
33	514.0	County of Fresno	Academy	Manning to SR 180	2008	7.0	2 LU to 4 L Expressway	$28,000,000	21150	F	A	0.96	0	10	8	0	2	2	2	5	0	29	$182,599,000
34	400.0	Clovis	Ashlan	Armstrong to McKelvy	2005	0.2	3 LD to 4 LD	$390,000	21277	F	B	1.98	1	9	8	1	1	1	2	4	2	29	$182,989,000
35	108.0	City of Fresno	Ashlan	Grantland to Polk	2010	1.5	2 L to 4 LD	$1,600,000	20962	F	B	3.57	1	9	8	1	1	1	2	4	2	29	$184,589,000
36	153.0	City of Fresno	Brawley	Palo Alto to Herndon	2005	0.3	2 LU to 4 LD	$240,000	26204	F	C	5.92	2	7	8	1	2	1	2	4	2	29	$184,829,000
37	234.0	City of Fresno	Grantland	Shields to Ashlan	2012	1.0	2 LU to 6 LD	$3,520,000	18285	F	A	0.95	0	10	8	1	1	1	2	4	2	29	$188,349,000
38	322.0	Clovis	Herndon	DeWolf to McCall	2020	2.0	2 LU to 4 LD	$2,275,000	26239	F	B	4.17	1	9	8	1	2	2	2	4	0	29	$190,624,000
39	116.0	City of Fresno	Marks	Jensen to Whitesbridge	2010	2.0	2 LU to 4 LD	$2,400,000	22925	F	B	3.46	1	9	8	1	1	1	2	4	2	29	$193,024,000
40	193.0	City of Fresno	Peach	Jensen to Butler	2012	1.5	2 LU to 4 LD	$1,320,000	21076	F	B	4.35	1	9	8	1	1	1	2	4	2	29	$194,344,000
41	220.0	City of Fresno	Polk	McKinley to Shields	2008	1.0	2 LU to 4 LD	$800,000	22124	F	B	5.02	2	9	8	1	1	1	2	4	1	29	$195,144,000

	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Less Local Share	Final Model ADT	LOS W/O PROJ.	LOS W/ PROJ.	Benefit / Cost Ratio	Ben. / Cost	Improves LOS	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Mainten. Funded	Improves Safety	Supports Other Modes of Transp.	Total Score	Cumulative Total Cost
42	161.0	City of Fresno	Polk	Shields to Gettysburg	2009	1.5	2 LU to 4 LD	$1,200,000	21097	F	B	4.79	1	9	8	1	1	1	2	4	2	29	$196,344,000
43	358.0	Clovis	Shepherd	HWY 168 to Del Rey	2020	1.5	2 LU to 4 LD	$3,120,000	27438	F	C	2.38	1	7	8	1	2	2	2	4	2	29	$199,464,000
44	911.0	Clovis	Shepherd	Fowler to Armstrong	2020	0.5	3 LD to 4 LD	$455,000	15823	E	A	3.19	1	8	8	1	2	2	2	3	2	29	$199,919,000
45	1018.0	Caltrans	SR 145	SR 180 to Shaw	2025	5.0	2 LU to 4 LU	$42,000,000	18158	E	A	0.39	0	10	8	0	2	2	2	5	0	29	$241,919,000
46	52.0	Caltrans	SR 180 W	Dickenson to Brawley	2015	6.0	2 LU to 4 L Expressway	$50,000,000	20751	F	B	0.45	0	10	8	0	2	2	2	5	0	29	$291,919,000
47	63.0	Caltrans	SR 180 W	Siskiyou to Dickenson	2020	6.0	2 LU to 4 LU	$50,000,000	19683	F	A	0.43	0	10	8	0	2	2	2	5	0	29	$341,919,000
48	49.0	Caltrans	SR 41	Kings County line to Elkhorn	2011	7.0	2 L Expressway to 4 L Expressway	$40,131,000	20628	F	A	0.65	0	10	8	0	2	2	2	5	0	29	$382,050,000
49	50.0	Caltrans	SR 43	Kings County line to Selma City limits	2015	9.3	2 LU to 4 LU	$66,401,000	20429	F	A	0.52	0	10	8	0	2	2	2	5	0	29	$448,451,000
50	55.0	Caltrans	SR 99	Tulare County Line to SR 201	2010	1.0	4 L Freeway to 6 L Freeway & Widen Bridge to 6 L	$31,800,000	75775	E	A	0.42	0	10	8	0	2	2	2	5	0	29	$480,251,000
51	413.0	Clovis	Ashlan	Temperance to Locan	2005	0.5	2 LU to 4 LD	$455,000	27387	F	C	5.43	2	7	8	1	1	1	2	4	2	28	$480,706,000
52	217.0	City of Fresno	Copper	Friant to Willow	2007	2.0	2 LU to 6 LD	$4,000,000	16288	E	A	1.49	1	8	8	1	1	1	2	4	2	28	$484,706,000

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53	565.0	County of Fresno	Jensen	Brawley to Dickenson	2030	6.0	2 LU to 4 LD	$6,000,000	15967	E	A	2.93	1	7	8	1	2	2	2	5	0	28	$490,706,000
54	194.0	City of Fresno	Kings Canyon	Fowler to Temperance	2006	1.0	2 LU to 4 LD	$800,000	32665	F	D	7.34	2	5	8	1	2	2	2	4	2	28	$491,506,000
55	176.0	City of Fresno	North	SR 41 to Orange	2005	1.5	2 LU to 4 LU	$1,920,000	15966	E	A	2.29	1	8	8	1	2	2	2	4	0	28	$493,426,000
56	131.0	City of Fresno	Polk	Gettysburg to Shaw	2012	0.5	2 LU to 4 LD	$4,400,000	21260	F	B	0.44	0	9	8	1	1	1	2	4	2	28	$497,826,000
57	676.0	Reedley	Reed	Manning to South	2015	1.0	2 LU to 4 LD	$1,000,000	14882	D	A	2.74	1	7	8	1	2	2	2	5	0	28	$498,826,000
58	392.0	Clovis	Shaw	Clovis to Temperance	2008	2.0	4 LD to 6 LD	$650,000	46632	F	D	25.64	4	5	8	0	2	2	2	3	2	28	$499,476,000
59	166.0	City of Fresno	Shepherd	Chestnut to Willow	2007	0.5	2 LU to 4 LD	$400,000	24292	F	C	5.50	2	7	8	1	1	1	2	4	2	28	$499,876,000
60	59.0	Caltrans	SR 41	Interchange at American	2025	1.0	Add Ramps to Interchange at American	$10,700,000	54084	F	B	0.90	0	9	8	0	2	2	2	5	0	28	$510,576,000
61	61.0	Caltrans	SR 41	Interchange at Manning	2030	1.0	Add Interchange at Manning	$15,000,000	33696	E	B	0.40	0	9	8	0	2	2	2	5	0	28	$525,576,000
62	368.0	Clovis	Willow	Powers to Shepherd	2006	0.3	2 LU to 6 LD	$1,950,000	37153	F	B	0.85	0	9	8	1	1	1	2	4	2	28	$527,526,000
63	302.0	Clovis	Ashlan	Fowler to Armstrong	2006	0.4	2 LU to 4 LD	$1,495,000	18067	F	A	0.88	0	10	8	1	1	1	2	4	0	27	$529,021,000
64	303.0	Clovis	Ashlan	Leonard to McCall	2010	1.0	2 LU to 4 LD	$2,340,000	25654	F	C	1.98	1	7	8	1	1	1	2	4	2	27	$531,361,000
65	New	Clovis	Clovis	@ Teague	2004	0.5	Traffic Signal	$195,000	24207	F	B	11.24	3	9	4	2	2	2	2	3	0	27	$531,556,000
66	292.0	Clovis	Clovis	Third to Sierra	2003	0.3	3 LD to 4 LD	$5,525,000	19172	F	A	0.19	0	10	8	0	2	2	2	3	0	27	$537,081,000
67	119.0	City of Fresno	H St	Belmont to Ventura	2006	1.5	2 LU to 4 LD	$8,800,000	23912	F	B	0.74	0	9	8	0	2	2	2	4	0	27	$545,881,000

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68	142.0	City of Fresno	Marks	McKinley to Parkway	2010	1.0	2 LU to 4 LD	$1,520,000	22172	F	B	2.65	1	9	8	1	1	1	2	4	0	27	$547,401,000
69	132.0	City of Fresno	Shepherd	Cedar to Maple	2012	0.5	2 LU to 4 LD	$500,000	24959	F	C	4.52	1	7	8	1	1	1	2	4	2	27	$547,901,000
70	247.0	City of Fresno	Shields	Grantland to Cornelia	2007	2.5	2 LU to 4 LD	$2,000,000	17028	E	A	3.90	1	8	8	1	1	1	2	4	1	27	$549,901,000
71	212.0	City of Fresno	Brawley	S of Shaw to Marty	2008	1.0	2 LU to 4 LD	$880,000	28087	F	D	5.76	2	5	8	1	1	1	2	4	2	26	$550,781,000
72	New	City of Fresno	Cedar	Olive to McKinley	2020	0.1	Curb and Gutter	$50,000	39688	F	D	16.16	3	5	8	0	2	2	2	4	0	26	$550,831,000
73	543.0	County of Fresno	Manning	Buttonwillow to Alta	2012	2.0	2 LU to 4 LD	$3,700,000	14160	C	A	1.41	1	5	8	1	2	2	2	5	0	26	$554,531,000
74	1.0	Caltrans	SR 33	In Mendota - Intersection of SR 33 and SR 180 to Northern City Limits.	2010	0.8	2 LU to 4 L	$8,250,000	14630	D	A	0.26	0	7	8	0	2	2	2	5	0	26	$562,781,000
75	14.0	Caltrans	SR 99	SR 201 to SR 43	2007	6.7	4 L Freeway to 6 L Freeway	$41,208,000	104928	B	A	3.02	1	6	8	0	2	2	2	5	0	26	$603,989,000
76	1030.0	Caltrans	SR 99	SR 43/Floral Road	2014	1.0	Replace Bridge Structure and Widen Floral	$10,000,000	49200	F	C	0.88	0	8	8	0	2	2	2	4	0	26	$613,989,000
77	224.0	City of Fresno	Weber	Belmont to Olive	2010	0.7	2 LU to 4 LD	$880,000	16250	E	A	2.37	1	8	8	1	1	1	2	4	0	26	$614,869,000
78	134.0	City of Fresno	Willow	Herndon to Alluvial	2006	0.5	2 LU to 6 LD	$640,000	48833	F	D	6.81	2	5	8	1	1	1	2	4	2	26	$615,509,000
79	New	Clovis	Clovis	@ Nees	2008	0.5	Traffic Signal	$210,000	19360	E	B	8.40	2	8	4	2	2	2	2	3	0	25	$615,719,000

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80	New	Clovis	Clovis	@ Shepherd	2008	0.5	Traffic Signal	$210,000	18692	E	B	8.12	2	8	4	2	2	2	2	3	0	25	$615,929,000
81	964.0	City of Fresno	Elm	Central to North	2010	1.0	2 LU to 4 LD	$800,000	21439	F	D	4.87	1	5	8	1	1	1	2	4	2	25	$616,729,000
82	New	Clovis	Shaw	@ Highland	2015	0.5	Traffic Signal	$165,000	25437	F	C	13.94	3	7	4	2	2	2	2	3	0	25	$616,894,000
83	New	Clovis	Shaw	@ Leonard	2015	0.5	Traffic Signal	$183,820	25774	F	C	12.67	3	7	4	2	2	2	2	3	0	25	$617,077,820
84	New	Clovis	Shaw	@ McCall	2015	0.5	Traffic Signal	$183,820	20843	F	C	10.31	3	7	4	2	2	2	2	3	0	25	$617,261,640
85	43.0	Caltrans	SR 180 E	Clovis to 0.8 km east of Temperance	2007	3.2	Unconstructed to 4 L Freeway on 6 L ROW	$47,673,000	116133	E	E	1.38	1	3	10	0	2	2	2	4	1	25	$664,934,640
86	60.0	Caltrans	SR 41	Interchange at Central	2020	1.0	Add Interchange at Central	$15,000,000	82920	F	D	0.98	0	6	8	0	2	2	2	5	0	25	$679,934,640
87	437.0	Clovis	Willow	Barstow to Herndon	1995	1.5	4 LD to 6 LD	$1,820,000	46479	F	D	6.84	2	5	8	1	2	2	2	3	0	25	$681,754,640
88	408.0	Clovis	Willow	Chennault to Nees	2003	0.7	2 LU to 6 LD	$1,625,000	42566	F	D	3.28	1	5	8	1	1	1	2	4	2	25	$683,379,640
89	New	Clovis	Willow	@ Shepherd	2007	0.5	Traffic Signal	$210,000	37936	F	C	16.19	3	7	4	2	2	2	2	3	0	25	$683,589,640
90	New	Clovis	Ashlan	@ Leonard	2015	0.5	Traffic Signal	$210,000	26611	E	B	11.44	3	8	4	2	1	1	2	3	0	24	$683,799,640
91	New	Clovis	Ashlan	@ Thompson	2015	0.5	Traffic Signal	$195,000	15710	E	A	7.40	2	9	4	2	1	1	2	3	0	24	$683,994,640
92	New	Clovis	Herndon	@ DeWitt	2010	0.5	Traffic Signal	$42,000	63219	F	D	133.96	4	5	4	2	2	2	2	3	0	24	$684,036,640
93	288.0	Clovis	Herndon	Clovis to Tollhouse	2005	2.0	4 LD to 6 LD	$1,300,000	54342	F	E	14.91	3	3	8	1	2	2	2	3	0	24	$685,336,640
94	237.0	City of Fresno	Jensen	Cherry to Clovis	2010	4.5	4 LD to 6 LD	$22,000,000	105617	F	D	3.83	1	5	8	0	2	2	2	2	2	24	$707,336,640
95	125.0	City of Fresno	Kings Canyon	Chestnut to Fowler	2008	3.0	2 LU to 6LD	$22,000,000	43910	F	D	1.07	1	5	8	0	2	2	2	4	0	24	$729,336,640
96	123.0	City of Fresno	Kings Canyon	Temperance to DeWolf	2015	1.0	2 L to 4 LU	$1,320,000	76403	F	F	10.28	3	0	8	1	2	2	2	4	2	24	$730,656,640
97	239.0	City of Fresno	North	Cedar to Chestnut	2007	1.0	2 LU to 4 LD	$4,400,000	33464	F	E	1.37	1	3	8	1	2	2	2	4	1	24	$735,056,640

98	New	Clovis	Shaw	@ Thompson	2015	0.5	Traffic Signal	$195,000	21291	F	C	9.92	2	7	4	2	2	2	2	3	0	24	$735,251,640
99	New	Clovis	Willow	@ Sierra	2010	0.5	Traffic Signal	$60,000	45961	F	D	68.45	4	5	4	2	2	2	2	3	0	24	$735,311,640
100	New	Clovis	Ashlan	@ McCall	2015	0.5	Traffic Signal	$188,496	16865	E	B	8.20	2	8	4	2	1	1	2	3	0	23	$735,500,136
101	305.0	Clovis	Ashlan	Locan to Leonard	2006	1.0	2 LU to 4 LD	$1,625,000	31199	F	E	3.45	1	3	8	1	1	1	2	4	2	23	$737,125,136
102	112.0	City of Fresno	Golden State	Herndon to Ashlan	2006	3.6	2 LU to 4 LD	$1,360,000	44211	F	F	20.93	4	0	8	1	2	2	2	4	0	23	$738,485,136
103	121.0	City of Fresno	Jensen	Clovis to McCall	2015	5.0	4 LD to 6 LD	$3,520,000	62089	F	E	15.70	3	3	8	1	2	2	2	2	0	23	$742,005,136
104	New	Clovis	Shaw	@ DeWolf	2015	0.5	Traffic Signal	$170,360	35669	F	D	18.79	3	5	4	2	2	2	2	3	0	23	$742,175,496
105	54.0	Caltrans	SR 180 E	Trimmer Springs to Frankwood	2010	3.2	2 LU to 2 L Expressway on 4 L ROW	$23,375,000	19656	F	A	0.49	0	6	6	0	2	2	2	5	0	23	$765,550,496
106	196.0	City of Fresno	Ashlan	Polk to SR 99	2008	2.0	2 LU to 4 LD	$800,000	44066	F	F	19.70	3	0	8	1	1	1	2	4	2	22	$766,350,496
107	291.0	Clovis	Clovis	Alluvial to Nees	2008	0.5	3 LD to 4 LD	$780,000	15178	D	A	1.79	1	1	8	1	2	2	2	3	2	22	$767,130,496
108	427.0	Clovis	Clovis	Shepherd to 1/4 Mile South	2015	0.3	3 LD to 4 LD	$195,000	13000	C	A	3.71	1	1	8	1	2	2	2	3	2	22	$767,325,496
109	New	City of Fresno	Jensen	@Peach	2008	0.5	Traffic Signal	$265,000	45213	E	B	15.25	3	6	4	2	1	1	2	3	0	22	$767,590,496
110	444.0	Clovis	McCall	Herndon to Shepherd	2020	2.0	2 LU to 6 LD	$2,925,000	9256	A	A	1.20	1	0	8	1	2	2	2	4	2	22	$770,515,496
111	120.0	City of Fresno	P St	Ventura to Divisadero	2007	0.8	Convert to Two Way	$1,760,000	12392	E	C	1.05	1	4	8	0	2	2	2	3	0	22	$772,275,496
112	265.0	City of Fresno	Shaw	Garfield to Grantland Diagonal	2010	0.8	2 LU to 4 LD	$800,000	15051	D	A	2.77	1	1	8	1	2	2	2	4	1	22	$773,075,496
113	559.0	County of Fresno	Shaw	Temperance to McCall	2010	3.0	2 LU to 4 LD	$4,040,000	44544	F	A	5.91	2	0	8	1	2	2	2	5	0	22	$777,115,496
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114	356.0	Clovis	Shepherd	Armstrong to Temperance	2025	0.5	3 LD to 4 LD	$487,500	15307	D	A	2.89	1	1	8	1	2	2	2	3	2	22	$777,602,996
115	357.0	Clovis	Shepherd	Temperance to Tollhouse (HWY 168)	2008	2.0	2 LU to 4 LD	$2,730,000	9186	A	A	1.27	1	0	8	1	2	2	2	4	2	22	$780,332,996
116	122.0	City of Fresno	Shields	.125 w/o Fowler to Temperance	2008	1.2	2 LD to 4 LD	$1,600,000	31339	F	E	4.23	1	3	8	1	1	1	2	4	1	22	$781,932,996
117	10.0	Caltrans	SR 180	SR 41 to SR 168	2017	1.5	Construct Braided Ramps	$25,000,000	208095	F	C	2.21	1	6	8	0	2	2	2	1	0	22	$806,932,996
118	34.0	Caltrans	SR 180 E	SR 168 to Fowler	2005	3.7	Unconstructed to 6 L Freeway on 8 L ROW	$89,446,000	184695	F	F	1.35	1	0	10	0	2	2	2	4	1	22	$896,378,996
119	90.0	Caltrans	SR 99	Jensen to Central	2020	2.0	6 L to 8 L	$25,000,000	146063	F	C	2.07	1	6	8	0	2	2	2	1	0	22	$921,378,996
120	New	Clovis	Temperance	@ Ashlan	2005	0.5	Traffic Signal	$210,000	26853	E	C	11.54	3	4	4	2	2	2	2	3	0	22	$921,588,996
121	New	Clovis	Temperance	@ Barstow	2007	0.5	Traffic Signal	$210,000	24304	E	C	10.48	3	4	4	2	2	2	2	3	0	22	$921,798,996
122	New	Clovis	Temperance	@ Sierra	2007	0.5	Traffic Signal	$210,000	26389	E	C	11.35	3	4	4	2	2	2	2	3	0	22	$922,008,996
123	361.0	Clovis	Temperance	Alluvial to Nees	2005	0.2	3 LU to 4 LD (complete except 500' S/Nees Southbound)	$325,000	21394	D	A	1.79	1	1	8	1	2	2	2	3	2	22	$922,333,996
124	282.0	Clovis	Tollhouse	Third to Herndon	2020	1.3	2 LU to 4 LU	$455,000	11051	B	A	5.90	2	0	8	0	2	2	2	4	2	22	$922,788,996
125	264.0	City of Fresno	Whitesbridge	Valentine to Fruit	2018	2.0	2 LU to 4 LD	$2,640,000	15280	D	A	2.13	1	1	8	1	2	2	2	4	1	22	$925,428,996
126	New	Clovis	Ashlan	@ DeWolf	2008	5.0	Traffic Signal	$195,000	31199	F	D	18.24	3	5	4	2	1	1	2	3	0	21	$925,623,996
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127	401.0	Clovis	Ashlan	McKelvy to Temperance	2007	0.3	3 LD to 4 LD	$526,500	20249	D	C	2.10	1	1	8	1	1	1	2	4	2	21	$926,150,496
128	564.0	County of Fresno	Auberry	Copper to Millerton (W)	2030	8.9	2 LU to 4 LD	$18,000,000	12820	B	A	1.18	1	1	8	0	2	2	2	5	0	21	$944,150,496
129	512.0	County of Fresno	Chestnut	American to SR 99	2030	0.7	2 LU to 4 LD	$800,000	8837	A	A	1.47	1	0	8	1	2	2	2	5	0	21	$944,950,496
130	286.0	Clovis	Copper	Willow to Minnewawa	2025	1.0	2 LU to 4 LD	$1,755,000	13538	C	A	1.43	1	1	8	1	1	1	2	4	2	21	$946,705,496
131	New	City of Fresno	Divisadero	@ Freeway 41 - on/off ramps	2007	1.0	Additional SB Off lane and dual lefts on Divisadero at NB on ramp	$1,760,000	42878	F	D	4.36	1	5	8	0	2	2	2	1	0	21	$948,465,496
132	New	City of Fresno	Divisadero	Mariposa to SR 41	2007	1.0	New traffic signal at Mariposa, eliminated ped crossing at SR 41, SB off-ramp, modify SB 41 off ramp	$704,000	57412	F	E	14.53	3	3	8	0	2	2	2	1	0	21	$949,169,496
133	112.0	City of Fresno	Golden State	Herndon to Ashlan	2006	3.0	2LD to 4 LD	$4,080,000	44211	F	F	5.81	2	0	8	1	2	2	2	4	0	21	$953,249,496
134	62.0	Caltrans	I 5	Kings County line to Merced County line	2030	66.2	4L Freeway to 6 L Freeway	$198,000,000	48181	B	A	2.88	1	1	8	0	2	2	2	5	0	21	$1,151,249,496

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135	539.0	County of Fresno	Jayne	SR 33 to I-5	2030	6.3	Widen to 4-lane divided highway	$7,100,000	7196	A	A	1.23	1	0	8	1	2	2	2	5	0	21	$1,158,349,496
136	117.0	City of Fresno	Marks	Nielsen to McKinley	2007	1.5	2 LU to 4 LD	$1,920,000	15349	D	A	2.21	1	1	8	1	1	1	2	4	2	21	$1,160,269,496
137	336.0	Clovis	McCall	Shaw to Bullard	2020	1.0	2 LU to 6 LD	$2,437,500	9344	A	A	0.72	0	0	8	1	2	2	2	4	2	21	$1,162,706,996
138	549.0	County of Fresno	Millerton	Friant to Table Mountain	2015	4.3	2 LU to 4 LD	$9,000,000	11269	B	A	1.01	1	1	8	0	2	2	2	5	0	21	$1,171,706,996
139	913.0	City of Fresno	Polk	Olive to Belmont	2007	0.5	Unconstructed to 4 LD	$800,000	11278	D	A	1.32	1	1	10	1	1	1	2	4	0	21	$1,172,506,996
140	514.0	County of Fresno	Reed	Goodfellow to SR 180	2030	3.5	2 LU to 4 LD	$3,850,000	10099	A	A	1.73	1	0	8	1	2	2	2	5	0	21	$1,176,356,996
141	556.0	County of Fresno	Reed	Reedley City Limit (South Ave.) to Goodfellow	2025	3.0	2 LD to 4 LD	$3,300,000	10211	A	A	1.74	1	0	8	1	2	2	2	5	0	21	$1,179,656,996
142	560.0	County of Fresno	Shaw	Dickenson to W of Biola	2030	3.0	2 LU to 4 LD	$2,750,000	5004	A	A	1.09	1	0	8	1	2	2	2	5	0	21	$1,182,406,996
143	557.0	County of Fresno	Shaw	Garfield to Dickenson	2030	1.0	2 LU to 4 LD	$1,100,000	6449	A	A	1.14	1	0	8	1	2	2	2	5	0	21	$1,183,506,996
144	243.0	City of Fresno	Shaw	Grantland Diagonal to Golden State	2009	0.8	2 LU to 6 LD	$3,200,000	56605	F	F	2.52	1	0	8	1	2	2	2	4	1	21	$1,186,706,996
145	558.0	County of Fresno	Shaw	McCall to Academy	2030	3.0	2 LU to 4 LD	$3,300,000	8700	A	A	1.50	1	0	8	1	2	2	2	5	0	21	$1,190,006,996

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146	96.0	Caltrans	SR 168	Shepherd to Millerton	2030	9.0	Construct 2 L expressway on new alignment of 4 L freeway ROW	$67,500,000	12687	B	A	0.31	0	4	6	0	2	2	2	5	0	21	$1,257,506,996
147	New	Caltrans	SR 180	James Rd. to Yuba	2020	1.6	Add Passing Lanes	$1,830,000	11128	B	A	1.82	1	1	8	0	2	2	2	5	0	21	$1,259,336,996
148	1014.0	Caltrans	SR 180 W	West of Marks and East of Marks	2005	1.0	Widen Shoulders, signalize, channelization, and raise profile	$1,106,000	25906	F	D	4.23	1	5	4	0	2	2	2	4	1	21	$1,260,442,996
149	New	Caltrans	SR 41	Divisadero to O Street	2015	1.0	Add SB Auxiliary Lane	$7,000,000	74109	E	A	1.88	1	5	8	0	2	2	2	1	0	21	$1,267,442,996
150	New	Caltrans	SR 41	Near McKinley to north of Shields	2009	1.4	Widen On-ramps and install 3-ramp metering systems	$3,060,000	86325	F	E	7.01	2	3	8	0	2	2	2	1	1	21	$1,270,502,996
151	New	Clovis	Temperance	@ Herndon	2005	0.5	Traffic Signal	$460,000	28414	E	C	5.57	2	4	4	2	2	2	2	3	0	21	$1,270,962,996
152	250.0	City of Fresno	Temperance	Jensen to Belmont	2010	3.0	2 LU to 6 LD	$8,000,000	69348	F	F	4.62	1	0	8	1	2	2	2	4	1	21	$1,278,962,996
153	940.0	City of Fresno	Ashlan	Garfield to Grantland	2020	0.5	Unconstructed to 4 LD	$1,000,000	9400	A	A	1.01	1	0	8	1	1	1	2	4	2	20	$1,279,962,996

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154		City of Fresno	Blackstone & Shields	Intersection	2007	0.5	Intersection improvement with dual left	$1,400,000	49134	F	E	3.13	1	3	4	2	2	2	2	3	1	20	$1,281,362,996
155	139.0	City of Fresno	Clovis	Kings Canyon to McKinley	2005	2.0	4 LD to 6 LD	$2,200,000	68806	F	F	11.12	3	0	8	0	2	2	2	3	0	20	$1,283,562,996
156	976.0	City of Fresno	Grantland	Belmont to Shields	2020	1.0	2LD to 4 LD	$880,000	7904	A	A	1.72	1	0	8	1	1	1	2	4	2	20	$1,284,442,996
157	974.0	City of Fresno	Grantland	Shaw to Parkway	2010	1.5	2 LU to 4 LD	$1,440,000	5046	A	A	1.05	1	0	8	1	1	1	2	4	2	20	$1,285,882,996
158	975.0	City of Fresno	Grantland	Shaw to Veterans	2015	0.5	2 LU to 4 LU	$528,000	8131	A	A	1.47	1	0	8	1	1	1	2	4	2	20	$1,286,410,996
159	199.0	City of Fresno	Herndon	Milburn to Marks	2007	2.0	4 LD to 6 LD	$2,000,000	81931	F	F	14.55	3	0	8	1	2	2	2	2	0	20	$1,288,410,996
160	254.0	City of Fresno	Herndon	SR 99 to Millburn	2007	2.0	4 LU to 6 LD expressway w/ bridge at UPRR & widen BNSF bridge	$28,800,000	80842	F	F	1.00	1	0	8	1	2	2	2	2	2	20	$1,317,210,996
161	115.0	City of Fresno	Hughes	Nielsen to McKinley	2008	1.5	2 LU to 4 LD	$2,640,000	10603	A	A	1.13	1	0	8	1	2	2	2	4	0	20	$1,319,850,996
162	542.0	County of Fresno	Manning	Alta to Hill	2025	3.0	2 LU to 4 LD	$5,100,000	8306	A	A	0.93	0	0	8	1	2	2	2	5	0	20	$1,324,950,996
163	675.0	Reedley	Manning	I St to Columbia	2015	1.0	2 LU to 4 LD	$2,000,000	8738	A	A	0.80	0	0	8	1	2	2	2	5	0	20	$1,326,950,996
164	238.0	City of Fresno	McKinley	Grantland to Golden State	2010	5.0	2 LU to 4 LD widen SR 99 bridge	$12,000,000	44117	F	F	3.29	1	0	8	1	2	2	2	4	0	20	$1,338,950,996
165	191.0	City of Fresno	Peach	Belmont to SR 180	2005	0.5	2 LU to 4 LD	$1,056,000	37105	F	F	3.15	1	0	8	1	1	1	2	4	2	20	$1,340,006,996

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166	192.0	City of Fresno	Peach	Butler to Belmont	2008	1.5	2 LU to 4 LD	$8,800,000	37105	F	F	1.13	1	0	8	1	1	1	2	4	2	20	$1,348,806,996
167	193.0	City of Fresno	Peach	North to Jensen	2012	1.0	2 LD to 4 LD	$616,000	7904	A	A	2.45	1	0	8	1	1	1	2	4	2	20	$1,349,422,996
168	677.0	Reedley	Reed	Olson to 11th St	2025	0.5	2 LU to 4 LD	$500,000	8378	A	A	1.66	1	0	8	0	2	2	2	5	0	20	$1,349,922,996
169	53.0	Caltrans	SR 180 E	Temperance to Academy	2008	6.0	2 LU to 4 L Expressway on existing alignment	$46,951,000	76403	F	F	1.73	1	0	8	0	2	2	2	5	0	20	$1,396,873,996
170	New	Caltrans	SR 99	At Ashlan	2008	1.0	Additional lane for on-ramp	$1,537,000	85996	F	E	9.93	2	3	8	0	2	2	2	1	0	20	$1,398,410,996
171	364.0	Clovis	Temperance	Heritage Lane to Shepherd	2008	0.5	3 LU to 4 LD	$650,000	9462	A	A	1.37	1	0	8	1	2	2	2	2	2	20	$1,399,060,996
172	521.0	County of Fresno	Alta	Manning to Floral	2025	2.0	2 LU to 4 LD	$2,100,000	8143	A	A	1.48	1	0	8	1	1	1	2	5	0	19	$1,401,160,996
173	229.0	City of Fresno	Cedar	Grant to Turner	2010	0.2	4 LD to 6 LD	$880,000	33387	C	A	1.36	1	1	8	0	2	2	2	3	0	19	$1,402,040,996
174	New	Clovis	Herndon	@ Villa	2010	0.5	Traffic Signal	$42,500	66281	F	F	138.73	4	0	4	2	2	2	2	3	0	19	$1,402,083,496
175	156.0	City of Fresno	Herndon	Cedar to Willow	2005	1.5	4 LD to 6 LD	$2,420,000	83883	F	F	9.23	2	0	8	1	2	2	2	2	0	19	$1,404,503,496
176	200.0	City of Fresno	Herndon	SR 41 to Fresno	2007	1.0	Add new WB auxiliary lane for SB on-ramp	$1,200,000	99312	F	F	14.67	3	0	8	1	2	2	2	1	0	19	$1,405,703,496

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177	326.0	Clovis	Herndon	Willow to Clovis	2006	1.5	4 L Expressway to 6 L Expressway	$2,080,000	73078	F	F	9.37	2	0	8	1	2	2	2	2	0	19	$1,407,783,496
178	New	Clovis	Herndon	Willow to Fowler	2010	1.0	Synchronization	$40,000	73078	F	F	324.73	4	0	4	2	2	2	2	3	0	19	$1,407,823,496
179	36.0	City of Fresno	Hughes/West Diagonal	Whitesbridge to Nielson	2004	1.2	Unconstructed to 4 LD	$1,320,000	28000	D	A	4.59	1	1	6	1	2	2	2	4	0	19	$1,409,143,496
180	987.0	City of Fresno	Marks	Weber to Dakota	2015	0.3	2LU to 4 LD	$308,000	15103	D	A	2.26	1	1	8	1	1	1	2	4	0	19	$1,409,451,496
181	548.0	County of Fresno	Mendocino	Kingsburg City Limit (Kamm) to Manning	2030	5.4	2 LU to 4 LD	$6,500,000	7760	A	A	1.24	1	0	8	1	1	1	2	5	0	19	$1,415,951,496
182	511.0	County of Fresno	Millerton	Table Mountain Road to Auberry	2030	2.2	2 LU to 4 LD	$3,600,000	6697	A	A	0.79	0	0	8	0	2	2	2	5	0	19	$1,419,551,496
183	New	City of Fresno	O Street	SR 41 to Ventura	2005	1.0	Intersection Improvement at Ventura and SR 41 off-ramp w/NB dual lefts at Ventura	$2,464,000	118773	F	F	8.54	2	0	8	0	2	2	2	3	0	19	$1,422,015,496
184	1001.0	City of Fresno	Polk	Olive to McKinley	2020	0.5	2 LD to 4 LD	$400,000	13339	C	A	3.09	1	1	8	1	1	1	2	4	0	19	$1,422,415,496

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185	1019.0	Caltrans	SR 198	Interchange at I-5	2020	1.0	Interchange Improvements, widen bridge to 4 lanes	$5,000,000	11476	A	A	0.43	0	0	8	0	2	2	2	5	0	19	$1,427,415,496
186	107.0	Caltrans	SR 41	Bullard to Herndon	2008	1.0	Construct NB auxiliary lane	$5,143,000	94786	F	E	3.27	1	3	8	0	2	2	2	1	0	19	$1,432,558,496
187	39.0	Caltrans	SR 99	Ashlan to Madera County line	2015	5.3	Widen from 4 L Freeway to 6 L Freeway	$25,000,000	118811	F	E	4.46	1	3	8	0	2	2	2	1	0	19	$1,457,558,496
188	1017.0	Caltrans	SR 99	Interchange at Central/Chestnut	2020	1.0	Interchange Improvements	$25,000,000	110900	F	F	0.79	0	0	8	0	2	2	2	5	0	19	$1,482,558,496
189	181.0	City of Fresno	Weber	Ashlan to Clinton	2010	2.1	2 LU to 4 LD	$2,640,000	38412	F	F	5.48	2	0	8	1	1	1	2	4	0	19	$1,485,198,496
190	114.0	City of Fresno	West	Jensen to Kearney	2020	1.5	2 LU to 4 LD	$2,640,000	14160	D	A	1.48	1	1	8	1	1	1	2	4	0	19	$1,487,838,496
191	902.0	City of Fresno	Friant	Audubon to Shepherd	2004	4.3	5L to 6L (Add NB Lane)	$4,880,000	77483	F	F	12.13	3	0	8	1	1	1	2	2	0	18	$1,492,718,496
192	New	Clovis	Herndon	@ Peach	2008	0.5	Traffic Signal	$420,000	73078	F	F	15.46	3	0	4	2	2	2	2	3	0	18	$1,493,138,496
193	157.0	City of Fresno	Herndon	Marks to West	2005	0.3	4 LD to 6 LD	$1,936,000	87174	F	F	2.40	1	0	8	1	2	2	2	2	0	18	$1,495,074,496
194	986.0	City of Fresno	Marks	North to Jensen	2025	1.0	2 LU to 4 LD	$1,144,000	9427	A	A	1.56	1	0	8	1	1	1	2	4	0	18	$1,496,218,496
195	337.0	Clovis	McCall	Bullard to Herndon	2020	1.0	3 LU to 6 LD	$2,275,000	6419	A	A	0.55	0	0	8	1	2	2	2	3	0	18	$1,498,493,496

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196	692.0	Reedley	Reed	Manning/Reed intersection to 200' N of North Avenue	2004	0.2	4 LU to 4 LD	$500,000	10014	A	A	0.87	0	0	8	0	2	2	2	4	0	18	$1,498,993,496
197	1003.0	City of Fresno	Shields	Garfield to Grantland	2025	0.5	2 LU to 4 LD	$800,000	3329	A	A	0.44	0	0	8	1	1	1	2	4	1	18	$1,499,793,496
198	92.0	Caltrans	SR 168	Millerton to Lodge	2030	7.0	Construct 2 L expressway on new alignment of 4 L freeway ROW	$52,500,000	8901	A	A	0.22	0	1	6	0	2	2	2	5	0	18	$1,552,293,496
199	New	Caltrans	SR 180	Near Firebaugh - along Nees Ave west of I-5 to SR 33	2015	17.9	Shoulder Widening (Traversable Highway)	$13,823,000	8634	A	A	2.12	1	0	6	0	2	2	2	5	0	18	$1,566,116,496
200	New	Clovis	Temperance	@ Nees	2006	0.5	Traffic Signal	$210,000	15029	C	B	6.59	2	1	4	2	2	2	2	3	0	18	$1,566,326,496
201	New	Clovis	Temperance	@ Shepherd	2008	0.5	Traffic Signal	$210,000	15209	C	B	6.66	2	1	4	2	2	2	2	3	0	18	$1,566,536,496
202	New	City of Fresno	West	Kearney to Whitesbridge	2012	0.5	2 LU to 4 LU	$792,000	10861	B	A	1.28	1	0	8	1	1	1	2	4	0	18	$1,567,328,496
203	410.0	Clovis	Clovis	Nees to Teague	2003	0.5	Unconstructed to 4 LD	$780,000	14000	D	A	1.66	1	1	2	1	2	2	2	4	2	17	$1,568,108,496

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204	427.0	Clovis	Clovis	Shepherd to 1/4 Mile South	2006	0.3	Unconstructed to 3 LD	$448,500	13000	C	A	1.61	1	1	2	1	2	2	2	4	2	17	$1,568,556,996
205	38.0	Caltrans	SR 180 E	Academy to Trimmer Springs	2009	3.4	2 LU to 2 L Expressway on 4 L ROW	$29,159,000	21174	F	B	0.45	0	0	6	0	2	2	2	5	0	17	$1,597,715,996
206	56.0	Caltrans	SR 180 E	Frankwood to Cove	2025	5.6	2 LU to 2 L Expressway on new alignment	$41,000,000	11638	B	B	0.30	0	0	6	0	2	2	2	5	0	17	$1,638,715,996
207	57.0	Caltrans	SR 180 W	I-5 to San Benito	2025	22.5	Route Adoption for New 2 L Expressway with interchange modification	$94,000,000	8216	A	A	0.38	0	0	6	0	2	2	2	5	0	17	$1,732,715,996
208	6.0	Caltrans	SR 41	Ashlan to Shaw	2020	1.0	6 L Freeway to 8 L Freeway	$16,800,000	196605	F	F	2.07	1	0	8	0	2	2	2	1	1	17	$1,749,515,996
209	8.0	Caltrans	SR 41	Bullard to Herndon	2025	1.0	6 L Freeway to 8 L Freeway	$16,800,000	189575	F	F	1.99	1	0	8	0	2	2	2	1	1	17	$1,766,315,996

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210	42.0	Caltrans	SR 41	Divisadero to Shields	2017	2.5	6 L Freeway to 8 L Freeway & widen SB off-ramp at Divisadero	$43,000,000	174693	F	F	1.80	1	0	8	0	2	2	2	1	1	17	$1,809,315,996
211	9.0	Caltrans	SR 41	Herndon to Friant	2025	1.0	6 L Freeway to 8 L Freeway	$16,800,000	171106	F	F	1.80	1	0	8	0	2	2	2	1	1	17	$1,826,115,996
212	7.0	Caltrans	SR 41	Shaw to Bullard	2020	1.0	6 L Freeway to 8 L Freeway	$16,800,000	191564	F	F	2.02	1	0	8	0	2	2	2	1	1	17	$1,842,915,996
213	5.0	Caltrans	SR 41	Shields to Ashlan	2017	1.0	6 L Freeway to 8 L Freeway	$16,800,000	189470	F	F	1.99	1	0	8	0	2	2	2	1	1	17	$1,859,715,996
214	New	Caltrans	SR 99	At Ventura	2008	1.0	Interchange improvements	$2,500,000	118773	F	F	8.41	2	0	8	0	2	2	2	1	0	17	$1,862,215,996
215	208.0	City of Fresno	Ashlan	Grade separation @ UPRR & SR 99 interchange	2010	1.0	Interchange Improvements	$20,000,000	105190	F	E	0.93	0	3	8	0	1	1	2	1	0	16	$1,882,215,996
216	1013.0	Caltrans	SR 41	Ashlan to Shaw	2014	1.0	Add NB Auxiliary Lane	$7,000,000	99306	E	A	2.52	1	0	8	0	2	2	2	1	0	16	$1,889,215,996

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217	1015.0	Caltrans	SR 41	Friant to Herndon	2012	1.0	Add SB Auxiliary Lane	$7,000,000	68270	E	A	1.73	1	0	8	0	2	2	2	1	0	16	$1,896,215,996
218	11.0	Caltrans	SR 41	Herndon to Audubon	2007	0.6	Modify Friant interchange (NB off-ramp. Add auxiliary lane from Herndon to Friant)	$8,520,000	82836	F	F	1.04	1	0	8	0	2	2	2	1	0	16	$1,904,735,996
219	1016.0	Caltrans	SR 41	McKinley to Shields	2012	1.0	Add NB Auxiliary Lane	$7,000,000	85909	E	A	2.18	1	0	8	0	2	2	2	1	0	16	$1,911,735,996
220	48.0	Caltrans	SR 99	Jensen to Bullard	2025	11.5	6 L Freeway to 8 L Freeway	$266,000,000	174995	F	F	1.34	1	0	8	0	2	2	2	1	0	16	$2,177,735,996
221	920.0	City of Fresno	Friant	Freeway 41 to Audubon	2008	0.5	6 lane to 8 lane	$2,400,000	90874	F	F	3.36	1	0	8	0	1	1	2	2	0	15	$2,180,135,996
222	246.0	City of Fresno	Shaw	SR 99 Interchange	2011	1.0	Reconstruct interchange	$44,880,000	113210	F	F	0.45	0	0	8	0	2	2	2	1	0	15	$2,225,015,996
223	1019.0	Caltrans	SR 198	Interchange at 1-5	2007	1.0	Install Signals, construct right turn lanes, and build ramps	$2,884,000	11476	A	A	0.74	0	0	4	0	2	2	2	5	0	15	$2,227,899,996
224	3.0	Caltrans	SR 99	Fresno to Clinton	2015	3.5	Add NB and SB Auxiliary Lanes	$132,000,000	174995	F	F	0.82	0	0	8	0	2	2	2	1	0	15	$2,359,899,996
225	New	Caltrans	SR 99	Interchange at North/Cedar	2020	1.0	Interchange Improvements	$25,000,000	119274	F	F	0.84	0	0	8	0	2	2	2	1	0	15	$2,384,899,996
																			TOTAL:				**$2,384,899,996**

Project Evaluation Criteria for Rehabilitation/Safety Projects

	Points Applied	
1	***Cost Benefit/Usage: (considers Year 2025 traffic)***	
	4	Has a Cost/Benefit Ratio of 20.1 or higher.
	3	Has a Cost/Benefit Ratio of 10.1 to 20.0.
	2	Has a Cost/Benefit Ratio of 5.1 to 10.
	1	Has a Cost/Benefit Ratio of 1.0 to 5.0.
	0	Has a Cost/Benefit Ratio less than 1.0.
		A cost/benefit ratio of 1.0 establishes a cost effective improvement project.
2	***Improves Air Quality***	
	10	Reconstruct and widen shoulders and/or stabilize shoulders.
	8	Widen shoulders.
	6	Reconstruct facility.
	4	Rehabilitate and AC Overlay.
	2	AC Overlay for maintenance.
	1	Emission neutral.
	0	Increases emissions.
		Reduces nonattainment air emissions.
3	***Is Environmentally Sensitive***	
	10	AC Overlay for Maintenance/Preservation
	8	Rehabilitate and AC Overlay
	6	Reconstruct Facility
	4	Widen shoulders.
	2	Reconstruct and widen shoulders and/or stabilize shoulders.
		The project has the ability to be implemented without significant mitigation costs and environmental assessment.
4	***Serves a Major Employment Center***	
	2	Directly serves an employment center.
	1	Indirectly serves an employment center.
	0	Does not directly or indirectly serve an employment center.

		Improves the economic well being of the adjacent area.
5	***Provides Improved Access to Essential Services***	
	2	Directly serves a hospital or major government, office or shopping center.
	1	Indirectly serves a hospital or major government, office or shopping center.
	0	Does not directly or indirectly serve a hospital or major government, office or shopping center.
		Improves the access to major services through an improved and maintained street and road system.
6	***Supports Other Modes of Transportation including Transit and Trail/Bike/Pedestrian Facilities***	
	2	Yes - Project includes the construction of planned trail/bike lanes, sidewalks, transit amenities, or other modal improvements.
	1	Yes - Project provides for future planned trail/bike lanes, sidewalks, transit amenities, or other modal improvements within ROW.
	0	*No.*
		Addresses multi-modal policies in the RTP.
7	***The Project Meets Roadway Design Standards and/or Improves Safety***	
	2	Rural 2 to 6 lane facility or urban 2 to 6 lane facility including expressway.
	1	Rural or urban freeway facility.
		Safety is improved with roadway rehabilitation (pavement widening only).

KEY TO RATINGS: [4, 3, or 2] Extremely or Very Positive; [1] Positive; [0] Not Positive or Not Applicable.

Rehabilitation/Safety RTP Candidate Projects

													Criteria and Ranking								
													1	2	3	4	5	6	7		
	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Estimate	Local Share	Total Cost Less Local Share	Final Model ADT	Benefit / Cost Ratio	Ben. / Cost	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Supports Other Modes of Transp.	Improves Safety	Total Score	Cumulative Cost
1		Clovis	Clovis	Dakota to Gettysburg	2007	1.0	Completed outside lane & curb and gutter (east side)	$300,000	$30,000	$270,000	45337	4	10	2	2	2	2	2	2	24	$270,000
2		Clovis	Clovis	Shaw to Pico	2006	0.5	Overlay	$170,000	0	$170,000	54242	4	2	10	2	2	0	2	2	22	$440,000
3		Clovis	Temperance	Gould Canal - Shepherd	2015	5.5	Pavement Restoration Various Locations	$400,000	0	$400,000	12588	4	6	6	2	2	0	2	2	22	$840,000
4		Clovis	Herndon	Clovis OT Trail to Dewitt & Clovis to Sunnyside	2005	0.7	Overlay	$310,000	0	$310,000	49756	3	2	10	2	2	0	2	2	21	$1,150,000
5		Clovis	Shaw	Fowler to Armstrong	2007	0.6	Overlay	$288,000	0	$288,000	34550	3	2	10	2	2	0	2	2	21	$1,438,000
6		Caltrans	SR 99	North of Floral to south of Merced St	2010	3.6	PCCP panel replacement, grinding, and joint sealing CAPM	$2,983,000	0	$2,983,000	119338	4	2	8	2	2	0	3	3	21	$4,421,000
7		Clovis	Willow	Shaw to 168	2007	0.4	Overlay	$190,000	0	$190,000	48002	3	2	10	2	2	0	2	2	21	$4,611,000
8		County of Fresno	McCall Avenue	SR 180 to Belmont	2015	3.0	2L reconstruction	$650,000	0	$650,000	11093	2	6	6	2	2	0	2	2	20	$5,261,000
9		County of Fresno	McCall Avenue	Ashlan to Bullard	2020	2.0	2L reconstruction	$1,250,000	0	$1,250,000	20843	2	6	6	2	2	0	2	2	20	$6,511,000
10		Caltrans	SR 180	Belmont to Whitesbridge	2008	2.7	AC overlay and widen shoulders	$9,826,000	0	$9,826,000	142364	2	10	2	2	2	0	2	2	20	$16,337,000
11		Caltrans	SR 43	Kings County Line to Floral	2005	9.3	Pavement rehab, AC overlay, and shoulder widening	$4,615,000	0	$4,615,000	25784	2	10	2	2	2	0	2	2	20	$20,952,000
12		City of Fresno	Various Major Streets	Within RJI significant streets	2005	7	Cold recycling of various major streets within the City with emphasis on RJI segments Phase I.	$2,160,000.00	0	$2,160,000	140000	4	2	8	2	2	0	2	2	20	$23,112,000
13		City of Fresno	Various Major Streets	Within RJI significant streets	2007	7	Cold recycling of various major streets within the City with emphasis on RJI segments Phase II.	$1,500,000.00	0	$1,500,000	140000	4	2	8	2	2	0	2	2	20	$24,612,000
14		Sanger	5th Street	Greenwood to Academy	2005	0.5	Reconstruction	$250,000	0	$250,000	9625	1	6	6	2	2	0	2	2	19	$24,862,000
15		County of Fresno	American Avenue	SR 99 to Temperance	2015	3.0	2L reconstruction	$2,250,000	0	$2,250,000	13597	1	6	6	2	2	0	2	2	19	$27,112,000
16		County of Fresno	Belmont/Shields	SR 33 to I-5	2020	21.0	2L reconstruct/realign	$14,500,000	0	$14,500,000	5026	1	6	6	2	2	0	2	2	19	$41,612,000
17		County of Fresno	Dickenson Avenue	SR 180 to Shaw	2020	5.0	2L reconstruction	$3,000,000	0	$3,000,000	5342	1	6	6	2	2	0	2	2	19	$44,612,000

	PID	Agency	Project Location	Project Limits	Deliv. Date	Dist.	Project Type	Total Cost Estimate	Local Share	Total Cost Less Local Share	Final Model ADT	Benefit / Cost Ratio	Ben. / Cost	AQ Benefits	Envir. Sensit.	Serves Major Employ.	Improved Access to Essential Services	Supports Other Modes of Transp.	Improves Safety	Total Score	Cumulative Cost
18		Sanger	Jensen Avenue	Bethel Ave to Academy Ave	2005	1.0	Reconstruction	$850,000	0	$850,000	12564	1	6	6	2	2	0	2	2	19	$45,462,000
19		County of Fresno	Jensen Avenue	SR 145 to Dickenson	2008	5.0	2L reconstruction	$2,500,000	0	$2,500,000	5854	1	6	6	2	2	0	2	2	19	$47,962,000
20		County of Fresno	Manning	Crawford to Hill	2010	2.0	2L reconstruction	$1,250,000	0	$1,250,000	8306	1	6	6	2	2	0	2	2	19	$49,212,000
21		County of Fresno	Mountain View	Elm to Cedar	2010	2.0	2L reconstruction	$1,250,000	0	$1,250,000	5479	1	6	6	2	2	0	2	2	19	$50,462,000
22		Caltrans	SR 145	McMullin Grade to Lincoln	2012	4.0	AC overlay and widen to 40'	$2,725,000	0	$2,725,000	5182	1	10	2	2	2	0	2	2	19	$53,187,000
23		Caltrans	SR 269	Kings County Line to SR 198	2005	12.7	Widen existing highway	$7,265,000	0	$7,265,000	16024	1	10	2	2	2	0	2	2	19	$60,452,000
24		Caltrans	SR 99	Merced St to Central Ave	2005	5.2	AC overlay, crack seat and widen shoulders	$17,272,000	0	$17,272,000	146063	2	10	2	2	2	0	1	1	19	$77,724,000
25		Caltrans	SR 99	Ventura to Madera County Line	2005	11.4	Rehabilitate roadway	$2,900,000	0	$2,900,000	174995	4	2	8	2	2	0	1	1	19	$80,624,000
26		County of Fresno	Auberry Road	SR 168 to Powerhouse Road	2010	2.8	2L reconstruction	$3,600,000	0	$3,600,000	3298	0	6	6	2	2	0	2	2	18	$84,224,000
27		County of Fresno	Belmont	1 mi. w/o Ohio to Lyon	2020	3.0	2L reconstruction	$700,000	0	$700,000	4685	1	6	6	1	1	0	2	2	17	$84,924,000
28		County of Fresno	Belmont	Newcomb to Fairfax	2020	3.0	2L reconstruction	$700,000	0	$700,000	3415	1	6	6	1	1	0	2	2	17	$85,624,000
29		County of Fresno	Fowler	Conejo to Dinuba	2015	5.0	2L reconstruction	$3,000,000	0	$3,000,000	8696	1	6	6	1	1	0	2	2	17	$88,624,000
30		County of Fresno	Fowler	Harlan to Conejo	2006	5.0	2L reconstruct/realign	$3,000,000	0	$3,000,000	6964	1	6	6	1	1	0	2	2	17	$91,624,000
31		County of Fresno	Golden State Blvd	SR 201 (Kingsburg) to North Avenue	2020	18.0	Rehabilitation/intersection improvements	$16,500,000	0	$16,500,000	19488	1	2	8	2	2	0	2	2	17	$108,124,000
32		Caltrans	SR 145	SPRR Br # 24-354 to Jct 180	2010	1.1	AC overlay	$894,000	0	$894,000	16751	1	2	8	2	2	0	2	2	17	$109,018,000
33		Caltrans	SR 180	Wahtoke Creek Bridge	2008	2.0	Bridge scour mitigation	$1,644,000	0	$1,644,000	8759	1	2	8	2	2	0	2	2	17	$110,662,000
34		County of Fresno	Cornelia Avenue	SR 180 to Belmont	2015	1.0	2L reconstruction	$1,800,000	0	$1,800,000	8447	0	6	6	1	1	0	2	2	16	$112,462,000
35		Caltrans	I-5	South of Panoche Interchange to north of California	2005	7.2	Rehab pavement, AC overlay, drainage improvements, upgrade MBGR	$21,158,000	0	$21,158,000	46971	1	2	8	2	2	0	1	1	16	$133,620,000
36		Caltrans	I-5	South of Panoche to Nees	2006	7.2	Capital preventative maintenance (CAPM)	$12,164,000	0	$12,164,000	46971	1	2	8	2	2	0	1	1	16	$145,784,000
37		Caltrans	SR 33	Jacalitos Creek Bridge	2010	0.8	Bridge replacement	$2,304,000	0	$2,304,000	4000	0	2	8	2	2	0	2	2	16	$148,088,000
38		County of Fresno	Roads Countywide	Countywide	Annual	20	Maintenance & rehab	$21,000,000	0	$21,000,000	28000	1	2	8	1	1	0	2	2	15	$169,088,000
							TOTAL:	**$169,118,000**	**$30,000**	**$169,088,000**											

Project Evaluation Criteria for Transit Projects

Points Applied		
1	***Is consistent with current plans and policies***	
	2	Yes, is consistent with the RTP and Short-Range Transit Plan.
	1	Yes, is consistent with either the RTP or Short-Range Transit Plan.
	0	No, is not consistent with either the RTP or the Short-Range Transit Plan.
		Implements an existing plan or policy.
2	***Operating costs are funded over time (Preservation of the System)***	
	2	Yes, funds are contained in an approved budget for project operations.
	0	No, funds are not contained in an approved budget for project operations.
		Insures that the project can be sustained over time.
3	***Provides Improved Access to Essential Services***	
	2	Directly serves an essential activity center or service.
	1	Indirectly serves an essential activity center or service.
	0	Does not directly or indirectly any Essential Activity Center or Service.
		Improves access to major services through an expanded transit system.
4	***Project will maintain established productivity standards***	
	3	Will Exceed Established Productivity Standards
	2	Yes, all productivity standards can be maintained.
	1	Two or more productivity standards can be maintained.
	0	Productivity standards cannot be maintained by the project.
		The project can be supported and operated over time.
5	***Project provides for or promotes intermodal connectivity***	
	2	Yes, the project connects more than three other modes of transportation.
	1	Yes, the project connects to two other modes of transportation.
	0	No, the project does not provide for enhanced intermodal connectivity.
		The project enhances the regional transportation system.
6	***Fares are sufficient to maintain State required minimums***	
	2	Yes.
	0	No.
		The project is supported through a combination of fares and subsidies consistent with State requirements.
7	***Project serves a transportation disadvantaged population***	
	2	A large transportation disadvantaged population center or community (population greater than 5,000) will be served by the Project.
	1	A transportation disadvantaged population center or community (with less than 5,000 population) will be served by the Project.
	0	The Project will serve a transportation disadvantages population center or community.
		Project provides essential services to the transit dependant population.
8	***Project enhances interagency service coordination***	
	2	Three transit agencies are participating in the project.

	1	Two transit agencies are participating in the project.
	0	Project does not involve more than one transit agency.
		Enhances regional transportation system connectivity and ability to reduce regional trips.
9	***Project reduces reliance on private automobiles***	
	2	The project involves new or enhanced commuter service.
	1	The project involves new or enhanced access to services (medical, government, other essential activity centers).
	0	The project does not involve new or enhanced commuter service or access to essential services.
		Enhances air quality and reduces peak automobile travel.
10	***Project will enhance part of an existing transit service***	
	2	The Project will enhance or extend an existing transit facility or service.
	0	The project is a stand alone project not connecting or enhancing an existing facility or service.
		Addresses continued system continuity.
11	***Project reduces vehicle and/or parking congestion***	
	2	The project involves new or enhanced express transit service along a congested (LOS E or F corridor).
	1	The project involves shuttle service for major events in congested areas such as in the city center.
	0	The Project will not reduce traffic congestion along a deficient corridor or in a city center.
		Reduces commuter or special event trips.

KEY TO RATINGS: [2] Very Positive; [1] Positive; [0] Not Positive or Not Applicable.

RTP Candidate Projects
FAX Transit Projects
(Ranked by Score)

Agency	Route	Project Limits	Project Description	Total Cost	Program
FAX	NA	Fresno-Clovis Metropolitan Area	Various Planning Projects/COFCG Staff/Annual Planning O & M Expenses and Special Projects	$1,550,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Various Planning Projects/FAX Staff/Annual Planning O & M Expenses and Special Projects	$2,143,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Preventative maintenance	$29,426,600	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Bus Simulator—Phase II	$100,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Contracted paratransit service	$13,134,500	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Capital Lease-Handy Ride Facility	$317,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Capital Lease – Vehicle Tire Lease	$787,400	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Non-revenue Vehicle Service Expansion/Replacement	$352,200	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Paratransit Vehicle Expansion/Replacement	$852,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Fixed Route Facility Equipment Purchase	$2,875,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Transit Enhancements	$400,000	FTA Section 5307
FAX	NA	Fresno-Clovis Metropolitan Area	Intermodal Transit Facility – Medical Center	$618,900	FTA Section 5309
FAX	NA	Fresno-Clovis Metropolitan Area	Purchase of 4 non-revenue vehicles	$150,000	FTA Section 5309
FAX	NA	Fresno-Clovis Metropolitan Area	Design and Construction of CNG Facility	$1,500,000	FTA Section 5309
FCRTA	Ops/Main./ Admin.	N/A	Operations/Maintenance/Administration of FCRTA	$4,408,600	FTA Section 5311
			TOTAL:	**$58,615,200**	

Exhibit 5-14 (continued)
RTP Candidate Projects
FAX Transit Projects
(Ranked by Score)

	PID	Agency	Project Name	Project Description	Area Affected	Cost	Criteria and Ranking 1 Consistent with Plans and Policies	2 Operating Costs are Funded	3 Improved Access to Services	4 Maintain Productivity Standards	5 Promotes Intermodal Connectivity	6 Fares will Maintain Req'd Minimums	7 Serves Disadvan. Pop.	8 Enhances Inter-Agency Coord.	9 Reduces Reliance on Autos	10 Enhances Existing Transit Service	11 Reduces Auto or Parking Congestion	Total Score
1	5	City of Fresno	**Transit Mall**	Redesign and consolidation of Downtown Fresno transfer facilities to include enhanced amenities including commercial development and multi-purpose community space (See Downtown Circulation Study).	Downtown Fresno	?	2	0	2	2	2	0	2	1	2	2	2	17
2			**Downtown Rail Trolley/Circulator system**	Fixed guide way circulator for Downtown Fresno. System to connect the Transit Mall, Intermodal Facility, New Exhibit Hall, and Stadium to Fulton Mall.	On Fulton Mall from Fresno St. to Kern St. Then on Kern St. to New Exhibit Hall	$10-20 Million per Mile	0	0	2	2	2	2	2	1	2	2	2	17
3	3	City of Fresno	**High Capacity Transit Corridor**	Studies currently underway will identify a future High Capacity Transit Corridor (HCTC) for Fresno (see MIS Project). The HCTC could be light rail, bus rapid transit, or any other high capacity transit system.	Corridors under consideration include Blackstone, Cedar, Shaw and Ventura	$10-50 Million per mile	0	0	2	2	2	2	2	0	2	2	2	16
4	4	City of Fresno	**Intermodal Facility**	The planned intermodal facility will link high-speed rail, the local HCTC, transit and park & ride services. The facility will include commercial retail and residential development.	Broadway and Tulare Northeast corner	$15 Million for Phase I	2	0	2	0	2	0	2	1	2	2	2	15
5			**Transit Transfer Centers (4)**	Transit Centers are designed to facilitate convenient transfers between multiple transit routes and multi-modal travel. The FAX LRP identified four such facilities that could include public space, art, restrooms, and FAX service support.	Northwest North East Southeast	$250,000 each	2	0	1	0	1	0	2	2	2	2	2	14
6		City of Fresno	**Park and Ride Facility**	Park and Ride to be located at the SE corner of Friant and Copper. This will be a multimodal hub for transit, multi-purpose trails, and vehicles	Friant/Copper	$750,000	1	2	1	0	2	0	1	0	2	0	2	11

	PID	Agency	Project Name	Project Description	Area Affected	Cost	Consistent with Plans and Policies	Operating Costs are Funded	Improved Access to Services	Maintain Productivity Standards	Promotes Intermodal Connectivity	Fares will Maintain Req'd Minimums	Serves Disadvan. Pop.	Enhances Inter-Agency Coord.	Reduces Reliance on Autos	Enhances Existing Transit Service	Reduces Auto or Parking Congestion	Total Score
7			**Increased Bus Fleet (400 to 500 buses)**	Based on a projected population of 1.3 million people in Fresno County for 2025, similar sized transit agencies and/or districts require up to 500 buses.	Regional Service	$150,000,000	2	0	1	0	0	0	0	0	0	2	0	5
8	8	City of Fresno	**Regional Trip Planning System**	System will provide individual automated trip planning services via phone, internet or kiosk locations. Multi-modal trips combining transit, automobile, bike and pedestrian travel can be coordinated through out the region.	On internet, at large employment centers, and via phone	$500	2	0	0	0	0	0	0	0	0	2	0	4
9			**Expansion of Clean Air Vanpool Program**	Expand the City of Fresno's Clean Air Express Vanpool program		$400,000 per year	2	0	0	0	0	0	0	0	0	2	0	4
10			**Expansion of On Street Information Sign System**	Place On Street Information signs at all major stop and station locations including large employer and trip generator sites.	Major Transit Stops and Stations	$1.5 Million	2	0	0	0	0	0	0	0	0	2	0	4
11			**Stop and Station Improvement**	Improve major stops with amenities similar to light rail stations. Amenities to include information/emergency phones, security cameras, level boarding capability, comfortable and secure waiting areas.	Major corridors and HCTC stations		2	0	0	0	0	0	0	0	0	2	0	4
12			**Bus Signal Preemption System**	Equip all transit buses with traffic signal preemption to improve service reliability		$500,000	1	0	0	0	0	0	0	0	0	2	0	3
13	2	City of Fresno	**Downtown Circulation Study**	Update Downtown Circulation Plan that will be used to improve access, circulation, and mobility issues within the Downtown area while reducing reliance on the automobile.	Downtown Fresno	$750,000	2	0	0	0	0	0	0	0	0	0	0	2
14	6	City of Fresno	**Major Investment Study**	Initiate Major Investment Study of one of the High Capacity Corridors currently being evaluated.	Blackstone, Cedar, Shaw, or Ventura/Kings Canyon	$1,500,000	2	0	0	0	0	0	0	0	0	0	0	2
15	7	City of Fresno	**Regional Farebox System**	A countywide farebox system allowing transit passengers to access all transit services using common farebox media.	On all transit vehicles.	$2,500,000	2	0	0	0	0	0	0	0	0	0	0	2
			Second Transit Operations and Maintenance Facility	To accommodate HCTC vehicles and increased bus fleet of 500 buses.	Along or near HCTC Corridor	$10-15 Million	2	0	0	0	0	0	0	0	0	0	0	2
				TOTAL FOR REGION:		$156,000,500												

FCRTA Transit RTP Candidate Projects

FCRTA's PROJECTED OPERATING EXPENDITURES FOR THE 2004 RTP

Sources: 2004 Regional Transportation Plan; 2004-2009 Short Range Transit Plan for the Rural Fresno County Area; and 2004-2005 Draft FCRTA Budget

		Year-1	Year-10	Year-25	25 Years
		2004-05	2013-2014	2028-2029	TOTALS
OPERATIONS					
REVENUES					
Farebox		$497,801	$649,517	$1,011,927	$18,149,458
TDA: LTF/STA		$3,294,200	$4,298,184	$6,696,430	$120,104,109
FTA Section 5311		$422,395	$551,130	$858,642	$15,400,211
Total Operating Revenues		$4,236,256	$5,527,353	$8,611,436	$154,450,777
EXPENDITURES					
Existing Service (Inflation Factors +3%)					
Operations		$2,085,682	$2,721,342	$4,239,762	$76,042,431
Maintenance		$931,142	$1,214,929	$1,892,820	$33,948,752
Administration		$354,879	$463,037	$721,396	$12,938,627
Total Operations		$3,371,703	$4,399,308	$6,853,978	$122,929,811
Operator Acquired Assets		$24,500	$31,967	$49,803	$893,252
Addition to Capital Reserves		$480,000	$626,291	$975,741	$17,500,447
Contingency		$338,193	$441,265	$687,477	$12,330,268
Total Operating Expenditures		$4,214,396	$5,498,831	$8,566,999	$153,653,778
Enhanced Service (existing+unmet=5%)		$0	$274,942	$428,350	$7,471,969
Expanded Services (underlined font)	250dyX10hrX$50hr	-	-	-	
Westside Transit Service Expansion	$125,000	$0	$646,240	$1,006,821	$15,090,302
Eastside Transit Service Expansion	$125,000	$0	$646,240	$1,006,821	$15,090,302
Escort Medical Transit	$125,000	$0	$1,615,601	$2,517,053	$37,725,754
Farm Labor Service Expansion	$125,000	$0	$1,615,601	$2,517,053	$37,725,754
Inter-County Transit Service	$125,000	$0	$646,240	$1,006,821	$15,090,302
CNG Fast-Fill Refueling Station	$500,000	$0	$0	$0	$1,082,432
Total Operating Expenditures		$0	$3,877,442	$6,040,928	$99,161,979
OPERATIONS REVENUES SUMMARY					
Farebox		$497,801	$965,121	$1,503,628	$26,028,773
TDA: LTF/STA		$3,294,200	$4,573,125	$7,124,780	$127,576,078
FTA Section 5311		$422,395	$551,130	$858,642	$15,400,211
FTA CMAQ / Measure C2		$0	$3,561,838	$5,549,227	$91,282,665
Total Operating Revenues Summary		$4,214,396	$9,651,214	$15,036,277	$260,287,726
OPERATION SUMMARY					
Existing Service (regular font)		$4,214,396	$5,498,831	$8,566,999	$153,653,778
Enhanced Services (italic font)		$0	$274,942	$428,350	$7,471,969
Expanded Services (underlined font)		$0	$3,877,442	$6,040,928	$99,161,979
Totals		$4,214,396	$9,651,214	$15,036,277	$260,287,726

Exhibit 15
FCRTA Transit RTP Candidate Projects (Continued)

FCRTA's PROJECTED CAPITOL EXPENDITURES FOR THE 2004 RTP

Sources: 2004 Regional Transportation Plan; 2004-2009 Short Range Transit Plan for the Rural Fresno County Area; and 2004-2005 Draft FCRTA Budget

		Year-1	Year-10	Year-25	25 Years
		2004-05	2013-2014	2028-2029	TOTALS
CAPITAL					
REVENUES					
TDA: LTF/STA		$43,500	$1,419,770	$1,929,557	$29,151,172
FTA Section 5311 & CMAQ		$0	$0	$2,212,169	$9,164,266
Other (Measure C-2)		$0	$0	$2,212,169	$9,164,266
Total Capital Revenues		$43,500	$1,419,770	$6,353,895	$47,479,705
CAPITAL SUMMARY		1	10	20	
Existing Service (regular font)		$43,500	$1,419,770	$1,929,557	$29,151,172
Enhanced Services (italic font)		$0	$0	$0	$0
Expanded Services (underlined font)		$0	$0	$4,424,338	$18,328,533
Totals		$43,500	$1,419,770	$6,353,895	$47,479,705
	cost per unit				
15 Passenger CNG Vans	$50,000	$0	$0	$0	$8,472,991
23 Passenger CNG Vans	$70,000	$0	$1,405,429	$1,910,067	$13,975,158
31 Passenger CNG Buses	$180,000	$0	$0	$0	$1,604,326
42 Passenger CNG Buses	$200,000	$0	$0	$0	$1,782,585
FuelMakers	$5,000	$0	$0	$0	$267,388
ITS Radio/Data/Safety Surveillance	$1,000	$0	$0	$0	$74,541
Bike Racks and Flip Seats	$0	$9,000	$0	$0	$9,000
Benches / Shelters and Signs	$0	$24,500	$0	$0	$24,500
Farebox	$3,500	$0	$0	$0	$647,848
Dispatch Terminal	$50,000	$0	$0	$0	$128,724
Computers and Related Equipment	$3,500	$0	$0	$0	$25,787
Office Equipment	$10,000	$10,000	$14,341	$19,490	$373,719
Total Capital Expenditures		$43,500	$1,419,770	$1,929,557	$29,151,172
Inflation Factors (+2%)		1.02	1.434111082	1.949047491	
Expanded Services (underlined font)					
Westside Transit Service Expansion	31 Passenger	$0	$0	$701,657	$2,734,239
Eastside Transit Service Expansion	31 Passenger	$0	$0	$701,657	$2,734,239
Escort Medical Transit	15 Passenger	$0	$0	$487,262	$1,903,979
Farm Labor Service Expansion	31 Passenger	$0	$0	$1,754,143	$6,835,599
Inter-County Transit Service	42 Passenger	$0	$0	$779,619	$3,038,044
CNG Fast-Fill Refueling Station	$500,000	$0	$0	$0	$1,082,432
Total Capital Expenditures		$0	$0	$4,424,338	$18,328,533

FCRTA Transit RTP Candidate Projects (Continued)

Total	Existing	Enhanced	Expanded		
Number of Units					
00-10/11-20/21-25=Total	00-10/11-20/21-25	00-10/11-20/21-25	00-10/11-20/21-25		
56/56/17=129	46/46/12	0/0/0	10/10/5	15 Passenger CNG Vans	129
52/52/26=130	52/52/26	0/0/0	0/0/0	23 Passenger CNG Vans	130
20/20/11=51	2/2/2	0/0/0	18/18/9	31 Passenger CNG Buses	51
6/4/4=14	2/2/2	0/0/0	4/4/2	42 Passenger CNG Buses	14
12/12/12=36	12/12/12	0/0/0	0/0/0	FuelMakers	36
71/0/0=71	0/0/0	0/0/0	71/0/0	ITS Radio/Data/Safety Surveillance	71
3/0/0=3	3/0/0	0/0/0	0/0/0	Bike Racks and Flip Seats	3
15/0/0=15	15/0/0	0/0/0	0/0/0	Benches / Shelters and Signs	15
71/74/0=145	0/0/0	71/74/0	0/0/0	Farebox	145
1/1/0=2	0/0/0	1/1/0	0/0/0	Dispatch Terminal	2
9/12/0=21	9/12/0	0/0/0	0/0/0	Computers and Related Equipment	21
10/10/5=25	10/10/5	0/0/0	0/0/0	Office Equipment	25
326/243/70=639	151/136/54	72/75/0	103/32/16	**Total Capital Expenditures**	**639**

Exhibit 5-16
Project Evaluation Criteria for Bike Projects

	Points Applied	
1	***Will be part of an existing trail or bicycle network***	
	2	The Project will enhance or extend an existing trail or bicycle facility.
	1	The project is a stand alone project not connecting or enhancing an existing facility.
		Addresses continued system continuity.
2	***Will provide for enhanced use by a variety of bicyclists and trail patrons***	
	2	Directly serves a hospital or major government, office or shopping center.
	1	Indirectly serves a hospital or major government, office or shopping center.
	0	Does not directly or indirectly serve a hospital or major government, office or shopping center.
		Improves the access to major services through an improved and expanded bicycle and/or trail system.
3	***Will accommodate both trail patrons/bicyclists and pedestrian users***	
	2	Both bicyclists and pedestrians will use the facility.
	1	The project will primarily benefit either bicyclists or pedestrians, but not both.
		The project has the ability to accommodate more than one form of alternative transportation.
4	***The project bridges an obstacle or provides a more direct route (reducing significant out-of-direction travel)***	
	2	Yes.
	0	No.
		The project reduces travel time and distance.
5	***Provides connectivity to other modes of travel***	
	2	Yes, the project connects more than three other modes of transportation.
	1	Yes, the project connects to two other modes of transportation.
	0	No, the project does not provide for enhanced intermodal connectivity.
		Enhances the regional transportation system connectivity and ability to reduce trips.
6	***Is consistent with current plans and policies***	
	2	Yes.
	0	No.
		Implements an existing plan or policy.
7	***Funding is available for a local match***	
	2	A local match greater than 25% of the project cost is available for the project.
	1	A local match of between 5% and 25% of the project cost is available for the project.
	0	A local match of at least 5% is not available for the project.
		Insures that the project can be funded and sustained over time.
8	***Improves trail/bicycle user safety***	
	2	The project includes lighting, drainage, improved visibility, hazard elimination, etc. that will enhance trail/bike safety.
	0	The project does not include ancillary improvements that will enhance safety.
		Improved trail/bicycle user safety.

KEY TO RATINGS: [2] Very Positive; [1] Positive; [0] Not Positive or Not Applicable.

Bicycle RTP Candidate Projects

Agency	Route	Project Limits	Description	Total Cost	Program
Coalinga	Monterey	Washington to Cambridge	Construct paved shoulders for bikes	$102,202	CMAQ
Fresno	Various Locations	Fresno-Clovis Metropolitan Area	Construct paved bikeways on various eligible routes	$1,296,600	CMAQ
Fresno	Various Routes	City of Fresno	Bicycle Facilities including lanes, racks, and traffic control devices to assist bicyclists	$903,600	CMAQ
Fresno County	Auberry Road	Copper Avenue to Millerton Road	Construct 4 foot wide bike lane	$408,500	CMAQ
San Joaquin River Conservancy	Friant Road	Community of Friant	Construct a bicycle/pedestrian rest area with park and ride lot	$380,150	CMAQ
			TOTAL:	**$3,091,052**	

									Criteria and Ranking									
									1	2	3	4	5	6	7	8		
	PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Total Cost Estimate	Part of Existing Facility	Provide Enhanced Usage	Accom. Trail and Bike Patrons	Reduces Out of Direction Travel	Provides Connect. To Other Modes	Consistent with Plans and Policies	Local Match is Available	Improves Trail or Bike User Safety	Total Score	Cumulative Total
1	10	City of Fresno	Copper Trail	Willow to Friant	2009	2	Extension to multi-use trail along North side	$800,000.00	1	2	2	0	2	2	1	2	12	$800,000.00
2	53	County of Fresno	Golden State Corridor Trail	Fresno to Kingsburg		19	Class I Bike/Pedestrian Facility	$6,000,000	1	2	2	0	1	2	2	2	12	$6,800,000.00
3	50	County of Fresno	McKenzie Trail	(County portions)	2005	0.4	Rehabilitate class I trail	$10,000	2	2	2	0	0	2	2	2	12	$6,810,000.00
4	15	City of Fresno	McKenzie Trail	Clovis to Willow	2006	1.5	Reconstruct trail	$320,000.00	2	2	2	0	1	2	1	2	12	$7,130,000.00
5	52	County of Fresno	SJ River Trail	SJ River Gorge to Italian Bar Road		15	Hiking Trail	$2,000,000	2	2	1	0	0	2	2	2	11	$9,130,000.00
6	48	County of Fresno	Auberry Road	MP 2.3 to MP 4.2	2005	1.9	class II bike lanes	$470,000	2	1	1	0	0	2	2	2	10	$9,600,000.00
7	5	City of Fresno	Cedar	Holland to 1/2 Block South of Holland	2005	0.1	Install class II bike lane West side only	$2,500.00	2	2	1	0	0	2	1	2	10	$9,602,500.00
8	4	City of Fresno	Cedar	Los Altos to Sierra	2005	0.8	Install class II bike lane, West side only. East side exists.	$10,000.00	2	2	1	0	0	2	1	2	10	$9,612,500.00
9	6	City of Fresno	Cedar	Shields to Fountain Way	2005	0.2	Install class II bike lane, East side only. West side exists.	$2,500.00	2	2	1	0	0	2	1	2	10	$9,615,000.00
10	9	City of Fresno	Church	Elm to M. L. King	2005	0.5	Install class II bike lane, North side only	$14,848.00	2	2	1	0	0	2	1	2	10	$9,629,848.00
11	8	City of Fresno	Church	Maple to Sierra Vista	2005	0.25	Install class II bike lane south side. North side exists	$9,653.00	2	2	1	0	0	2	1	2	10	$9,639,501.00

	PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Total Cost Estimate	Part of Existing Facility	Provide Enhanced Usage	Accom. Trail and Bike Patrons	Reduces Out of Direction Travel	Provides Connect. To Other Modes	Consistent with Plans and Policies	Local Match is Available	Improves Trail or Bike User Safety	Total Score	Cumulative Total
12	7	City of Fresno	Church	Willow to Chestnut	2005	0.5	Install class II bike lane, North side only	$13,674.00	2	2	1	0	0	2	1	2	10	$9,653,175.00
13	37	Clovis	Enterprise Canal Trail	Adjacent to Alluvial Drain Basin	2005	0.3	Class I Bike/Pedestrian Facility	$174,000	2	1	2	0	0	2	1	2	10	$9,827,175.00
14	13	City of Fresno	First	Dakota to Ashlan	2007	0.5	Install class II bike lane in both directions	$279,782.00	2	2	1	0	0	2	1	2	10	$10,106,957.00
15	14	City of Fresno	First	Shaw to Barstow	2005	0.5	Install class II bike lane on West side. East side exists	$8,256.00	2	2	1	0	0	2	1	2	10	$10,115,213.00
16	49	County of Fresno	Kearney Blvd	Fresno CL to Kearney Park	2005	4.5	reconstruct class I trail	$130,000	2	0	2	0	0	2	2	2	10	$10,245,213.00
17	17	City of Fresno	Palm	Browning to Bullard	2005	0.25	Install class II bike lane in both directions	$13,140.00	2	2	1	0	0	2	1	2	10	$10,258,353.00
18	20	City of Fresno	Palm	Olive to McKinley	2005	0.5	Install class II bike lane in both directions	$23,322.00	2	2	1	0	0	2	1	2	10	$10,281,675.00
19	43	Clovis	Peach	Shepherd to Clovis Old Town Trail	2006	1.3	Class II Bike Facility Striping	$80,000	2	2	1	0	0	2	1	2	10	$10,361,675.00
20	44	Clovis	SE Water Feature Trail	Shaw to Ashcroft	2015	0.8	Class I Bike/Pedestrian Facility	$937,500	1	2	2	0	0	2	1	2	10	$11,299,175.00
21	21	City of Fresno	Shields	Channing to West	2008	0.15	Install class II bike lane North side. South side exists	$2,000.00	2	2	1	0	0	2	1	2	10	$11,301,175.00
22	22	City of Fresno	Shields	Fruit to Thorne	2008	0.25	Install class II bike lane in both directions	$5,000.00	2	2	1	0	0	2	1	2	10	$11,306,175.00
23	23	City of Fresno	Shields	Palm to Wilson	2008	0.15	Install class II bike lane in both directions	$3,000.00	2	2	1	0	0	2	1	2	10	$11,309,175.00
24	30	City of Fresno	West	Princeton to shields	2008	0.25	Install parking bays for bike lane, West side (East side exists)	$62,531.00	2	2	1	0	0	2	1	2	10	$11,371,706.00
25	29	City of Fresno	West	Yale to Clinton	2008	0.2	Install parking bays for bike lane, West side (East side exists)	$28,620.00									10	$11,400,326.00
26	31	City of Fresno	Willow Trail	Shepherd to Copper	2008	2	Extension of multi-use trail	$750,000.00									11	$12,150,326.00
27	32	Clovis	Alluvial	Clovis to Fowler	2010	1	Class II Bike Facility Striping	$45,000									9	$12,195,326.00
28	33	Clovis	Alluvial	Willow to Peach	2005	0.5	Class II Bike Facility Striping	$62,000	2	1	1	0	0	2	1	2	9	$12,257,326.00
29	3	City of Fresno	Ashlan	Blackstone to Fresno	2005	0.5	Install class II bike lane in both directions	$25,000.00	1	2	1	0	0	2	1	2	9	$12,282,326.00
30	1	City of Fresno	Ashlan	Fresno to Angus	2005	0.25	Install class II bike lane in both directions	$22,875.00	1	2	1	0	0	2	1	2	9	$12,305,201.00
31	2	City of Fresno	Ashlan	Maroa to Blackstone	2005	0.5	Install class II bike lane in both directions	$24,957.00	1	2	1	0	0	2	1	2	9	$12,330,158.00
32	34	Clovis	Dog Creek	Enterprise Canal to Gould Canal	2010	2.5	Class I Bike/Pedestrian Facility	$3,400,000	1	1	2	0	0	2	1	2	9	$15,730,158.00
33	35	Clovis	Dry Creek Trail	Bullard to Willow	2006	1	Class I Bike/Pedestrian Facility	$250,000	1	1	2	0	0	2	1	2	9	$15,980,158.00
34	38	Clovis	Enterprise Canal Trail	Highland to Bullard	2008	1	Class I Bike/Pedestrian Facility	$1,250,000	1	1	2	0	0	2	1	2	9	$17,230,158.00
35	36	Clovis	Enterprise Canal Trail	Temperance to Herndon	2007	1.5	Class I Bike/Pedestrian Facility	$800,000	1	1	2	0	0	2	1	2	9	$18,030,158.00
36	11	City of Fresno	Fresno	California to C st.	2008	0.9	Install class II bike lane in both directions	$31,000.00	1	2	1	0	0	2	1	2	9	$18,061,158.00
37	12	City of Fresno	Friant	Copper	2009	0.1	Construct trail underpass to Eaton trail	$1,100,000.00	1	0	2	0	2	2	0	2	9	$19,161,158.00
38	40	Clovis	Gould Canal	Basin 1E to Temperance	2007	1.5	Class I Bike/Pedestrian Facility	$800,000	1	1	2	0	0	2	1	2	9	$19,961,158.00
39	39	Clovis	Gould Canal	Highland to Locan	2015	1.5	Class I Bike/Pedestrian Facility	$1,200,000	1	1	2	0	0	2	1	2	9	$21,161,158.00
40	41	Clovis	Jefferson Canal Trail	Enterprise Canal to Locan	2008	1.5	Class I Bike/Pedestrian Facility	$2,100,000	1	1	2	0	0	2	1	2	9	$23,261,158.00

	PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Total Cost Estimate	Part of Existing Facility	Provide Enhanced Usage	Accom. Trail and Bike Patrons	Reduces Out of Direction Travel	Provides Connect. To Other Modes	Consistent with Plans and Policies	Local Match is Available	Improves Trail or Bike User Safety	Total Score	Cumulative Total
41	51	County of Fresno	Millerton Road	MSRA entrance to Sky Harbour	2005	2.1	Class II bike lanes	$575,000	1	1	1	0	0	2	2	2	9	$23,836,158.00
42	42	Clovis	Minnewawa	Nees to Alluvial	2005	0.5	Class II Bike Facility Striping	$38,000	1	2	1	0	0	2	1	2	9	$23,874,158.00
43	16	City of Fresno	Palm	H st to Olive	2005	0.5	Install class II bike lane in both directions	$33,631.00	1	2	1	0	0	2	1	2	9	$23,907,789.00
44	18	City of Fresno	Palm	McKinley to Clinton	2005	0.5	Install class II bike lane in both directions	$18,838.00	1	2	1	0	0	2	1	2	9	$23,926,627.00
45	19	City of Fresno	Palm	Shields to Dakota	2005	0.5	Install class II bike lane in both directions	$16,886.00	1	2	1	0	0	2	1	2	9	$23,943,513.00
46	45	Clovis	Sierra	Armstrong to Temperance	2005	0.5	Class II Bike Facility Striping	$30,000	2	1	1	0	0	2	1	2	9	$23,973,513.00
47	26	City of Fresno	Sierra	Fresno to Palm	2008	1.5	Install class II bike lane in both directions	$10,000.00	1	2	1	0	0	2	1	2	9	$23,983,513.00
48	46	Clovis	Teague	Willow to Peach	2006	0.5	Class II Bike Facility Striping	$70,000	1	2	1	0	0	2	1	2	9	$24,053,513.00
49	47	Clovis	Third	Clovis to Sunnyside	2005	0.5	Class II Bike Facility Striping	$30,000	1	2	1	0	0	2	1	2	9	$24,083,513.00
50	28	City of Fresno	Ventura	H st. to B st.	2008	0.5	Install class II bike lane in both directions	$10,000.00	1	2	1	0	0	2	1	2	9	$24,093,513.00
51	25	City of Fresno	Sierra	First to Fresno at Callisch	2008	0.1	Open barrier for bike traffic only	$4,000.00	1	1	1	0	0	2	1	2	8	$24,097,513.00
52	27	City of Fresno	Sierra	Palm to Marks	2008	2	Designate as bike route (50 % County)	$7,000.00	1	1	1	0	0	2	1	2	8	$24,104,513.00
	24	City of Fresno	Sierra	Willow to Cedar	2008	1.3	Designate as bike route	$2,000.00	1	1	1	0	0	2	1	2	8	$24,106,513.00
							TOTAL:	**$24,106,513**										
							TOTAL FROM ABOVE:	**$3,091,052**										
							TOTAL FOR ALL PROJECTS:	**$27,197,565**										

Project Evaluation Criteria for Pedestrian Projects

	Points Applied	
1	***Will be part of a pedestrian network***	
	2	The Project will enhance or extend an existing pedestrian facility.
	1	The project is a stand alone project not connecting or enhancing an existing facility.
		Addresses continued system continuity.
2	***Will provide for enhanced use by a variety of pedestrians***	
	2	Project connects to two of the following: a recreational, shopping, employment, education, or intermodal facility/center.
	1	Project connects to one of the following: a recreational, shopping, employment, education, or intermodal facility/center.
	0	Project provides access within or between residential areas.
		Reduces regional trips.
3	***The project bridges an obstacle or provides a more direct route (reducing significant out-of-direction travel)***	
	2	Yes.
	0	No.
		The project reduces travel time and distance.
4	***Provides connectivity to other modes of travel***	
	2	Yes.
	0	No.
		Enhances the regional transportation system connectivity and ability to reduce trips.
5	***Is consistent with current plans and policies***	
	2	Yes.
	0	No.
		Implements an existing plan or policy.
6	***Funding is available for a local match***	
	2	A local match greater than 25% of the project cost is available for the project.
	1	A local match less than 25% of the project cost is available for the project.
	0	A local match is not available for the project.
		Insures that the project can be funded and sustained over time.
7	***Improves Pedestrian Safety***	
	2	The project includes lighting, drainage, improved visibility, hazard elimination, etc. that will enhance pedestrian safety.
	0	The project does not include ancillary improvements that will enhance safety.
		Improved pedestrian safety.

KEY TO RATINGS: [2] Very Positive; [1] Positive; [0] Not Positive or Not Applicable.

Pedestrian RTP Candidate Projects

Agency	Route	Project Limits	Description	Total Cost	Program
Fowler	Various Routes	City of Fowler	Pedestrian Facilities	$92,800	CMAQ
Fresno	Various Routes	City of Fresno	Construction of new trails to serve Fresno/Clovis Metropolitan Trail System	$451,800	CMAQ
Fresno	Various Routes	City of Fresno	Pedestrian facilities to include sidewalks and signal upgrades	$647,400	CMAQ
Mendota	2nd Street/5th Street	At railroad tracks	Construction of pedestrian and bicycle crossing across railroad tracks	$445,700	CMAQ
Mendota	Various Routes	City of Mendota	Pedestrian Facilities	$160,700	CMAQ
Orange Cove	Railroad Right-of-Way	From Anchor to Hills Valley Road	Purchase Abandoned AT and SF Railroad ROW from Anchor to Hills Valley Road for Construction of Future Pedestrian/Bicycle Trail	$243,300	CMAQ
Parlier	Various Routes	City of Parlier	Pedestrian Facilities	$122,900	CMAQ
Reedley	Reedley Rail Trail	Manning Avenue to kings River	Acquire ROW/Construct Bike/Pedestrian Trail Adjacent to UPRR Tracks	$182,450	TEA
Fresno	Various Routes	City of Fresno	Construction of grade crossing along pedestrian/bike trails	$734,200	CMAQ
			TOTAL:	**$3,081,250**	

								Criteria and Ranking								
								1	2	3	4	5	6	7		
PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Total Cost Estimate	Part of Existing Facility	Provide Enhanced Usage	Reduces Out of Direction Travel	Provides Connect. To Other Modes	Consistent with Plans and Policies	Local Match is Available	Improves Pedestrian Safety	Total Score	Cumulativ Total
7	City of Fresno	Maple	Clinton to Shields	2010	0.7	Construct curb, gutter & sidewalk	$175,000.00	2	1	0	2	2	0	2	9	$175,000
1	City of Fresno	Blackstone Avenue	N/O Shaw West Side	2010	0.1	Sidewalk improvements	$20,000	2	2	0	2	2	0	0	8	$195,000
1	City of Fresno	Blackstone Avenue	Shields to Dayton West Side	2010	0.2	Sidewalk improvements	$35,000	2	2	0	2	2	0	0	8	$230,000
5	City of Fresno	Clovis	California to Kings Canyon	2009	1	Construct curb, gutter & sidewalk	$1,000,000.00	2	2	0	2	2	0	0	8	$1,230,000
6	City of Fresno	Fresno	Herndon to Sierra	2008	0.25	Construct curb, gutter & sidewalk	$250,000.00	2	2	0	2	2	0	0	8	$1,480,000
1	City of Fresno	Kings Canyon	Chestnut to Peach South side	2008	0.1	Sidewalk improvements	$12,000	2	2	0	2	2	0	0	8	$1,492,000
2	City of Fresno	Barstow	Palm to Maroa	2015	0.1	Construct curb, gutter & sidewalk	$250,000.00	2	1	0	2	2	0	0	7	$1,742,000
1	County of Fresno	Barstow Avenue	Fruit to Gibson Elementary	2006	0.3	School sidewalk	$65,000	2	1	0	2	2	0	0	7	$1,807,000
3	City of Fresno	Chestnut	North to California	2012	1.7	Construct curb, gutter & sidewalk	$1,200,000.00	2	1	0	2	2	0	0	7	$3,007,000
4	City of Fresno	Clovis	Jensen to California	2008	1	Construct curb, gutter & sidewalk	$1,000,000.00	2	1	0	2	2	0	0	7	$4,007,000
			TOTAL:				**$4,007,000**									
			TOTAL FROM ABOVE:				**$3,081,250**									
			TOTAL FOR ALL PROJECTS:				**$7,088,250**									

Other RTP Candidate Projects

PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Cost Estimate	Cost Less Local Share
	FARRC	BNSF and UP Rail lines	North and Herndon Avenues			Rail Consolidation	$300,000,000	
	Caltrans	NA	Mendota Maintenance Station	2009	NA	Construct maintenance station	$4,395,000	$4,395,000
	Caltrans	SR 168	McKinley to Shaw		2.0	Construct median barrier	$1,000,000	$1,000,000
	Caltrans	SR 168	Various locations	2009	VAR	Install weather stations	$5,706,000	$5,706,000
	Caltrans	SR 168	West of Cressman Rd to west of Dogwood Mtn Rd	2008	1.0	Construct chain control area and reconstruct weigh station	$1,444,000	$1,444,000
	Caltrans	SR 180	I-5 to SR 33	2025	22.5	Route adoption study for a new roadway alignment	$94,000,000	$94,000,000
	Caltrans	SR 180	SR 168 to Clovis Ave	2009	2.8	Highway planting mitigation	$3,772,000	$3,772,000
	Caltrans	SR 180	Hughes/West Diagonal to east of SR 99 and on SR 99	2008	1.2	Highway planting	$1,800,000	$1,800,000
	Caltrans	SR 180	N99/W180 Connector UC Br to Jct 180S/168S	2005	3.7	Install median barrier	$1,338,000	$1,338,000
	Caltrans	SR 269	Near Huron - Gale to SR 198	2025	5.2	Construct permanent barrier	$4,171,000	$4,171,000
	Caltrans	SR 41	North Ave to SJ River	2007	13.3	Fiber optic system	$3,632,000	$3,632,000
	Caltrans	SR 41	Friant Rd to south of Perrin Rd	2006	0.9	Construct soundwall	$1,693,000	$1,693,000
	Caltrans	SR 41	South of Bullard to north of Herndon	2010	1.4	Highway planting restoration	$1,741,000	$1,741,000
	Caltrans	SR 41	Broadway to Princeton and on SR 180, Belmont to	2008	3.7	Highway planting restoration	$1,848,000	$1,848,000
	Caltrans	SR 99	Cedar to Ventura and Clinton to San Joaquin River	2007	14.7	Fiber optic system	$2,598,000	$2,598,000
	Caltrans	SR 99	Herndon Canal Br to the San Joaquin River Br	2009	3.1	New highway planting	$2,796,000	$2,796,000
	Caltrans	SR 99	Near the Merced Ave UC in Fowler	2006	0.8	Construct soundwalls	$1,000,000	$1,000,000

PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Cost Estimate	Cost Less Local Share
	Caltrans	SR 99	El Dorado to Kerman Branch UP and on SR 180, SR 99 to North Fresno UP	2008	1.0	Highway planting and restoration	$2,846,000	$2,846,000
	Caltrans	SR 99	Various locations	2005	VAR	Establish existing planting	$524,000	$524,000
	Caltrans	SR 99	South of Jensen to south of Ventura	2005	2.2	Replacement planting	$120,000	$120,000
	City of Fresno	Friant	Copper	2009	0.1	Construct park and ride lot	$300,000.00	$300,000.00
	City of Fresno	Jensen	Cedar to Clovis	2006	5	Construction of Median Islands and landscaping	$2,500,000.00	$2,500,000
	Clovis	Alluvial	Minnewawa to Dewitt	2020	0.3	Fiber Optic Conduit	$38,750	$38,750
	Clovis	Alluvial	Sunnyside to Armstrong	2020	0.5	Fiber Optic Conduit	$139,920	$139,920
	Clovis	Alluvial	Willow to Clovis Old Town Trail	2020	0.7	Fiber Optic Conduit	$108,500	$108,500
	Clovis	Armstrong	Gettysburg to Ashlan	2025	0.5	Fiber Optic Conduit	$77,500	$77,500
	Clovis	Armstrong	Herndon to Sierra	2008	0.5	Fiber Optic Conduit	$13,250	$13,250
	Clovis	Armstrong	Shaw to Gettysburg	2010	0.5	Fiber Optic Conduit	$17,490	$17,490
	Clovis	Ashlan	Fowler to McCall	2015	4.0	Fiber Optic Conduit	$559,680	$559,680
	Clovis	Barstow	Peach to Sunnyside	2014	1.5	Fiber Optic Conduit	$139,920	$139,920
	Clovis	Bullard	Fowler to Leonard	2010	2.5	Fiber Optic Conduit	$349,800	$349,800
	Clovis	Bullard	Willow to Minnewawa	2012	1.0	Fiber Optic Conduit	$155,000	$155,000
	Clovis	Clovis	Gettysburg to Ashlan	2020	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Coventry	Herndon to Sierra	2010	0.5	Fiber Optic Conduit	$37,100	$37,100
	Clovis	DeWolf	Bullard to Barstow	2010	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	DeWolf	Shepherd to Nees	2008	1.0	Fiber Optic Conduit	$139,910	$139,910
	Clovis	Fowler	Nees to Tollhouse	2025	2.0	Fiber Optic Conduit	$192,920	$192,920
	Clovis	Gettysburg	Clovis to Sierra Vista	2016	0.5	Fiber Optic Conduit	$77,500	$77,500
	Clovis	Gettysburg	Willow to Minnewawa	2015	1.0	Fiber Optic Conduit	$155,000	$155,000
	Clovis	Herndon	Fowler to Logan	2010	1.5	Fiber Optic Conduit	$175,960	$175,960
	Clovis	Herndon	Willow to Clovis	2009	1.0	Fiber Optic Conduit	$166,420	$166,420
	Clovis	Leonard	Bullard to Barstow	2015	0.5	Fiber Optic Conduit	$139,920	$139,920

PID	Agency	Project Location	Project Limits	Complete Date	Dist	Project Type	Cost Estimate	Cost Less Local Share
	Clovis	Leonard	Gettysburg to Ashlan	2010	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Locan	Barstow to Shaw	2005	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Locan	Shepherd to Teague	2008	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	McCall	Shaw to Ashlan	2018	1.0	Fiber Optic Conduit	$139,920	$139,920
	Clovis	Minnewawa	Bullard to Barstow	2010	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Minnewawa	Shepherd to Teague	2005	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Nees	Armstrong to Enterprise Canal	2018	0.4	Fiber Optic Conduit	$62,000	$62,000
	Clovis	Nees	DeWolf to HWY 168	2008	1.5	Fiber Optic Conduit	$16,960	$16,960
	Clovis	Nees	Peach to Minnewawa	2008	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Peach	Shepherd to Sierra	2008	2.5	Fiber Optic Conduit	$185,765	$185,765
	Clovis	Pedestrian Trail	Herndon to Clovis	2008	0.5	Fiber Optic Conduit	$151,050	$151,050
	Clovis	Shaw	Temperance to McCall	2015	3.0	Fiber Optic Conduit	$419,760	$419,760
	Clovis	Shaw	Fwy 168 to Clovis	2006	1.7	Fiber Optic Interconnect Upgrade	$500,000	$500,000
	Clovis	Shepherd	Willow to HWY 168	2008	6.0	Fiber Optic Conduit	$769,560	$769,560
	Clovis	Sunnyside	El Paso to Alluvial	2020	0.3	Fiber Optic	$38,750	$38,750
	Clovis	Teague	Peach to Clovis	2005	1.0	Fiber Optic Conduit	$139,920	$139,920
	Clovis	Temperance	Bullard to Wrenwood	2025	0.3	Fiber Optic Conduit	$38,750	$38,750
	Clovis	Temperance	Gettysburg to Ashlan	2008	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Temperance	Herndon to Shaw	2005	2.0	Fiber Optic Conduit	$650,000	$650,000
	Clovis	Temperance	Ashlan to Shaw	2005	1.0	Fiber Optic Conduit	$330,000	$330,000
	Clovis	Temperance	Nees to Shaw	2005	3.0	Fiber Optic Conduit	$419,760	$419,760
	Clovis	Tollhouse	Fowler to Armstrong	2010	0.5	Fiber Optic Conduit	$15,900	$15,900
	Clovis	Villa	Herndon to Sierra	2020	0.5	Fiber Optic Conduit	$69,960	$69,960
	Clovis	Willow	Shepherd to Herndon	2008	2.0	Fiber Optic Conduit	$314,820	$314,820
	Clovis	Willow	Along Basin CL	2006	0.2	Right-of-Way Frontage Landscaping	$150,000	$97,500
						TOTALS:	**$446,951,055**	**$146,898,555**

Appendix E
Measure C Projects

MEASURE "C" EXTENSION EXPENDITURE PLAN

REGIONAL TRANSPORTATION FUNDING PROGRAM - URBAN TIER 1

URBAN AREA PROJECTS ASSUMING ALLOCATION OF 50% OF REGIONAL TRANSPORTATION FUNDING PROGRAM FUNDS

(The Tier 1 projects are in a generalized priority order. The funding order would be determined by Fresno COG during preparation of the biennial Expenditure Plan Update and could be affected by project cost benefit, project readiness, funding availability, etc.)

Project Identifier	Project Name	Project Limits	Project Description	Uninflated Costs	Inflated Costs *1	Cumulative Inflated Costs
Tier 1 Projects						
A	SR 180 East	Clovis to Temperance	New 4 Lane Freeway within 6 Lane Right of Way	$ 33,479,701	$ 63,169,246	$ 63,169,246
B	SR 180 West	Brawley to Hughes/ West	Funding Shortfall	$ 6,995,758	$ 13,199,544	$ 76,368,790
C	SR 41/SR 168/SR 180	Added Capacity for Safe Connection Between State Routes	New Braided Ramps	$ 29,981,821	$ 56,569,474	$ 132,938,265
D	Willow Avenue	Barstow to Copper	Complete to 6 Lane Divided//retrofit bike paths	$ 13,991,517	$ 26,399,088	$ 159,337,353
E	Temperance Avenue	Bullard to Shepherd	Widen to 4 Lane Divided	$ 5,996,364	$ 11,313,895	$ 170,651,247
F	Ventura Blvd.	SR 41 to SR 99	Widen to 4 Lane Divided	$ 5,000,000	$ 9,428,246	$ 180,079,493
G	SR 99	Monterey Avenue	Bridge improvement/Improved acess to downtown from West Fresno	$ 1,000,000	$ 1,885,649	$ 181,965,142
H	California Avenue	Ventura to West	Widen to 4 Lane Divided	$ 7,995,152	$ 15,085,193	$ 197,050,335
I	Peach Avenue	SR 180 to Jensen Avenue	Widen to 4 Lane Divided	$ 24,984,851	$ 47,141,229	$ 244,191,564
J	SR 41	SB Aux. Lane, Tulare to "O"	Widen/Aux. Lanes and Improve On & Off Ramps	$ 3,000,000	$ 5,656,947	$ 249,848,511
K	Herndon Avenue	SR 99 to DeWolf	Complete to 6 Lane Divided/retrofit bike paths	$ 30,000,000	$ 56,569,474	$ 306,417,986
L	Shaw	Sunnyside - McCall	Complete to 6 Lane divided traffic signal upgrades, grade crossing	$ 31,580,852	$ 59,586,513	$ 366,004,499
M	SR 99	North & Cedar Avenue	Improve Interchange	$ 24,984,851	$ 47,141,229	$ 413,145,727
N	Veteran's Boulevard	Herndon to Grantland	Connection and grade separation	$ 60,000,000	$ 113,138,949	$ 526,284,676
			Urban Tier 1 Total		**$ 526,284,676**	

*1 Original project costs were estimated by Local Agencies, and were in 2004 Dollars. A 5% annual inflation was applied through 2017.

MEASURE "C" EXTENSION EXPENDITURE PLAN

REGIONAL TRANSPORTATION FUNDING PROGRAM - RURAL TIER 1

RURAL AREA PROJECTS ASSUMING ALLOCATION OF 50% OF REGIONAL TRANSPORTATION FUNDING PROGRAM FUNDS

(The Tier 1 projects are in a generalized priority order. The funding order would be determined by Fresno COG during preparation of the biennial Expenditure Plan Update and could be affected by project cost benefit, project readiness, funding availability, etc.)

Project Identifier	Project Name	Project Limits	Project Description	Uninflated Costs	Inflated Costs *1	Cumulative Inflated Costs
Tier 1 Projects						
A	SR 180 West	Yuba Ave. to James Ave.	Passing lanes	$ 9,993,940	$ 18,856,491	$ 18,856,49
B	SR 180 East	Temperance to Academy	Widen to 4 Lane Divided Expressway	$ 14,491,214	$ 27,341,913	$ 46,198,40
C	SR 180 East	Academy to Trimmer Springs	Widen to 2 Lane Expressway on 4 Lane Right of Way	$ 38,976,368	$ 73,540,317	$ 119,738,72
D	SR 180 East	Trimmer Springs to Frankwood	Widen to 2 Lane Expressway on 4 Lane Right of Way	$ 42,674,126	$ 80,517,218	$ 200,255,93
E	Friant Road	Copper to Millerton	Widen to 4 Lane Divided	$ 16,490,002	$ 31,113,211	$ 231,369,15
F	Golden State Boulevard	American to Tulare County Line	Corridor Improvements	$ 34,978,792	$ 65,997,720	$ 297,366,87
G	SR 269	Bridge located between SR 198 & Huron	New Bridge & Channel to Address Seasonal Road Closures Due to Flooding	$ 16,989,699	$ 32,056,035	$ 329,422,90
H	SR 180 West	Extend to Interstate 5 (I-5)	As a 2 Lane Undivided	$ 39,975,762	$ 75,425,966	$ 404,848,87
I	Mountain View Avenue	Bethel to Tulare County Line	Widen to 4 Lane Divided	$ 5,496,667	$ 10,371,070	$ 415,219,94
J	Mendocino Avenue	Manning to Industrial Park	Widen to 4 lane Divided	$ 1,998,788	$ 3,771,298	$ 418,991,24
K	SR 99	American Avenue	Interchange Improvements	$ 24,984,851	$ 47,141,229	$ 466,132,46
L	I-5	At SR 198	Construct Interchange Improvements	$ 7,995,152	$ 15,085,193	$ 481,217,66
			Rural Tier 1 Total		**$ 481,217,662**	

*1 Original project costs were estimated by Local Agencies, and were in 2004 Dollars. A 5% annual inflation was applied through 2017.

MEASURE "C" EXTENSION EXPENDITURE PLAN

REGIONAL TRANSPORTATION FUNDING PROGRAM - URBAN TIER 2

URBAN AREA PROJECTS ASSUMING ALLOCATION OF 50% OF REGIONAL TRANSPORTATION FUNDING PROGRAM FUNDS

(In the event all of the Tier 1 projects are fully funded and there are remaining Measure "C" funds, those remaining funds would be used for Tier 2 projects. The Tier 2 projects are not listed in any priority order and the funding order would be at the discretion of Fresno COG and the Fresno County Transportation Authority.)

Project Identifier	Project Name	Project Limits	Project Description	Uninflated Costs	Inflated Costs *1	Cumulative Inflated Costs
Tier 2 Projects						
AA	SR 99	Stanislaus & Tuolumne (Dntn Access)	Improve On & Off Ramps	$ 7,995,152	$ 15,085,193	$ 541,369,869
BB	SR 41	"O" St. to Herndon	Widen/Aux. Lanes and Improve On & Off Ramps	$ 162,000,000	$ 305,475,161	$ 846,845,030
CC	Friant Road	Shepherd to Copper	Widen to 6 Lane Divided	$ 9,993,940	$ 18,856,491	$ 865,701,521
DD	SR 99	Shaw Avenue	Improve Interchange	$ 34,978,792	$ 65,997,720	$ 931,699,241
EE	Traffic Synchronization	Selected Regionally Significant Corridors	Signal Synchronization (Coordination of Traffic Signals) in Clovis & Fresno	$ 24,984,851	$ 47,141,229	$ 978,840,469
FF	Herndon Avenue	DeWolf to McCall	Widen to 4 Lane Divided	$ 5,796,485	$ 10,936,765	$ 989,777,234
GG	SR 99	Fresno to Clinton	Add North & Southbound Auxillary Lanes	$ 59,963,643	$ 113,138,949	$ 1,102,916,183
HH	Shields Avenue	Blackstone Avenue	Add Dual Left Turn Lanes to the Intersection	$ 1,998,788	$ 3,771,298	$ 1,106,687,481
II	Shields Avenue	SR 99	New Overcrossing	$ 59,963,643	$ 113,138,949	$ 1,219,826,430
JJ	McCall Avenue	Griffith to Shaw	Widen to 6 Lane Divided	$ 10,993,334	$ 20,742,141	$ 1,240,568,570
KK	Shepherd Avenue	Cedar to SR 168	Widen to 4 Lane Divided	$ 15,490,608	$ 29,227,562	$ 1,269,796,132
LL	SR 41	McKinley to Shields	Add North and Southbound Auxillary Lanes	$ 9,993,940	$ 18,856,491	$ 1,288,652,624
MM	SR 99	Ashlan to Madera County Line	Widen to 6 Lane Freeway	$ 29,981,821	$ 56,569,474	$ 1,345,222,098
NN	Traffic Management Center	Caltrans		$ 9,993,940	$ 18,856,491	$ 1,364,078,589
OO	Minnewawa	Shepherd to Copper	Complete to 4 lanes	$ 34,978,792	$ 65,997,720	$ 1,430,076,309
			Urban Tier 2 Total		**$ 903,791,634**	
			Urban Projects Total		**$ 1,430,076,309**	

*1 Original project costs were estimated by Local Agencies, and were in 2004 Dollars. A 5% annual inflation was applied through 2017.

MEASURE "C" EXTENSION EXPENDITURE PLAN

REGIONAL TRANSPORTATION FUNDING PROGRAM - RURAL TIER 2

RURAL AREA PROJECTS ASSUMING ALLOCATION OF 50% OF REGIONAL TRANSPORTATION FUNDING PROGRAM FUNDS

(In the event all of the Tier 1 projects are fully funded and there are remaining Measure "C" funds, those remaining funds would be used for Tier 2 projects. The Tier 2 projects are not listed in any priority order and the funding order would be at the discretion of Fresno COG and the Fresno County Transportation Authority.)

Project Identifier	Project Name	Project Limits	Project Description	Uninflated Costs	Inflated Costs *1	Cumulative Inflated Costs
Tier 2 Projects						
AA	SR 99	Interchange @ Central Chestnut	Interchange Improvements	$ 24,984,851	$ 47,141,229	$ 528,358,890
BB	SR 145	Nielson to South of Kerman	Widen to 4 Lane Divided	$ 22,986,063	$ 43,369,930	$ 571,728,821
CC	SR 33	At SR 180 Intersection	Widen to 4 Lane Divided	$ 8,245,001	$ 15,556,605	$ 587,285,426
DD	Academy Parkway	South of Mountain View to SR 99 Kamm/Bethel Interchange	New Diagonal Connector Road	$ 23,386,250	$ 44,125,000	$ 631,410,426
EE	SR 41	Central / American	Upgrade Intersections to Interchanges at Central & American	$ 49,969,702	$ 94,282,457	$ 725,692,883
FF	Millerton Road	Friant to Sky Harbor	Widen to 4 lane Divided	$ 11,992,729	$ 22,627,790	$ 748,320,673
GG	Manning Avenue	Reedley City Limits to Alta	Widen to 4 lane Divided	$ 3,697,758	$ 6,976,902	$ 755,297,575
HH	SR 43	Selma to Kings County Line	Widen to 4 lane Undivided	$ 89,945,464	$ 169,708,423	$ 925,005,997
II	McCall	Shaw to 168	Complete the 4-lane connection	$ 34,978,792	$ 65,997,720	$ 991,003,717
JJ	SR 180 E	Frankwood to Cove	2 LU to 2 L Expressway on new alignment	$ 40,975,156	$ 77,311,615	$ 1,068,315,332
			Rural Tier 2 Total		**$ 587,097,671**	
			Rural Projects Total		**$ 1,068,315,332**	

*1 Original project costs were estimated by Local Agencies, and were in 2004 Dollars. A 5% annual inflation was applied through 2017.

Appendix F
Response to Comments

Randy Nelson (via email, dated March 2, 2007)

Comment: To improve safety on FAX busses, a security police system similar to San Francisco's Muni Transit Police should be instituted. All age riders are in constant fear of intimidation and criminal acts by gangs. Fresno is a large metropolis and should act accordingly. Crime and the perception of crime are increasing on FAX transportation.

Response: Comment noted. Safety and security are a concern of FAX. Steps being taken to address these issues are included in section 4.4.3 of the draft 2007 RTP.

Comment: Plan for advanced transportation technologies now and implement these plans as soon as possible. Our future economy and livability depend on the plans reflected in the RTP today.

Response: Comment noted. The Measure C Expenditure Plan includes funding for a New Technology Reserve. Committees are meeting to discuss implementation and use of these funds.

Dennis Manning – FARRC (via email, dated March 30, 2007)

Comment: Please consider the following comments regarding the 2007 draft RTP:

In section 3-4 "Mass Transportation" nothing is mentioned in regards to the possibilities of private sector funding through Public Private Partnerships (PPPs). With the increased efforts at developing PPPs at both the state and federal levels as well local jurisdictions in various parts of the country it would seem like the RTP should contain some recognition of this source of potential funding.

Response: Comment noted. Fresno COG is committed to reviewing all possible sources of funding. The possibilities of public private partnerships are recognized by the Federal Highway Administration (FHWA) and additional information is available on their website (http://www.fhwa.dot.gov/PPP/). This effort is possible in all forms of transportation, not only mass transit. Fresno COG will work to develop a section on public private partnerships for future RTPs.

Comment: On page 4-39 appears the following paragraph:

> Alternative service consideration will be evaluated over the next twenty-five years of the planning period. Personal rapid transit (PRT) may include: small electric cars; electric scooters; electric bikes; or standing electric mobility units (such as a Segways). Storage, recharge, and transferability issues will have to also be addressed.

This is a totally incorrect usage of the term Personal Rapid Transit (PRT) - The general use of the term refers to fully automated transit systems that operate on separate guideways with off-line stations that provide non-stop service in small vehicles. Small electric cars; electric scooters; electric bikes; or standing electric mobility units (such as a Segways) should use a different descriptor. Perhaps "personal mobility units" or something similar would be better.

Such usage here could cloud the definition of eligible projects under the "New Technology Reserve Fund" category.

Response: Comment noted. The comment refers to a paragraph on page 4-59 of the draft 2007 RTP. The final 2007 RTP will be updated to reflect a more accurate description of these devices.

CA Department of Transportation (via letter dated April 18, 2007)

District 6

Transportation Planning

Comment: Corridor preservation of State Highways and intersecting roadways is important to Caltrans. The District is developing strategies to work with the local jurisdictions and the regional transportation planning agencies on developing valuable information regarding conceptual alignments of corridors and footprints of interchanges that will require expansion in the foreseeable future. It is our hope that preserving the needed right-of-way for future expansion of State facilities will greatly benefit the State, local communities and the public with regard to subsequent project delivery in terms of time and cost savings.

The Draft RTP contains language that addresses corridor preservation, as specified below.

3.2 General Transportation Goals, Objectives, and Policies

Goal: Support cooperative efforts between local, state, federal agencies and the public to plan, develop and manage our transportation system. (Page 3-4)

Policies:
Work together with the appropriate public agencies to preserve rights-of-way for construction of future transportation projects, including identification of unused rights-of-way which may be needed for future transportation corridors and identification of these corridors for which action is most needed to prevent destruction or loss.

4.2.3 Needs Assessment

Corridor Preservation (Pages 4-4 and 4-5)

The District is requesting Fresno COG's assistance and partnership in the area of corridor preservation. It is recommended that the RTP include policy and action measures to support and implement corridor preservation. Suggested language for the RTP that would strengthen this commitment include:

A concerted effort between the local jurisdictions, the regional transportation planning agency, Caltrans, and the public is needed to insure the dedication of rights-of-way to facilitate the planned ultimate corridors of State Highways, including interchanges, as well as major local arterial and collector streets. A region-wide approach is necessary for corridor preservation of transportation facilities, which cross jurisdictional boundaries.

Response: Comment noted. Suggested changes have been incorporated into the final 2007 RTP.

System Planning/Goods Movement

Comment: Per Randy Treece, on Page 4-14 of the Draft RTP, the last paragraph should read:
The DSMP is one tier of a two tier Caltrans planning process which identifies the current and potential deficiencies and proposes realistic alternatives for resolving these deficiencies. The other tier is the Transportation Corridor Reports (TCRs) formerly known as Route Concept Reports

Response: Comment noted. Suggested changes have been incorporated into the final 2007 RTP.

Comment: Also on Page 4-15, delete the last three sentences under the Transportation Concept Reports subheading starting with "Following the DSMP and prior to updating the TCRs, ..."

Response: Comment noted. Suggested changes have been incorporated into the final 2007 RTP.

A valley-wide freight movement project or projects may be a goal in the Fresno COG FY 2007 Regional Transportation Plan The Fresno COG with the other 7 San Joaquin Valley Council of Governments need to develop one or two feasible valley-wide freight movement projects in order to compete with other major population centers for available Trade Corridor Bond funds or other available funds. The Fresno COG in coordination with the 7 Metropolitan Planning Organizations in the San Joaquin Valley have done an excellent job in working together on the San Joaquin Valley Goods Movement studies I, II, and III. San Joaquin Valley COGs have made progress in exploration of freight movement issues, policies and development of a truck model.

Response: Comment noted.

Division of Transportation Planning

Comment: Thank you for the opportunity to review and provide comments on the 2007 Fresno COG Draft RTP. The Office of Regional and Interagency Planning (ORIP) would like to commend Fresno COG for developing an excellent Plan. Our review concluded that the RTP met most of the requirements. However, we would like to comment on the following sections:

- RTP Checklist: The Draft 2007 Fresno COG RTP Checklist is incomplete and does not include a signed RTP Checklist by the executive director, as required in the 2003 Supplement to the 1999 RTP Guidelines. This checklist should be included with the draft RTP. **Please ensure that a completed and signed checklist is contained in the final RTP**.

Response: Comment noted. Please note that the draft 2007 RTP indicated that the checklist would be completed for the final document.

Comment:

- Public Participation Section: We strongly suggest that Fresno COG include a copy of their updated public participation plan, and demonstrate how the public had input in the development and implementation of the RTP and the Public Participation Plan. Furthermore, new federal requirements specifically require a documented process as stated in 23 CFR Part 450.316.

Response: Comment noted. The currently approved Public Participation Plan is available on the Fresno COG website at www.fresnocog.org or by request. Chapter 6 of the 2007 RTP contains information on the public participation process for this document; including the entire participation plan as part of the RTP does not seem necessary. Please note that the gap analysis included in Appendix C contains the schedule for updating the participation plan.

Comment:

- Public Participation Section, page 6.1.1: In the public participation section of the RTP, it would benefit Fresno COG to document public outreach efforts, such as including copies of agendas, list of public comments, technical staff committee notes or summaries, any workshop outcomes, air quality comments and tribal community members' comments. In particular, efforts to meet with traditionally underrepresented and underserved populations such as the elderly, disabled, low income, and minority (i.e. Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander) communities/groups and their community leaders. We suggest including an appendix section dedicated to actual examples of documentation.

Response: Comment noted. Fresno COG will continue to improve methods of documenting our public outreach efforts.

Comment:

- Consultation and Coordination: A discussion on consultation and coordination is included in the RTP, however the RTP lacks the "documentation" to support the efforts by Fresno COG. Federal requirements also requires MPOs to compare plans, programs, maps, reports, natural and/or historic resources as stated in 23 CFR Part 450.316 & 450.322.

Response: Comment noted. Fresno COG will continue to improve methods of documenting our public outreach efforts.

Comment:

- Environmental Mitigation Discussion: We were not able to locate the section discussing mitigation activities in the RTP and how those measures would or could be implemented. Federal regulations require a discussion on the potential environmental mitigation activities and the potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the RTP, as stated in 23 CFR Part 450.322. To obtain an expanded list of Native American Tribes, communities, organizations, groups, and individuals with cultural knowledge within Fresno COG boundaries send a request to the Native American Heritage Commission, 915 Capitol Mall, Sacramento, California 95814 or call (916) 653-4082.

Response: The discussion of Environmental Mitigation is contained in Section 4.11 Environmental Mitigation from pages 4-108 to 4-111 of the Draft 2007 RTP. The Native American Heritage Commission was provided copies of the 2007 RTP and Draft EIR; the Commission provided comments on the Notice of Preparation for the EIR, as well as the Draft EIR.

Comment:

- Financial Element, page 5-15, Exhibit 5-2: Based upon federal programming requirements please indicate, discuss, and document activities on whether or not funding has been allocated to any Tribes or projects that were identified by the Tribes to meet their community needs. 23 CFR, Sections 134 and 135.

To obtain an expanded list of Native American Tribes, communities, organizations, groups, and individuals with cultural knowledge within Fresno COG boundaries send a request to the Native American Heritage Commission, 915 Capitol Mall, Sacramento, California 95814 or call (916) 653-4082.

Response: Comment noted. No funding has been allocated to the project types mentioned.

<u>Division of Aeronautics</u>

Overall, reviewing staff notes a concerted effort to describe and evaluate aviation within the Fresno Region. We recommend, however, that airport managers be contacted for *recent basic data updates* prior to Report writing. Below are more comments from Aeronautics Division:

Comment:

- Our comparative review of the **Existing System Inventory** (page 4-67) and our own annual data indicates a potential for inaccurate or out-of-date report data.

Response: The Existing System Inventory in the final 2007 RTP will be changed as warranted based on information from the most recent California Aviation System Plan, System Requirements Element and from airport managers.

Comment:

- **Accomplishments** (page 4-70) We have participated with several Fresno Region airports in the development of their Master Plans. Our Division's System Planning Branch is interested in continuing this practice and requests that we are notified of any pending Master Plan activity. Of particular note is Fresno Yosemite International (FYI).

Response: Comment noted. The Division of Aeronautics System Planning Branch will be notified of any pending Master Plan activity.

Comment:

- **Completed Improvements** (page 4-72) provides a comprehensive listing of the Region's recent airport improvements. It appears consistent with our airport file records, California Aviation System Plan (CASP) and previous reviews of Master Plans and Capital Improvement Plans.

Response: Comment noted.

Comment:

- **Needs Assessment** (page 4-73) provides a concise public record of the Region's unmet aviation needs. Of particular note is Fresno Yosemite International (FYI). The airport's leakage issue has been previously identified in the recent Overall Work Program (OWP) for Fresno County. Consistent with our comments regarding the OWP, we recommend continuing public education in the advantage of selecting FYI over using out-of-town airports. Disadvantages associated with this option include $3.00+/ gallon gasoline, travel time/ congestion issues, vehicle wear/ exposure, and parking/ security issues. We've read the rationale in FYI publications in the past and urge continued repetition and dissemination through the Fresno Bee and other regional media. The Caltrans Economic Report referenced in this section may assist in the effort.

Response: Comment noted. Language has been included in the final 2007 RTP that mentions the importance of an ongoing public education program to promote the use of FYI rather than other airports.

Comment:

- Short Range Improvement Plan (page 4-74/ 75) We encourage the individual airports to consult with our Division's Office of Airports while these plans are in process. The Office of Airports is the statewide permitting authority for the airports and serves as a valuable resource in detailing physical projects, particularly from the operational safety perspective.

Response: Comment noted. Individual airports will be encouraged to coordinate the development of short-range improvement plans and other plans with Caltrans Aeronautics' Office of Airports.

Comment:

- Ground Access Improvement Program-Fresno Yosemite International Airport (page 4-75/ 77) Our staff has direct familiarity with the airport's ground access improvements and concurs with this report's assessment. Although the City is a separate jurisdiction, we strongly encourage continuing communication and coordination with Caltrans District 6 regarding State Routes 168/ 180 operations and the surface street network. We would also encourage our Division being apprised of future ground access issues concerning FYI, or any other airport in the Fresno Region.

Response: Comment noted. COG staff will continue to foster communication and coordination with the City of Fresno and Caltrans District 6 with regard to ground access improvements at FYI. Also, staff will apprise Caltrans Aeronautics of future ground access issues at FYI and other airports in Fresno County.

Comment:

- Goods Movement (page 1-35/ 38) and Existing System Inventory (page 4-48, specifically) identify the role and value of air cargo in the inter-modal network. We would remind FYI, as well as other airports in the

Region, that major airports in both Southern and Northern California are experiencing significant air cargo issues that include both facilities and operations capacity. These issues present opportunity for the Fresno Region. Inter-modal goods movement planning that effectively links the site suited airports will provide an attractive infrastructure for near future demand for increased air cargo/ distribution service. In the long term, increased associated passenger demand for FYI may also result. We encourage the Region's airport sponsors to directly pursue these economic opportunities with the capacity impacted airports and the carriers.

Response: Comment noted. Language has been inserted in the final 2007 RTP to reflect these comments and the opportunities for increased air cargo and passenger demand at FYI.

Comment:

- The Financial Element notes the California Aid to Airports Program on page 5-9 and within the spreadsheet on page 5-13. We recommend additional language regarding the availability of Acquisition and Development funds for Airport Land Use Compatibility Plans (ALUCP). These funds are available on a limited basis and may involve a waiting period. We recommend contacting our Aviation Funding Specialist for further details.

Response: Comment noted. Language has been included in the final 2007 RTP regarding the availability of Acquisition and Development funds for Airport Land Use Compatibility Plans.

Division of Mass Transportation

Comment:
Comment on Safety and Security of the Transportation System
The RTP addresses safety and security as it applies to ITS technology only and did not address safety and security of the public transportation system and emergency preparedness. As a part of their role to foster intergovernmental coordination and undertake comprehensive regional planning with an emphasis on transportation, DMT suggest that Fresno COG consider their role regarding issues of safety and security of the transportation system related to a prepared response to sudden unexpected incidents or natural disasters.

Response: Safety and security of the transit system is addressed in section 4.4.3 of the draft 2007 RTP.

Comment: Page 2-14, under **Coordinated Human Service Transportation Plan**, the correct section number for the New Freedom program is 5317, not 5318.

Response: Comment noted. The final 2007 RTP will be updated accordingly.

Comment: Page 3-6, 3.4 Mass Transportation **Goal: Provide public transportation mobility opportunities to the maximum number of people in the region.** DMT offers the following addition to the second policy:

- Provide transit services that service **low income**, elderly and disabled communities.

Response: Comment noted. The final 2007 RTP will be updated accordingly.

Comment: Page 5-3, 5.4.1 **Federal Programs:** As Fresno COG is the designated recipient for Section 5316 (Job Access and Reverse Commute Program) and Section 5317 (New Freedom) we suggest adding them to the federal programs listed.

Response: Comment noted. The final 2007 RTP will be updated accordingly.

Comment: Page 5-6 and 5-7, **Federal Transit Administration Section 5311 and Federal Transit Administration 5310.** Both programs have a new federal share ratio for capital projects. Capital assistance is provided for up to **88.53**% of the net project cost.

Response: Comment noted. The final 2007 RTP will be updated accordingly.

Comment: Page 5-16, **Exhibit 5-3:** As SAFETEA-LU was signed into law in 2005, consider removing references to TEA-21 from the flow chart.

Response: Comment noted. The final 2007 RTP will be updated accordingly.

CALTRANS OFFICE OF COMMUNITY PLANNING (via email dated April 18, 2007)

Comment: Page 1–2 Section 1.2 –San Joaquin Valley Profile

We would like to thank the Council of Fresno County Governments for including this section within the Draft RTP. The description of the cultural and physical geography of the Region helped educate and enhance our ability to understand, and therefore comment on the important transportation issues facing the County of Fresno and its communities.

Response: Comment noted.

Comment: General Comment – Overall Tone

The fifth paragraph on page 1-1 under section 1.2 describes the relentless population growth that Fresno and neighboring counties are experiencing. We feel that pain. The State of California is anticipating +/- 10 million more people within the next two to three decades. Much of that growth is anticipated to occur within the San Joaquin Valley.

With that said, there are numerous communities around California that have experienced, or are currently feeling the same growth pressure that Fresno foresees. Some local governments representing these communities struggle with the exponential cost of constructing new transportation infrastructure, and then the cost of maintaining those facilities. Much of that struggle stems from the local approval of sprawling development.

Response: Comment noted.

Comment: Page 1-8 under Section 1.2.1 'Trends and Assumptions – Land Uses' states: "It is anticipated that land use will continue to be converted at an increasingly rapid pace due to residential, commercial and industrial uses. Our Office does not want that to happen, and Fresno County appears to agree. We commend the COFCG's for the language used on page 1-11. We believe that language will lead the County down a different and more sustainable path. The language states:

- Goal – Encourage land use design which is more efficient and more conducive to the use of transit, non-motorized transportation and rail alternatives.
- Objective – Support land uses that are in the interest of the general community by encouraging population densities and patterns that are conducive to transit and non-motorized transportation options.
- Policies – Advise decision makers on land use decisions that favor compact development.

To address Fresno's anticipated need for transportation infrastructure, the RTP discusses – in many ways, the potential transportation solutions that could keep regional mobility in an un-congested state. We support that endeavor. However, Exhibit 5-13 on page 5-45 gives a visual depiction of the total cost and need for transportation by mode. Of the expenditure needs listed, streets and highways continue to dominate the lion's share of available

transportation funding – billions over the life of this RTP. This statement suggests that transportation improvements for the automobile - many of which are capacity increasing, remain the Region's primary focus.

The Office of Community Planning is concerned about the emphasis placed on capacity-increasing improvements for auto centric infrastructure. Question: How will an auto dominated investment strategy encourage the Goal, support the Objective, and help steer the Policies that are suggested above and within the RTP? We strongly suggest that the COFCG place more focus and financial resources toward the multi-modal aspects of transportation planning and project development.

Our position:

- California transportation history has proven time and time again that new auto oriented infrastructure influence land uses that ultimately bring free flowing auto traffic back into congestion. It's a continuous cycle that will ultimately reduce community livability by impacting many different aspects of both the human and physical environment – mobility and air quality to name just two. Therefore, we suggest planning for growth in more innovative ways. Smart transportation growth can be accomplished by utilizing existing transportation facilities and adjacent land more efficiently. We believe bringing this vision to the forefront will ultimately preserve many of geographic attributes so many current and future Fresno County citizens enjoy. Now is the time.

On that note, developers in many communities – large and small, are beginning to find value in markets for sustainable housing developments such as Transit Oriented Developments, infill development, high-density projects, or developments that produce multi-modal benefits. Promoting these types of proposals through the RTP could be a conduit for change. This action may one day help to balance transportation, land use and the County's precious environment. The State needs to grapple with urban sprawl and Fresno could be a leader.

Response: Comment noted. The chart referred to on page 5-45 estimates needs based on mode at this time. Please note that the 2007 RTP, which includes continued funding for Measure C, includes more funding for multi-modal projects than the previous RTP in 2004. Fresno COG, through the development of Measure C, the Regional Transportation Plans, and participation in the Blueprint process, is committed to implementation of a multi-modal system that balances the needs of transportation, land use, and the environment.

CA Department of Transportation (via memo dated April 23, 2007)

Comment:

A list of transportation improvements on State highways located within Fresno County is attached. Caltrans has identified that these improvements are needed to accommodate existing and growing demand. The estimated cost for the improvements do not include possible costs for engineering and environmental services. Most of the estimates also do not include cost for right-of-way. Caltrans requests that the COG consider including these projects in the RTP.

Response: Comment noted. Fresno COG staff requested that projects be submitted prior to the development of the RTP. In addition, the listed projects do not include some of the necessary information, such as the implementation date. Fresno COG staff will continue to work with Caltrans to ensure that all projects are included in future FTIP and RTP documents.

Comment:

Page 3-92, Section on land use regulations in Fresno County:

The Council of Fresno County Governments may wish to add the California Public Utilities Commission as a State Agency that will be reviewing the impacts created by land use decisions and subsequent development. Currently, the CPUC is doing only a very limited CEQA review of the impacts of development on railroads. However, to

comply with AB158, the CPUC has formed the "Special Railroad Safety Task Force," a body that has the duty of identifying impacts to railroad safety brought about by development. They are considering a number of issues, including evaluating deficiencies in current land use planning that might impact rail safety and determining what type of mitigation would lessen the risks to the public and the environment. This will be accomplished in part with a "Best Practices" document to assist local agencies in planning development near railroads. The Task Force will also be developing a type of corridor management plan, a document that will identify future necessary railroad safety improvements with the goal of getting early by-off from local jurisdictions. They are also developing a nexus-based formula for rail safety mitigation and working on establishing legal limits on development adjacent to rail corridors. This new Task Force will have an impact on land use and transportation planning and should be taken into consideration in the RTP. If COFCG would like additional information they may contact:

Mr. Kevin Boles, Environmental Specialist
Rail Crossings and Engineering Section
California Public Utilities Commission
505 Van Ness Avenue
San Francisco, CA 94102-3298
(415) 703-2795

Response: Comment noted.

San Joaquin Valley Air Pollution Control District (via letter, dated April 26, 2007)

Comment: District Rule 9510 (Indirect Source Review) – The District recommends that subsequent, project specific environmental review documents characterize the emission reductions achieved by complying with District Rule 9510. The District further recommends that potential costs of complying with Rule 9510 be considered during the transportation budgeting process.

Response: Comment noted. Please note that:

1) regional emission reductions for 9510 are assumed in the conformity analysis consistent with approved SIP;

2) project-level requirements are addressed separately from TIP/RTP/EIR documents provided for public review; and

3) the MPOs will continue to work with the Air District on addressing the budgetary and other issues related to the implementation of District Rule 9510.

Comment: CEQA Analysis – information was provided on Health Risk Assessment, Applicable District Rules, and Recommended Mitigation Measures.

Response: Comment noted. The SJV MPOs acknowledge the information provided and the applicable information will be addressed as required with individual project-level requirements.

Appendix G
RTP Resolution

BEFORE THE
COUNCIL OF FRESNO COUNTY GOVERNMENTS
RESOLUTION NO. 2007-16

In the Matter of:	)	**RESOLUTION ADOPTING THE**
	)	**2007 RTP, 2007 FTIP**
2007 RTP, 2007 FTIP	)	**AMENDMENT #7, AND**
AMENDMENT #7, AIR QUALITY	)	**AIR QUALITY CONFORMITY**
CONFORMITY ANALYSIS	)	**ANALYSIS**
_____	)	

WHEREAS, the Council of Fresno County Governments is a Regional Transportation Planning Agency and a Metropolitan Planning Organization, pursuant to State and Federal designation; and

WHEREAS, federal planning regulations require Metropolitan Planning Organizations to prepare and adopt a long range a Regional Transportation Plan (RTP) for their region; and

WHEREAS, Section 65080 of the California Government Code requires each regional transportation planning agency to prepare a regional transportation plan and update it for submission to the governing Policy Board for adoption; and

WHEREAS, a 2007 Regional Transportation Plan has been prepared in full compliance with federal guidance; and

WHEREAS, a 2007 Regional Transportation Plan has been prepared in accordance with state guidelines adopted by the California Transportation Commission; and

WHEREAS, federal planning regulations require that Metropolitan Planning Organizations prepare and adopt a short range Federal Transportation Improvement Program (FTIP) for their region; and

WHEREAS, the 2007 Federal Transportation Improvement Program (FTIP) Amendment #7 has been prepared to comply with Federal and State requirements for local projects and through a cooperative process between the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the State Department of Transportation (Caltrans), principal elected officials of general purpose local governments and their staffs, and public owner operators of mass transportation services acting through the Council of Fresno County Governments forum and general public involvement; and

WHEREAS, the 2007 FTIP Amendment #7 program listing is consistent with: 1) the 2007 Regional Transportation Plan; 2) the State Transportation Improvement Program; and 3) the Air Quality Conformity Analysis; and

WHEREAS, the 2007 FTIP Amendment #7 contains the MPO's certification of the transportation planning process assuring that all federal requirements have been fulfilled; and

WHEREAS, the 2007 FTIP Amendment #7 includes projects and financial information for four years of programming; and

WHEREAS, the 2007 FTIP Amendment #7 includes updates to the Expedited Project Selection Procedures; and

WHEREAS, projects submitted in the 2007 FTIP Amendment #7 must be financially constrained and the financial plan affirms that funding is available; and

WHEREAS, the 2007 RTP and 2007 FTIP Amendment #7 do not interfere with the timely implementation of the Transportation Control Measures; and

WHEREAS, the MPO must demonstrate conformity per 40 CFR Part 93 for the RTP and FTIP; and

WHEREAS, in accordance with EPA Companion Guidance for the Conformity Rule for multi-jurisdictional areas, the Council of Fresno County Governments has developed their portion of the PM2.5 regional emissions analysis separately and provided the entire PM2.5 nonattainment area conformity demonstration; and

WHEREAS, the PM2.5 nonattainment area conformity demonstration is contingent upon adoption by all MPOs in the PM2.5 nonattainment area; and

WHEREAS, the Council of Fresno County Governments has also developed a regional emissions analysis for Carbon Monoxide (CO), Ozone, and PM-10 for Fresno County; and

WHEREAS, the documents have been widely circulated and reviewed by the Council of Fresno County Governments advisory committees representing the technical and management staffs of the member agencies; representatives of other governmental agencies, including State and Federal; representatives of special interest groups; representatives of the private business sector; and residents of Fresno County; and

WHEREAS, a public hearing was conducted on April 26, 2007 to hear and consider comments on the 2007 RTP, 2007 FTIP Amendment #7, and associated Air Quality Conformity Analysis and the remainder of the MPOs in the PM2.5 nonattainment area have conducted public hearings as well; and

WHEREAS, the Council of Fresno County Governments Policy Board has reviewed the Air Quality Conformity Analysis and made a finding that the 2007 Regional Transportation Plan and the 2007 Federal Transportation Improvement Program Amendment #7 are in conformance with the applicable transportation conformity rules for the applicable air quality standards.

NOW, THEREFORE, BE IT RESOLVED, that the Council of Fresno County Governments adopts the 2007 RTP, 2007 FTIP Amendment #7, and associated Air Quality Conformity Analysis.

THE FOREGOING RESOLUTION was passed and adopted by Council of Fresno County Governments this 31st day of May, 2007.

AYES: Clovis, Coalinga, Fowler, Fresno, Fresno County, Huron, Kingsburg, Mendota, Orange Cove, Parlier, San Joaquin, Sanger and Selma

NOES: None

ABSTAIN: None

ABSENT: Firebaugh, Kerman and Reedley

Signed: _____
Trinidad M. Rodriguez, Chairman

ATTEST:

I hereby certify that the foregoing is a true copy of a resolution of the Council of Fresno County Governments duly adopted at a regular meeting thereof held on the 31st day of May, 2007.

Signed: _____
Barbara Goodwin, Executive Director