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
- Non-Motorized: Section 4.7
- Rail: 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 20010/11 to 20013/14. 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 Transportation 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 in the San Joaquin Valley, be consistent with, or

conform to, the State Implementation Plans (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 adopted SIPs.

4.2 Multimodal

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 approach is helped by looking at the characteristics of our County which may affect travel demands, including but not limited to the following:

- 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 from Measure "C," a local sales tax, and its reauthorization.

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 includes 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" and its reauthorization.

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 preservation 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 with highest demand, for cost-efficiency.

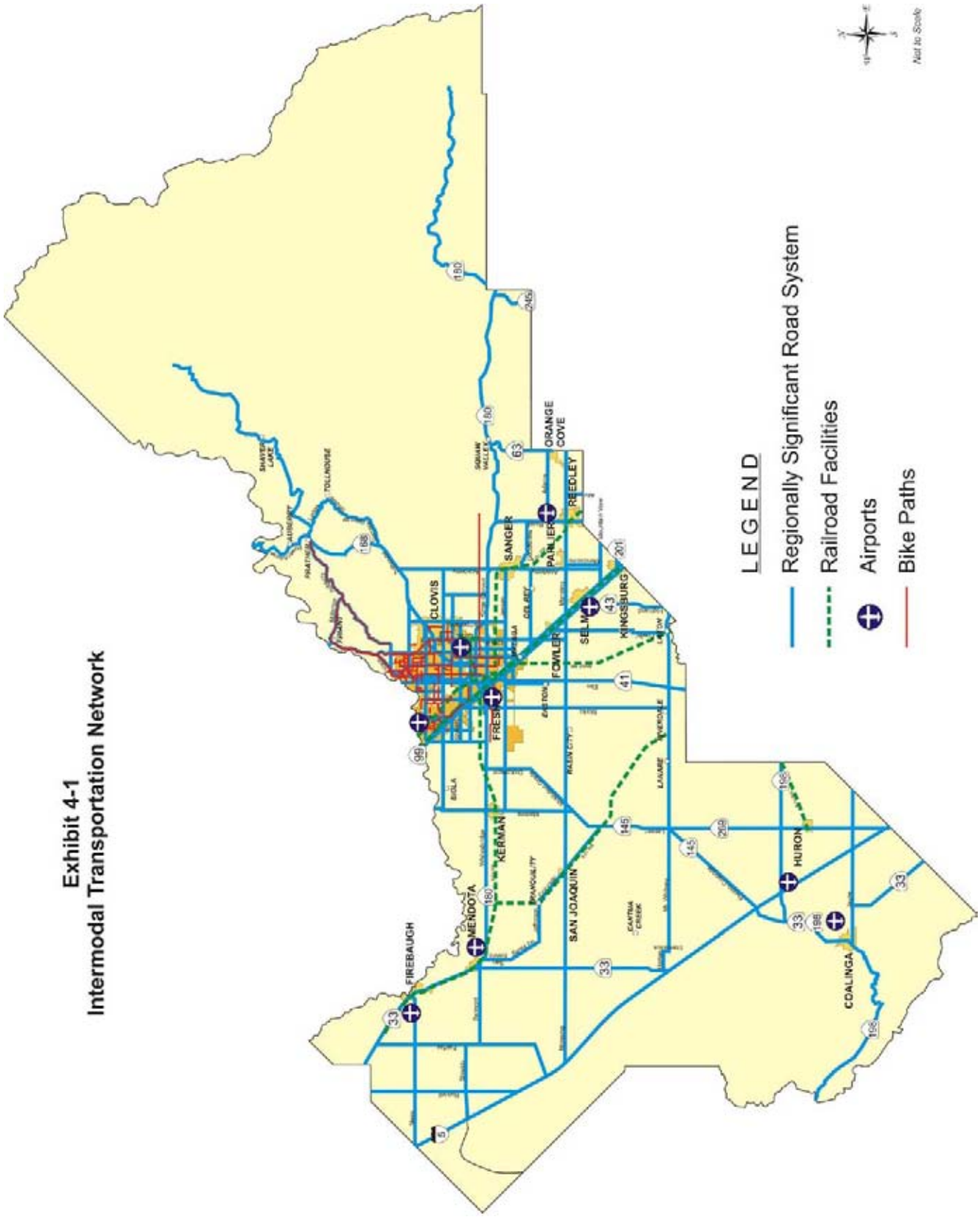


Exhibit 4-1
Intermodal Transportation Network

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, 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 third phase culminated with the development of a truck model, 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 also provided 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.

In addition, in 2007, the San Joaquin Valley RTPAs developed the *San Joaquin Valley Goods Movement Action Plan, 2007*. The document is a coordinated strategic plan for system-wide, multi-modal goods movement planning in the San Joaquin Valley. The plan defines the linkages between the goods movement system in the Valley and the role it plays in the movement of goods throughout the rest of the State and Nation. The plan also identifies the crucial role the Valley plays in the State's and Nation's economy with its $20 billion dollar annual, agricultural economy.

.

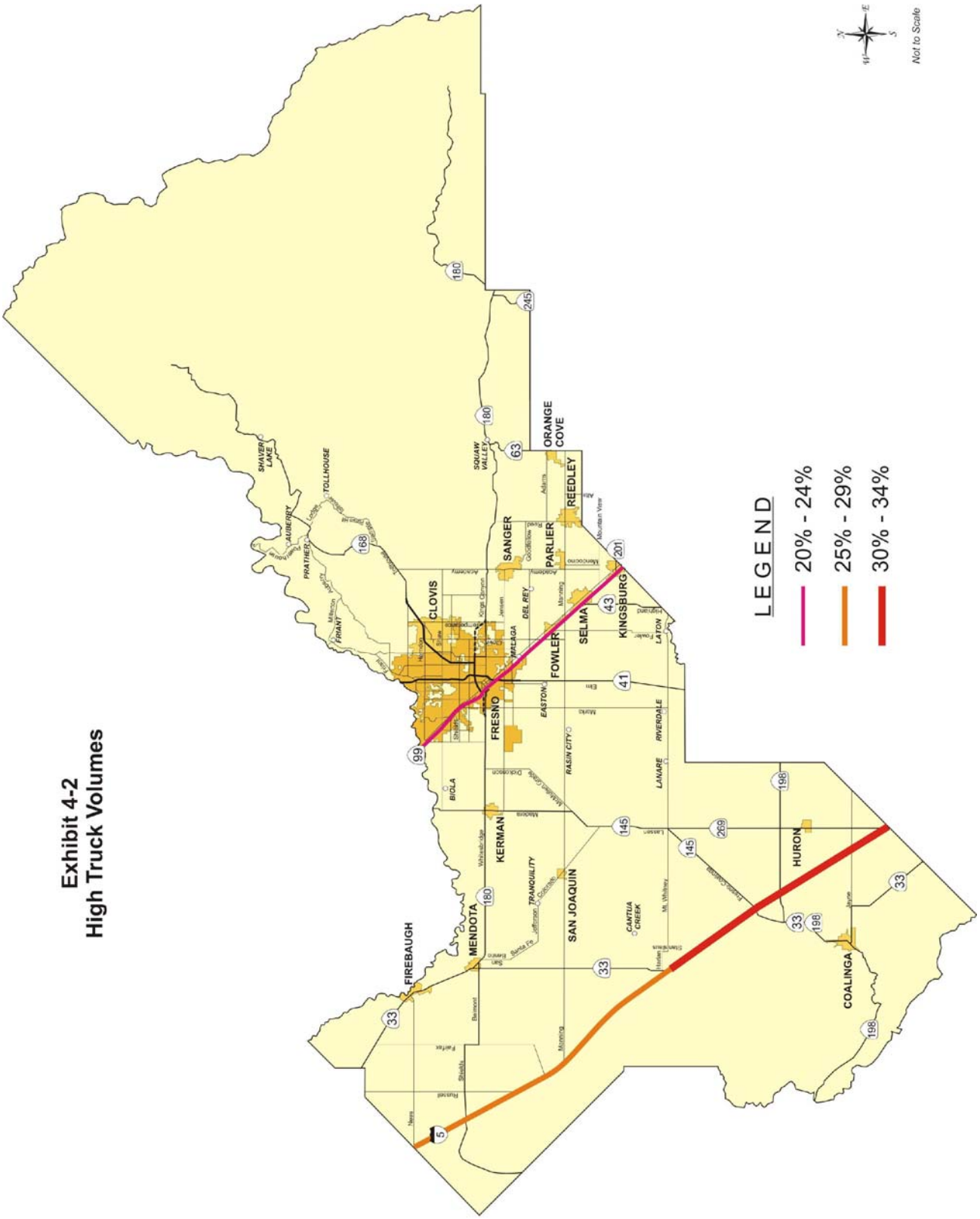


Exhibit 4-2
High Truck Volumes
LEGEND
20% - 24%
25% - 29%
30% - 34%
Not to Scale
FRESNO
CLOVIS
SANGER
REEDLEY
PARLIER
ORANGE COVE
SELMA
KINGSBURG
FOWLER
KERMAN
SAN JOAQUIN
HURON
COALINGA
MENDOTA
FIREBAUGH
SHAVER LAKE
TOLLHOUSE
AUBERRY
PRATHER
SQUAW VALLEY
DEL REY
MALAGA
EASTON
RASIN CITY
RIVERDALE
LANARE
LATON
BIOLA
TRANQUILITY
CANTUA CREEK

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, Reedley, and 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. Consequently, the Fresno COG has retained a consultant to assist with a National Parks Transit Study that will focus on operational and infrastructure issues related to the provision of public transit service between Fresno and Yosemite and Sequoia/Kings Canyon National Parks. That study is expected to be completed in fiscal year 2010-11.

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), 2009-2014, 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.

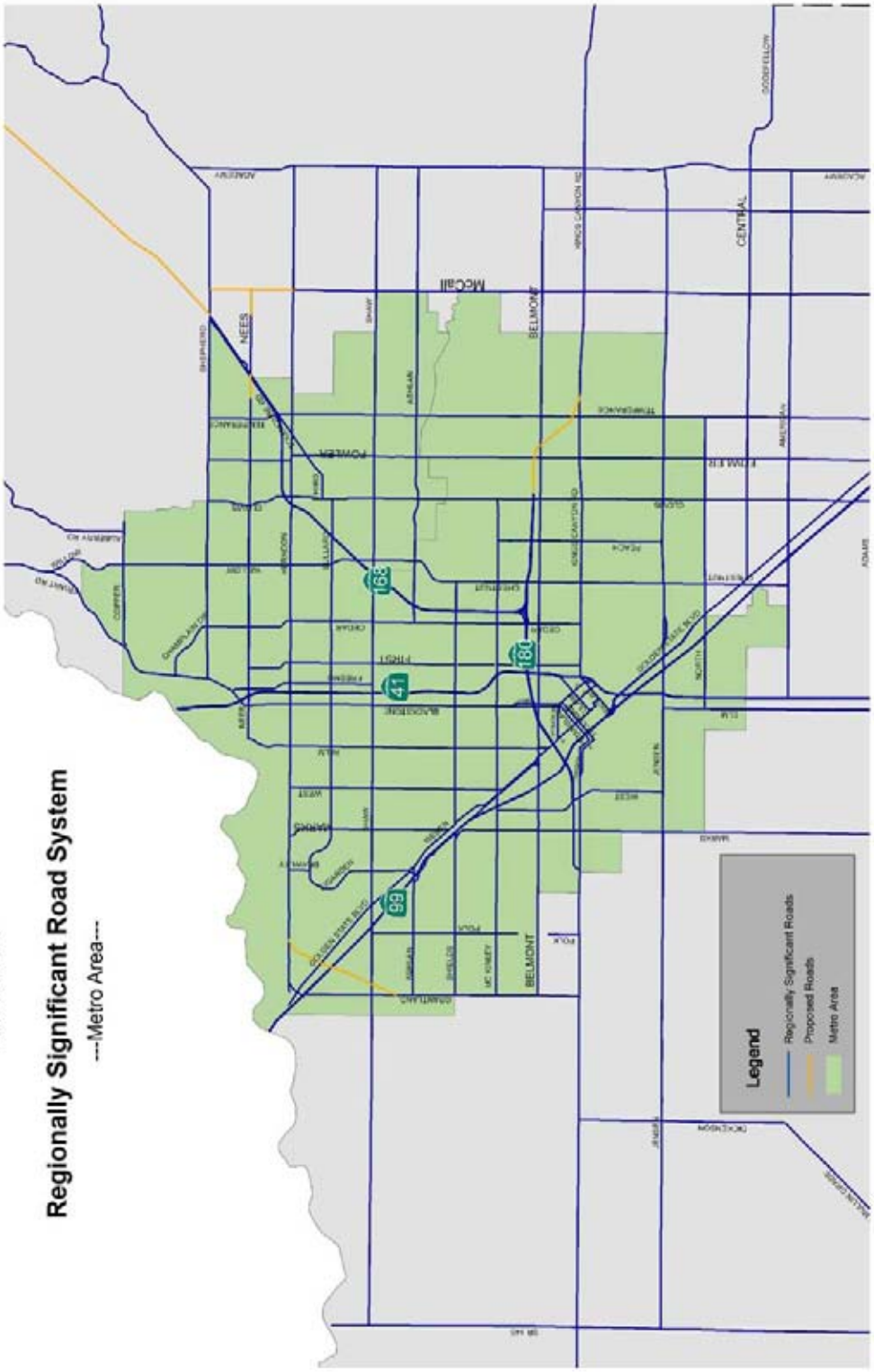


Exhibit 4-3
Regionally Significant Road System
---Metro Area---
Legend
Regionally Significant Roads
Proposed Roads
Metro Area
McCall
Belmont
Central
Fowler
Nees
99
180
41

Exhibit 4-4

Regionally Significant Road System

---Rural Area---

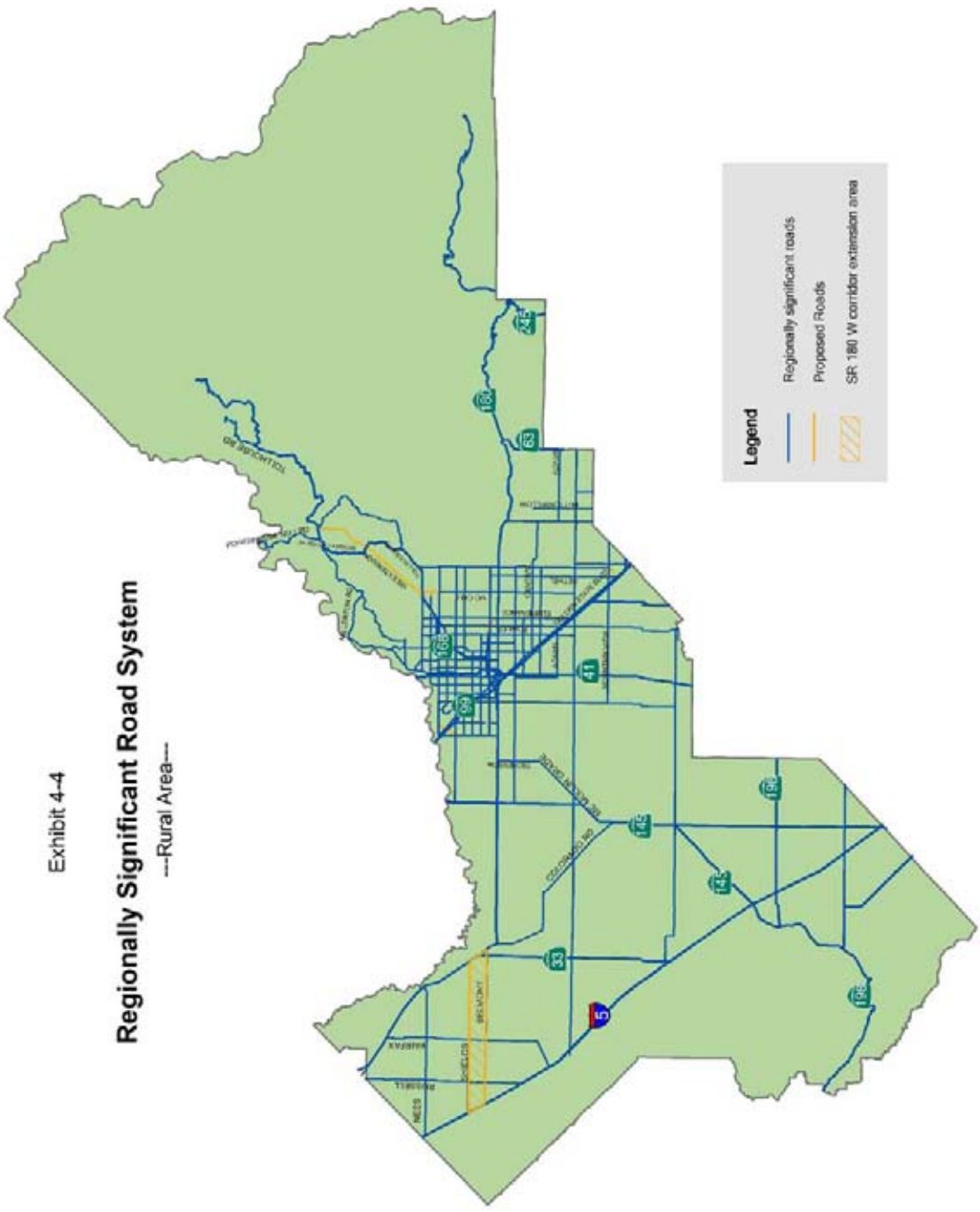


Exhibit 4-5
Functional Classification System Definitions

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 over 1,570 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.
- Blueprint Modeling
- Modeling for SB 375 Target Setting and for development of Sustainable Communities Strategies and Alternate Planning Strategies for SB 375 implementation.

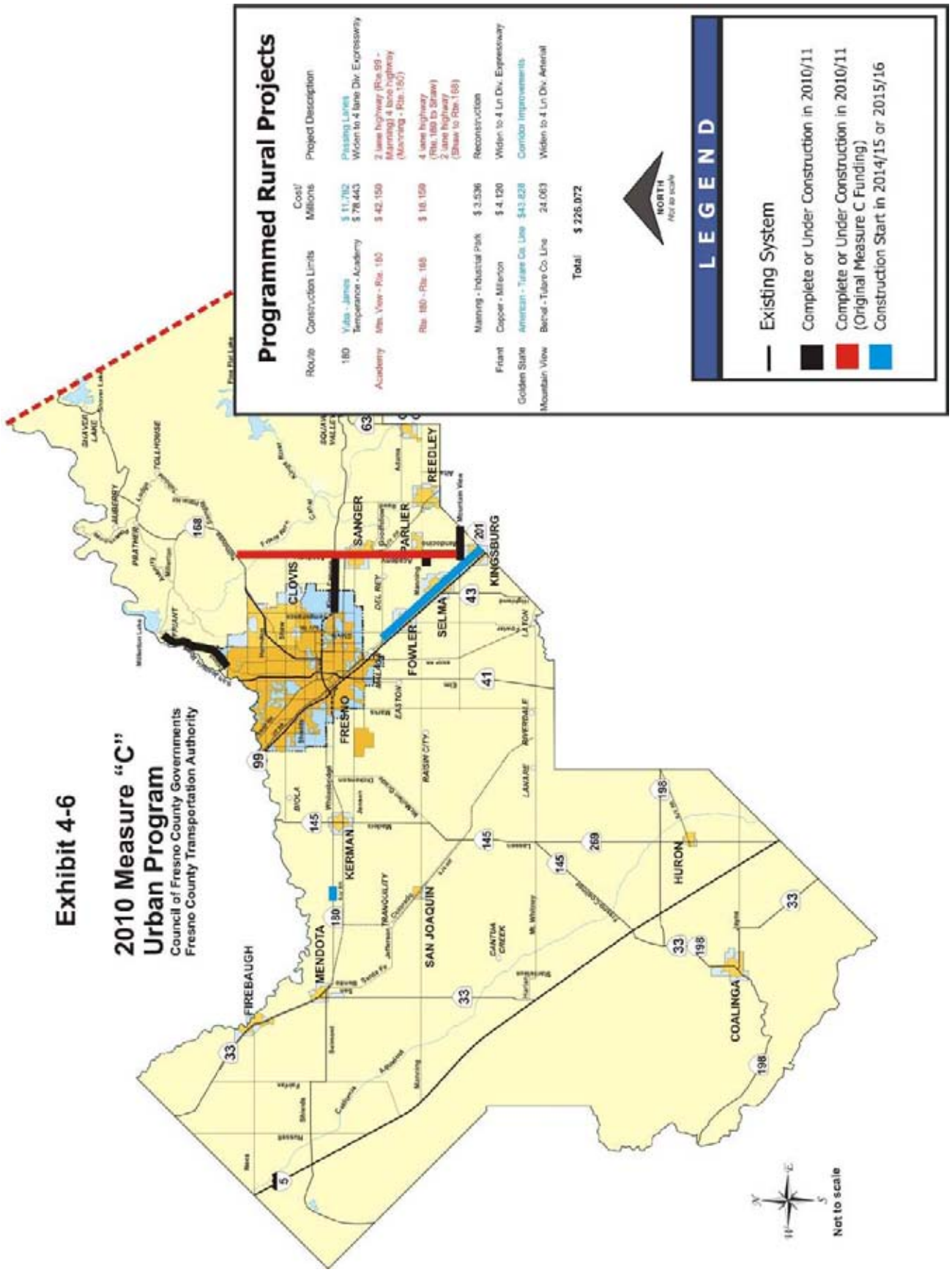


Exhibit 4-6
2010 Measure "C"
Urban Program
Council of Fresno County Governments
Fresno County Transportation Authority
Programmed Rural Projects
Route
Construction Limits
Cost/ Millions
Project Description
180
Yuba - James
$ 11.762
Passing Lanes
Temperance - Academy
$ 78.443
Widen to 4 lane Div. Expressway
Academy
Mts. View - Rte. 180
$ 42.158
2 lane highway (Rte.99 - Manning) 4 lane highway (Manning - Rte.180)
Rte. 180 - Rte. 168
$ 18.159
4 lane highway (Rte.180 to Straw) 2 lane highway (Straw to Rte.168)
Manning - Industrial Park
$ 3.536
Reconstruction
Friant
Copper - Millerton
$ 4.120
Widen to 4 Ln Div. Expressway
Golden State
American - Tulare Co. Line
$43.828
Corridor Improvements
Mountain View
Bethel - Tulare Co. Line
24.063
Widen to 4 Ln Div. Arterial
Total
$ 226.072
LEGEND
Existing System
Complete or Under Construction in 2010/11
Complete or Under Construction in 2010/11 (Original Measure C Funding)
Construction Start in 2014/15 or 2015/16
NORTH
Not to scale
FIREBAUGH
MENDOTA
SAN JOAQUIN
KERMAN
FRESNO
CLOVIS
SANGER
REEDLEY
PARLIER
KINGSBURG
SELMA
FOWLER
HURON
COALINGA
Not to scale

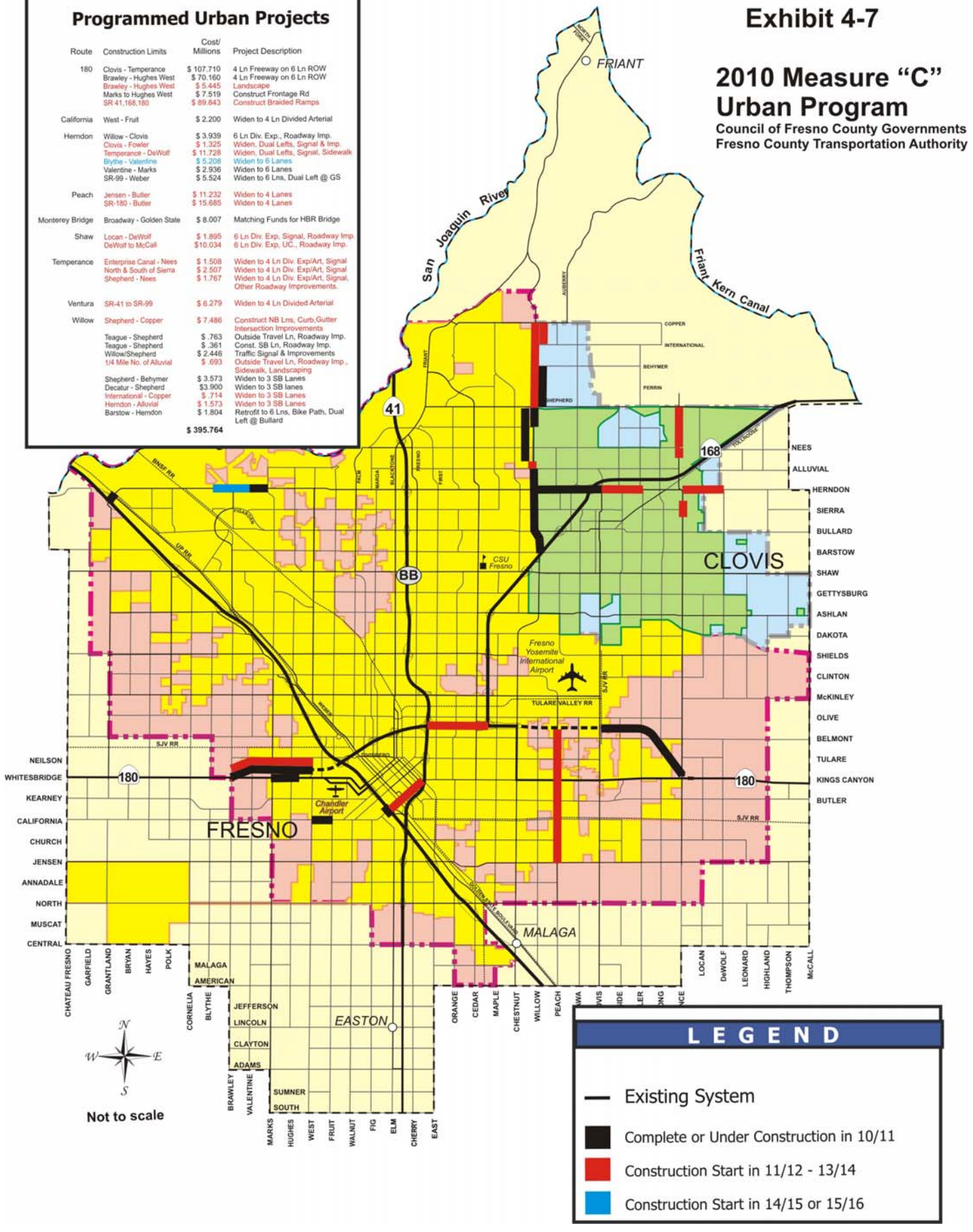
Exhibit 4-7

2010 Measure "C" Urban Program

Council of Fresno County Governments
Fresno County Transportation Authority

Programmed Urban Projects

Route	Construction Limits	Cost/ Millions	Project Description
180	Clovis - Temperance	$ 107.710	4 Ln Freeway on 6 Ln ROW
	Brawley - Hughes West	$ 70.160	4 Ln Freeway on 6 Ln ROW
	Brawley - Hughes West	$ 5.445	Landscape
	Marks to Hughes West	$ 7.519	Construct Frontage Rd
	SR 41,168,180	$ 89.843	Construct Braided Ramps
California	West - Fruit	$ 2.200	Widen to 4 Ln Divided Arterial
Herndon	Willow - Clovis	$ 3.939	6 Ln Div. Exp., Roadway Imp.
	Clovis - Fowler	$ 1.325	Widen, Dual Lefts, Signal & Imp.
	Temperance - DeWolf	$ 11.728	Widen, Dual Lefts, Signal, Sidewalk
	Blythe - Valentine	$ 5.208	Widen to 6 Lanes
	Valentine - Marks	$ 2.936	Widen to 6 Lanes
	SR-99 - Weber	$ 5.524	Widen to 6 Lns, Dual Left @ GS
Peach	Jensen - Butler	$ 11.232	Widen to 4 Lanes
	SR-180 - Butler	$ 15.685	Widen to 4 Lanes
Monterey Bridge	Broadway - Golden State	$ 8.007	Matching Funds for HBR Bridge
Shaw	Locan - DeWolf	$ 1.895	6 Ln Div. Exp, Signal, Roadway Imp.
	DeWolf to McCall	$10.034	6 Ln Div. Exp, UC., Roadway Imp.
Temperance	Enterprise Canal - Nees	$ 1.508	Widen to 4 Ln Div. Exp/Art, Signal
	North & South of Sierra	$ 2.507	Widen to 4 Ln Div. Exp/Art, Signal
	Shepherd - Nees	$ 1.767	Widen to 4 Ln Div. Exp/Art, Signal, Other Roadway Improvements.
Ventura	SR-41 to SR-99	$ 6.279	Widen to 4 Ln Divided Arterial
Willow	Shepherd - Copper	$ 7.486	Construct NB Lns, Curb,Gutter Intersection Improvements
	Teague - Shepherd	$ .763	Outside Travel Ln, Roadway Imp.
	Teague - Shepherd	$ .361	Const. SB Ln, Roadway Imp.
	Willow/Shepherd	$ 2.446	Traffic Signal & Improvements
	1/4 Mile No. of Alluvial	$ .693	Outside Travel Ln, Roadway Imp., Sidewalk, Landscaping
	Shepherd - Behymer	$ 3.573	Widen to 3 SB Lanes
	Decatur - Shepherd	$3.900	Widen to 3 SB lanes
	International - Copper	$ .714	Widen to 3 SB Lanes
	Herndon - Alluvial	$ 1.573	Widen to 3 SB Lanes
	Barstow - Herndon	$ 1.804	Retrofit to 6 Lns, Bike Path, Dual Left @ Bullard
		$ 395.764	



In summary, the COG traffic model represents over twenty-five 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 RTPAs 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 RTPAs 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. Fresno COG along with the seven other counties making up the San Joaquin Valley including Kings, Tulare, Kern, Madera, San Joaquin, Merced and Stanislaus Counties have been working for the past couple of years to put in place a 511 or traveler information System. The San Joaquin Valley 511 system is, at the time of this writing in the process of being developed and deployed across the San Joaquin Valley..

- *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. 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). Academy Avenue project construction was funded through the Measure "C" program with additional funding through the Measure "C" Extension program for the segment through Sanger.

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

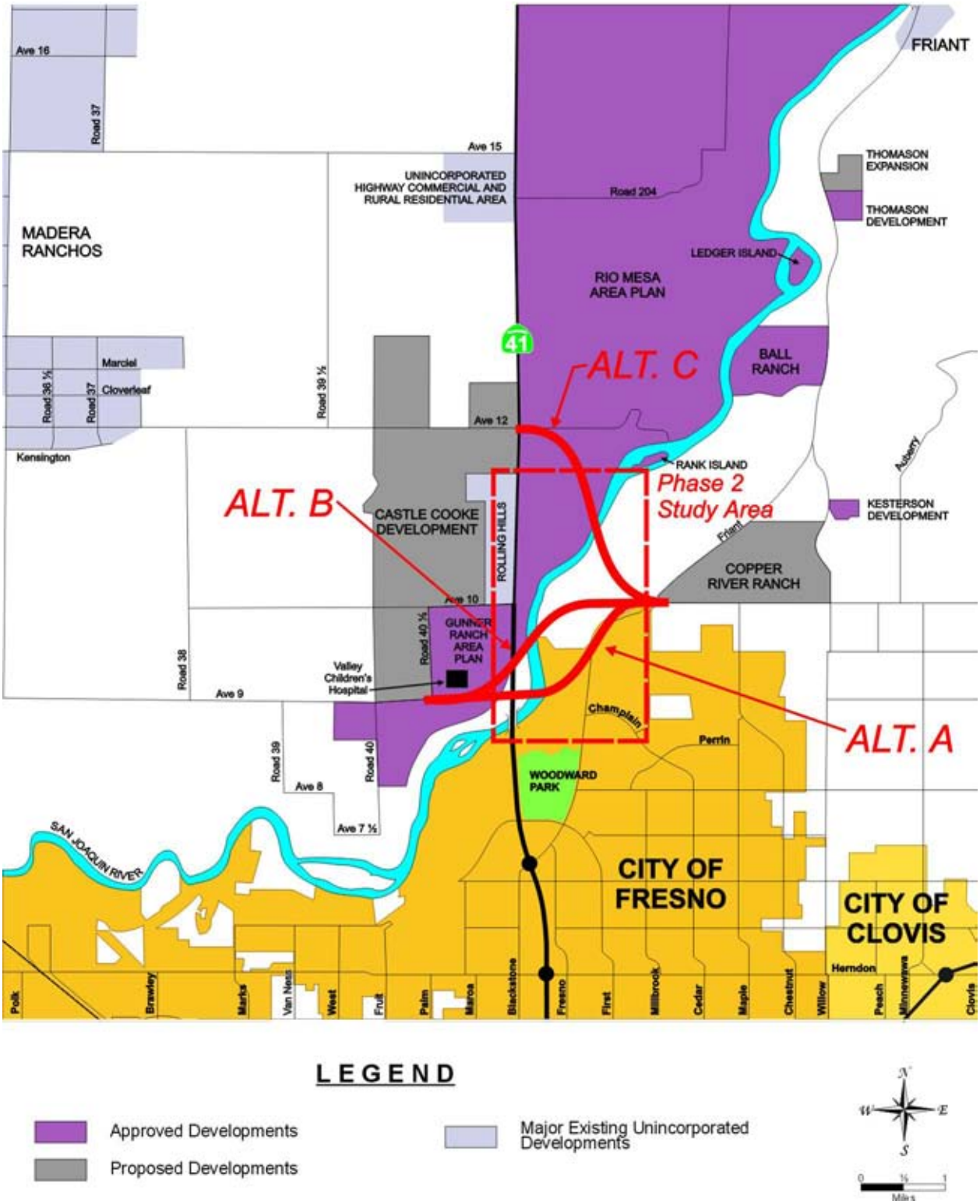
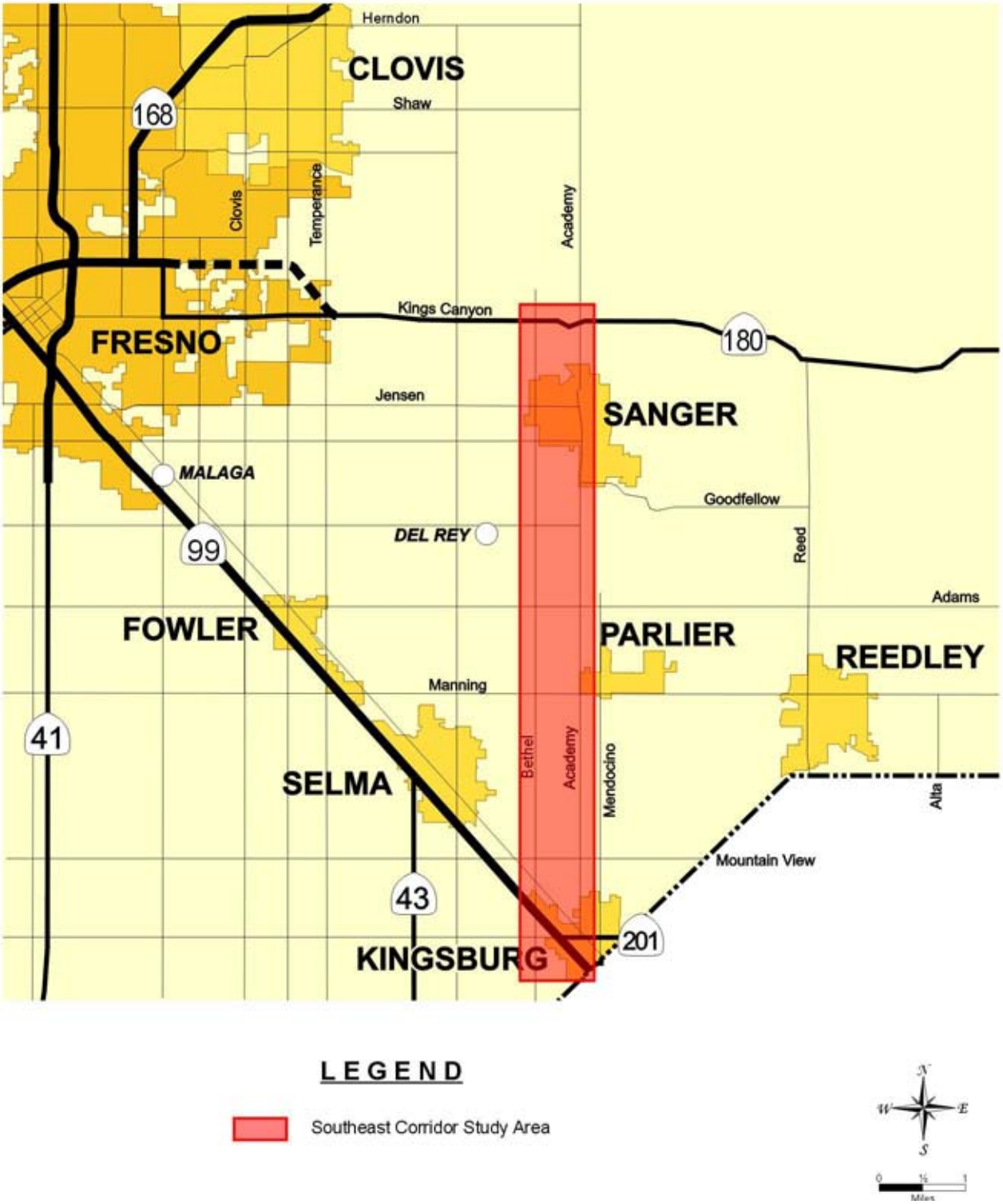


Exhibit 4-10
Southeast Corridor Study



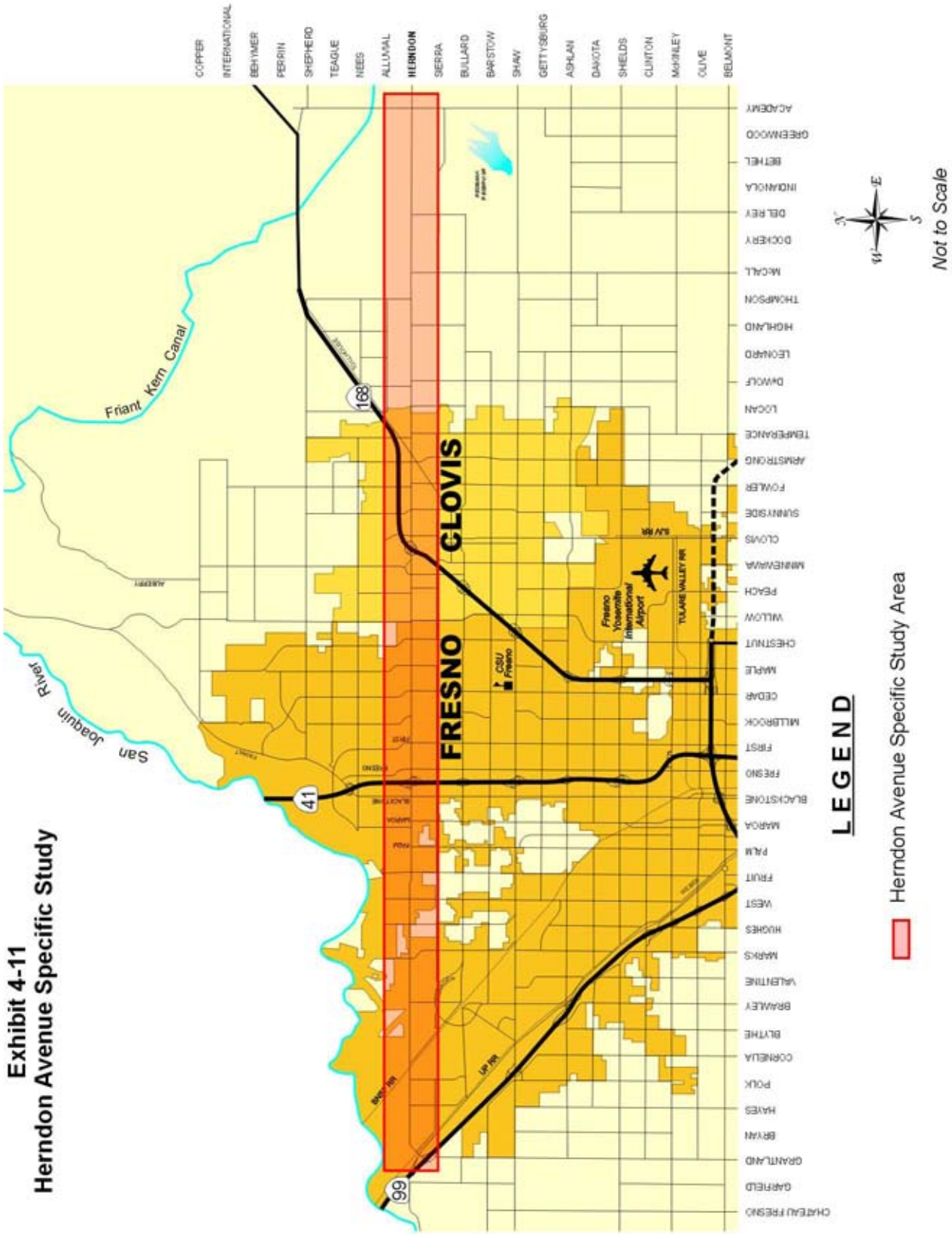


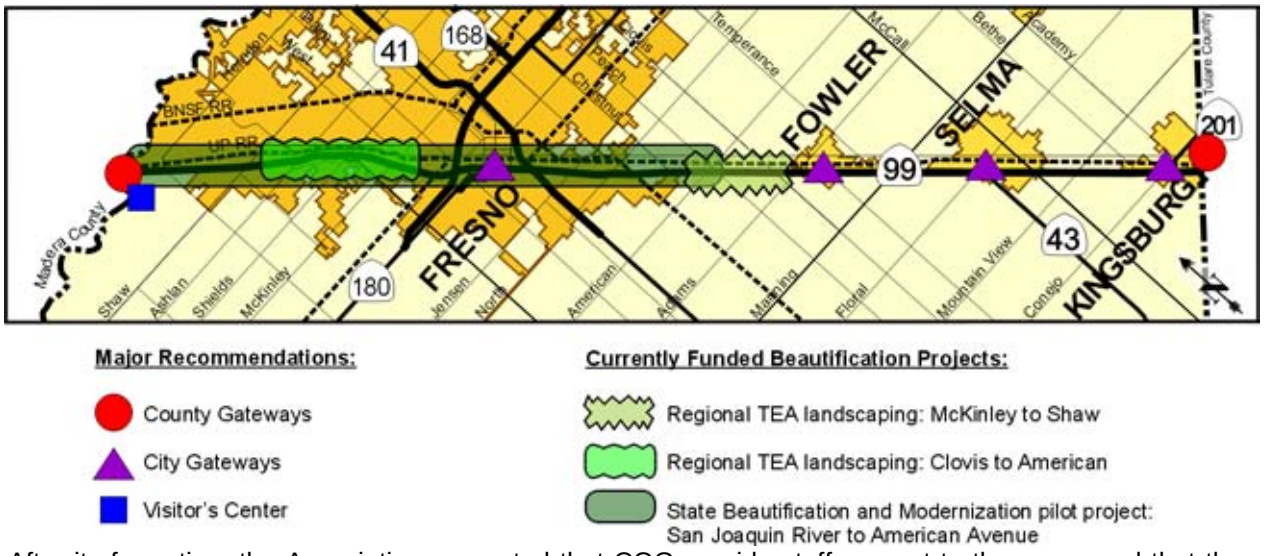
Exhibit 4-11
Herndon Avenue Specific Study
COPPER
INTERNATIONAL
BEHYMER
PERRIN
SHEPHERD
TEAGUE
NEES
ALLUVIAL
HERNDON
SIERRA
BULLARD
BARSTOW
SHAW
GETTYSBURG
ASHLAN
DAKOTA
SHIELDS
CLINTON
MARKLEY
OLIVE
BELMONT
ACADEMY
GREENWOOD
BETHEL
INDIANOLA
DEL REY
DOCKERY
McCALL
THOMPSON
HIGHLAND
LEONARD
DAMOLF
LOCAN
TEMPERANCE
ARMSTRONG
FOWLER
SUNNYSIDE
CLOVIS
MINNEWAWA
PEACH
WILLOW
CHESTNUT
MAPLE
CEDAR
MILLBROOK
FIRST
FRESNO
BLACKSTONE
MARCA
PALM
FRUIT
WEST
HUGHES
MARKS
VALENTINE
BRAWLEY
BLYTHE
CORNELIA
POLK
HAYES
BRYAN
GRANTLAND
GARFIELD
CHATEAU FRESNO
Friant Kern Canal
San Joaquin River
FRESNO
CLOVIS
CSU Fresno
Fresno Yosemite International Airport
TULARE VALLEY RR
SJV RR
UP RR
BNSF RR
168
41
99
LEGEND
Herndon Avenue Specific Study Area
Not to Scale

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.

- A "Welcome to Fresno County" monument sign has been constructed 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.

- A zoning overlay ordinance has been adopted in four of the five land use jurisdictions. This ordinance addresses 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, particularly within Fresno County, will be facing increasing congestion as the population of the state continues to grow. To address this concern, all of SR 99 through Fresno County will need to be 6 lanes. Because of recent construction, most of the SR 99 corridor within Fresno County is now six lanes; however, a portion, mostly within northern Fresno County, remains only four lanes. These remaining segments of four-lane freeway will be expanded to 6 lanes in the next few years.

The widening project funded by Proposition 1b required the preparation of a Corridor System Management Plan (CSMP) in order to secure funding. The Fresno-Madera Urban Corridor System Management Plan included the section of SR 99 from American Avenue in Fresno County to SR 152 in Madera County. In addition, Caltrans District 6 is currently preparing a CSMP to facilitate future planning on SR 41. This CSMP will include the entire length of the SR 41 corridor, including the section in Fresno County.

Travel Demand

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 travel 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 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 (20011 through 2014)

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 (2011 through 2014):

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 (2015 through 2035)

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 2035 approximately 1,519,300 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 nearly $5.7 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 6) 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.

Several hundred safety stakeholders representing 80 different agencies and organizations working together in a collaborative effort developed the Strategic Highway Safety Implementation Plan (SHSIP). The SHSIP contains 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 Plans, 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 2011 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 people with disabilities.

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.

Funding constraints have made efforts to maintain reliable and accessible transit service commensurate with reasonable needs difficult. The 2006 reauthorization of Measure "C", Fresno County's ½ cent sales tax for transportation purposes, has established a stable funding source for Fresno Area Express (FAX). However, actual revenues have been significantly lower than expected. By 2009, Measure "C" was expected to provide an estimated $11 million dollars per year. It is anticipated that in fiscal year 2011 Measure "C" will account for less than $7 million dollars in revenue. 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 service levels. Attention will continue to focus on the needs of transportation disadvantaged populations including low income, elderly and people with disabilities; 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 people with disabilities. 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.

As a result of 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 Fresno 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 determine 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 (FCMA)

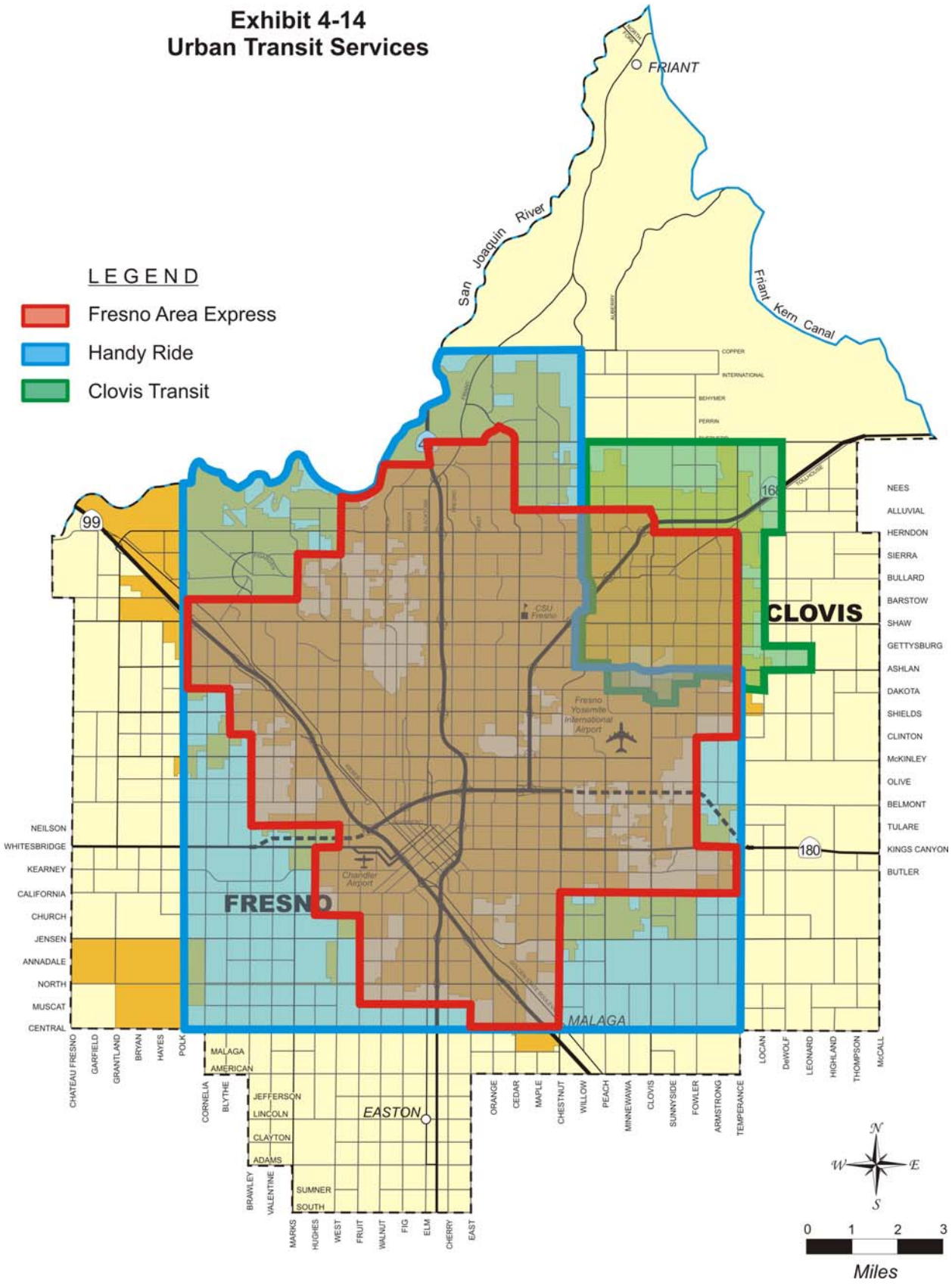
The major provider of urban public transportation in Fresno County is Fresno Area Express (FAX), a department of the City of Fresno. FAX provides two types of public transportation service in the FCMA: the fixed-route service for general public riders, and Handy Ride, a demand-responsive service designed 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 people with disabilities.

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 four routes, each on 30-minute headways, and one express route that operates on school days only. 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 within 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.

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 three daily trips from Fresno to Los Angeles, with connecting services onward to Santa Ana, San Ysidro and Tijuana. There are also two daily trips to San Jose with service to the Westside of Fresno County, and two daily trips to Stockton with service to the northern Central Valley.

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 1999 to 2009, actual revenue service miles increased from 3.3 million to 4.7 million, a 42.9% increase. During that same period, total ridership rose from 11 million in 1999, to 18 million in 2009, an increase in ridership of 63.8 percent. The increase in service miles is primarily driven by the addition of 15-minute frequencies on four routes in 2005/2006.

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. A Regional Transit Agency Formation study was completed in 2007. The Study which included peer evaluations, policy level stake holder interviews, an evaluation of existing system performance and coordination efforts, found that Fresno County public transportation operators already have a high level of cooperation and coordination. Additionally, based on peer evaluations, Fresno County Operators are providing a cost effective and productive service. The Study recommends the formation of a 'Transit Coordinating Council' which would consist of policy level members and technical staff support. The purpose of the Council would be to continue to explore improved coordination potentially leading to a regional transit agency.

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:

- FAX is continuing on the path of Intelligent Transportation Systems (ITS) by adding additional electronic displays at Fresno Yosemite International Airport, and plans to install signs at California State University, Fresno this year. 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.

- FAX and its paratransit coordinator made significant improvement to the efficiency and cost effectiveness of the program by reducing the amount of "No Shows". A "No Show" is when a client fails to fulfill a scheduled trip. "No Shows" were reduced from 10% in 2007 to just over 3% in 2008. This contributed to an 8.8% increase in productivity, to 1.79 Passengers per Revenue Hour.

- In 2009, FAX and MV Transportation were able to eliminate all taxi trips utilized under the paratransit operation. This was down from a peak of 49,000 taxi trips in 2006 and a significant reduction in service costs.

- FAX purchased an additional 41 40-foot CNG buses and 3 Gasoline/Electric Hybrid buses bringing its alternative fueled fleet to 75 vehicles.

- FAX eliminated the Clean Air Express Vanpool Program in FY 2008 because the funding was discontinued; however, the newly authorized Measure C has a provision for the operation of a vanpool program. The new program is administered by the Council of Fresno County Governments.

- Beginning in 2006, FAX increased frequencies on an additional two routes. These routes were identified by the Long-Range Transit Plan as the preferred corridors for high capacity transit.

- In 2008, The Fresno COG in conjunction with FAX completed the Bus Rapid Transit (BRT) Master Plan. The BRT Plan demonstrates how improved efficiency, speed, and service can

attract new transit ridership, improve customer satisfaction, and benefit the broader community by providing a quality of service similar to light rail systems through the use of bus technology.

- Introduced the FAX Senior 7 Program in 2007, which allows seniors to use the FAX route system each and every day at no charge. Senior 7 was the first Measure C Primary Project to be rolled out.

Clovis Transit

Over the past two years, Clovis Transit has accomplished many of its goals including:

- Clovis Transit took delivery of 14 new transit buses; 8 for paratransit and 6 for fixed-route. Seven aging buses were replaced with the remaining seven used as expansion. Prior to the delivery of the new buses, Clovis Transit had very few back-up buses.

- Camera systems have been added to 14 of Clovis Transit's fleet using a Proposition 1B Homeland Security grant. A grant to add cameras in the remainder of the fleet has been approved but not yet funded. Each bus is equipped with five cameras, a digital video recorder that can record up to three weeks worth of video footage and has an automatic vehicle locator embedded. The cameras have been a valuable tool in accident investigation, complaint follow-up and customer service.

- As part of the Measure C expenditure plan, Clovis Transit added an additional bus on route 50 to increase service from every hour to every 30 minutes, added weekend Stageline service, and free rides for seniors age 65 and over. Unfortunately, about 18 months after the weekend Stageline service was implemented, the service was suspended due to funding reductions in light of the current fiscal crisis. Weekend Stageline service is on the top of the priority list when funding has stabilized. Free rides for seniors age 65 and over and the additional bus on Route 50 still continue

- Clovis Transit continues coordination with 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 has been involved in the evaluation and selection of a vendor for countywide registering fareboxes. The Clovis Transit, FAX, Fresno County Rural Transit, Fresno County Economic Opportunities Commission and California State University Fresno have been coordinating efforts for a farebox system that would allow the use of various pass media, and track where media was purchased, where it was used, and which bus stops are most popular. The system will allow for a more seamless transportation experience for passengers and better fare equity for the transit operators. A pilot project with demo fareboxes is being conducted on FAX buses.

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. In 2008, FAX added additional full-time police officers to bring the total to four.

(2) Video Surveillance System
In an effort to prevent graffiti and vandalism on buses, and to increase the safety of our passengers and drivers, FAX has begun procuring an On Board Video Surveillance System. It is believed that the presence of the video surveillance cameras serve as a deterrent to vandalism and other crimes.

(3) Senate Bill 1561: Abide to Ride
On September 28, 2008 Governor Schwarzenegger signed and enacted Senate Bill 1561 authorizing additional transit security measures to curb passenger misconduct and reduce nuisance behavior. Users of public transit have identified passenger misconduct as one of the major issues that impacts the quality of their commute and influences their continued use of bus service. Beginning January 2009, the law permits FAX to exclude passengers whose actions impact the safety and security of passengers and FAX bus operators. The law authorizes FAX to issue a prohibition order to any person cited for committing one or more prohibited acts under various circumstances and prohibiting the person subject to the order from entering FAX property, facilities, or vehicles for specified periods of time up to one year.

(4) City of Fresno Emergency Operations Plan
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 Fresno 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 Fresno 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 criterion 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 Fresno 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 Fresno 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 Fresno 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 Fresno 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

The Fresno COG, as the designated Metropolitan Planning Organization (MPO), is responsible for transportation planning in Fresno County. This includes development and adoption of planning policies and documents, review and coordination of transportation planning, and transportation policy direction. The COG is the lead agency for the development of a Coordinated Human-Services Transportation Plan (CHSTP) under the direction of the **Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).** A coordinated public-transit human-service transportation plan provides a strategy for meeting local needs. It prioritizes transportation services for funding and implementation, with an emphasis on the transportation needs of individuals with disabilities, older-adults, and people with low incomes. The 2011 RTP is consistent with the Public Transit-Human Services Transportation Plan.

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, 2009. 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 completed 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 FAX 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 (Fresno COG). Fresno COG'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 Fresno COG 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. Research is currently being conducted about a new deviated fixed-route in an area with low ridership during the day.

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.

Over the next five years, Clovis Transit does have some specific plans to improve transit services in the community. They are of course depending upon funding opportunities. Some specific plans include:

- County-wide registering farebox system which would improve transportation ease for passengers and allow agencies more detail on where passes are purchased, where they are utilized and the busiest bus stops and times. Initially, Clovis Transit would just be purchasing the pass and passenger counter portion of the system. Due to the current large size of the bill counting units, Clovis Transit vehicles cannot accommodate the bill counting farebox. However, as research and development is able to create a smaller bill counting unit that can be attached to a bus stanchion, Clovis Transit would purchase the smaller units.
- Zonar Pre-Trip inspection devices are being planned to improve safety and security for passengers and citizens by ensuring a complete and proper pre-trip vehicle inspection. The system tracks each pre-trip location and requires the driver to check off each item electronically. Any defects are sent to the fleet shop wirelessly. When repairs are made, the information is sent back to the hand held unit in the bus so the driver knows which repairs were made. The unit also includes an internal AVL system.
- ADA Bus stop improvements are planned to make every bus stop served by Clovis Transit ADA compliant. Grading, concrete work, benches and shelters are planned to improve accessibility and comfort for passengers.
- Replacement vehicles will be ordered as the fleet ages and the older vehicles become too costly to maintain. Also, as service expands, particularly in paratransit, additional vehicles will be required to provide the service without trip denials. Expansion vehicles will need to be purchased.
- Mobile Data Terminals and a completely integrated paratransit dispatching software would improve efficiency and record keeping in paratransit.

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 in the northern neighborhoods abutting Herndon Avenue, west of Highway 99 and in the south east. 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. It has also made it difficult for FAX to serve the areas that are substantially far from the City core. To make the transit system more effective and a feasible choice for non-dependent riders, the City needs to experience greater infill development.

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 Fresno COG Travel Model, traffic congestion throughout the FCMA will reach a 'significant' level by 2020 and 'serious' level 2030.

Increased congestion impacts not just cars but buses as well. 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 FAX LRTP- identified four corridors that could potentially support high capacity transit. 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. The Bus Rapid Transit Master Plan, completed in 2008 confirmed these findings and on August 27, 2009, the Fresno City Council passed a resolution declaring a Locally Preferred Alternative (LPA) for a Bus Rapid Transit (BRT) project. The LPA adoption is a necessary step in applying for Federal Transit Administration (FTA) Very Small Starts Grant (VSS). The project limits include Ventura/Kings Canyon Road from Fowler Avenue on the east to Downtown Fresno, and Blackstone Boulevard from Friant Road on the north to Downtown Fresno. Bus Rapid Transit will bring an innovative, high-capacity, lower cost public transit solution that can achieve the many of the performance and benefits of more expensive rail modes.

In 2006, Fresno County Voters approved a half-cent sales tax called Measure C. Measure C included a projected $5 million reserve for the completion of the PTIS and the formation of a regional transit agency. The PTIS 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 growth and development scenarios that will be used to establish a long-range plan leading to optimum connectivity within the region.

The Public Transportation Infrastructure Study (PTIS) is exploring how people travel in Fresno County, so that by 2050 there will be more opportunities to travel by bus, by bike or by foot.

The PTIS will help Fresno County identify ways to:

- Reduce urban sprawl.
- Decrease traffic congestion.
- Reduce greenhouse gas emissions.
- Improve air quality.
- Preserve agricultural land.

Fresno County's population is projected to grow to 1.9 million people by 2050. This growth will increase traffic congestion on our roadways and highway system. In the past, Fresno County's major growth pattern has been low-density and widely spread geographically. This pattern has consumed prime agricultural land and increased the number of miles residents drive each year, a major contributor to greenhouse gas emissions. Currently, Fresno County does not meet several of the air quality standards in the Federal Clean Air Act or the California Clean Air Act and must satisfy federal requirements to bring the county into compliance.

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 will facilitate a regional pass program is being implemented this year. 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

Fresno 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 Fresno 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 struggled to keep up with the growth in population and service area over the last decade. This is illustrated in some detail on Exhibit 4-16. During the period between 1990 and 2009, the population in the City of Fresno grew by 41.4 percent. The geographic area within the city's boundaries grew by 12.5 percent during that same period. During this period, FAX service miles increased by 56.7 percent, primarily due to the addition of 15-minute frequencies on four of FAX's busiest routes, and total passengers increased by 101 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 role 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 between fiscal years 2006 through 2008, but decreased in fiscal 2009. This was primarily due to a service change that eliminated

Handy Ride vehicles going into the City of Clovis. An agreement between transit operators established meeting points to facilitate trips into Clovis.

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
1990	8,981,596	4.40%	2,994,049	-0.10%	99.38	0.00%	350,700	4.40%
1991 (1)	9,067,499	0.96%	2,983,202	-0.36%	99.38	0.00%	366,200	4.42%
1992	8,477,432	-6.51%	3,051,916	2.30%	99.42	0.04%	379,900	3.74%
1993	8,283,499	-2.29%	3,025,476	-0.87%	100.53	1.12%	389,200	2.45%
1994	7,950,970	-4.01%	3,017,917	-0.25%	101.01	0.48%	395,700	1.67%
1995	8,552,797	7.57%	3,053,058	1.16%	101.03	0.02%	401,400	1.44%
1996	9,225,096	7.86%	3,048,962	-0.13%	102.11	1.07%	406,400	1.25%
1997	9,545,574	3.47%	3,050,894	0.06%	102.11	0.00%	410,900	1.11%
1998	10,399,087	8.94%	3,061,294	0.34%	102.44	0.32%	414,700	0.92%
1999 (2)	11,021,716	5.99%	3,281,329	7.19%	102.89	0.44%	419,800	1.23%
2000	12,419,412	12.68%	3,966,338	20.88%	104.56	1.62%	426,900	1.69%
2001 (3)	13,178,495	6.11%	4,277,175	7.84%	104.85	0.28%	434,948	1.89%
2002	11,905,195	-9.66%	4,289,968	0.30%	105.1	0.24%	442,279	1.69%
2003	11,213,049	-5.81%	4,026,408	-6.14%	106.04	0.89%	448,453	1.40%
2004	10,854,859	-3.19%	3,957,463	-1.71%	106.7	0.62%	458,170	2.17%
2005	11,241,838	3.57%	4,101,325	3.64%	107.35	0.61%	464,784	1.44%
2006	11,808,724	5.04%	4,229,020	3.11%	108.82	1.37%	471,479	1.44%
2007 (4)	15,542,564	31.62%	4,335,012	2.51%	110.4	1.45%	481,035	2.03%
2008	16,925,826	8.90%	4,661,278	7.53%	111.4	0.91%	486,116	1.06%
2009	18,049,827	6.64%	4,690,193	0.62%	111.85	0.40%	495,913	2.02%
Total % Change		**101.0%**		**56.7%**		**12.5%**		**41.4%**

Notes:
(1) Base cash fare increased to $0.75 per trip in 1991
(2) FAX began operating night service until 10 PM on weekdays (September 1999)
(3) Base cash fare increased to $1.00 per trip in 2001
(4) Began using an FTA approved stratified sampling plan to determine ridership

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 inabilities to expand service into new areas, provide service during non-traditional work hours, and improve on the frequency and convenience of service, prevent transit from increasing market share. This makes transit's real impact on congestion and vehicle miles traveled (VMT) nominal.

Stable Funding Source

Measure "C", the ½ cent sales tax, is dedicated for transportation and transit purposes, and has provided local jurisdictions with additional local funds. However, actual revenues have been significantly lower than expected. By 2009 Measure "C" was expected to provide an estimated 11 million dollars per year. It is anticipated that in fiscal year 2011 Measure "C" will account for less than $7 million dollars in revenue.

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, and 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 28th anniversary in 2010. 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 2009-10 edition of the OPB was adopted by the respective agencies policy boards and the COG Policy Board in June 2000.

Fresno County Coordinated Human Services Transportation Plan

In August of 2005, Congress passed SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act; A Legacy for Users). SAFETEA-LU is a federal surface transportation program which provides funding for transportation. Specific transit programs are part of the Surface Act. They include the following programs:

- Elderly and Persons with Disabilities Transportation - (Section 5310)
- Rural Public Transportation - (Section 5311)
- Job Access and Reverse Commute (JARC) - (Section 5316)
- New Freedom - (Section 5317)

As part of fulfilling the requirement to receive funding from any of these sources, Fresno County must complete a 'Coordinated Human Services Transportation Plan'. The plan accomplishes the following:

- identifies resources currently in use for public transit
- surveys users to determine current needs and future expectation of users, and
- develops strategies to close gaps in perceived service levels.

The federal funds are the resources used to close the gaps identified in the plan. The Fresno County Coordinated Human Services Transportation Plan was developed in close cooperation with public transit and human services providers and other stakeholders.

Fresno COG and FAX staff completed the Fresno County Coordinated Human Services Transportation Plan in November 2007. Following an extended 45 day review period for public comments, the document was adopted by the Fresno COG Board on January 24, 1008 by Resolution 2008-03.

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 the following:

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, primarily FTA Section 5310, to replace existing vehicles which exceed budgeted maintenance costs due to age and high mileage.

Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA)

In November 20067, California voters approved Proposition 1B which placed $3.6 billion into a new account referred to as the Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA). It is at the discretion of the State legislature to appropriate this funding to transit operators. In 2007 the legislature appropriated $600 million via Senate Bill (SB) 88. They may appropriate different levels in future years. The criteria by which they make allocations may also change.

SB 88 calls for the $600 million to be allocated to agencies and transit operators who are eligible to receive State Transit Assistance funding pursuant to Sections 99313 and 99314 under new sections 8879.55 (a2) and 8879.55(a3) respectively.

Allocations were proportional to the share of State Transit Assistance (STA) allocated to each agency in FY 2004-05, 2005-06, and 2006-07. Eligible projects were submitted to Caltrans to determine eligibility with SB 88.

The State Controllers Office initially calculated and distributed the Section 8879.55(a3) funding based on the Section 99314 revenue formula. The Section 8879.55(a2) funding is distributed by the Metropolitan Planning Organization's (MPO) per Section 99313 by population. The initial allocation to Fresno County operators totaled $8,217,473.

Eligible Capital Projects (or a minimum operable segment of a project) must address the following purposes:

1. Rehabilitation, safety, or modernization improvements;
2. Capital service enhancement or expansion;
3. New capital projects;
4. Bus rapid transit improvement; or
5. Rolling stock procurement, rehabilitation or replacement.

A month later the State Controller decided to included the PTMISEA as part of the State Transit Assistance Estimate and the 2007-08 Transportation Development Act Claims were adopted using this estimate. However, STA can be used for operations while the PTMISEA must be used for capital. Therefore, approximately $6.5 million in PTMISEA was adjusted out of the STA resulting in Local Transportation Funding (LTF) that was originally claimed for Streets and Roads being transferred to Transit Operations.

The current appropriation is for three years, therefore funding not allocated in 2007-08 will carry over, however there is no guarantee that the Legislature will not revise the guidelines. In 2007-08 Transit agencies, including the Fresno County Rural Transit Agency (FCRTA) began preparing a list of eligible projects to submit to Caltrans. To date, the FCRTA has submitted four Applications for vehicle procurements, electronic fareboxes, and CNG refueling pumps totaling $1,653,394.

In November 2008, the Legislature and the Governor decided to eliminate future STA funding as a means of balancing the State Budget. In December of 2007-08, PTIMISEA funding was suspended by the Governor due to the circumstances of the growing deficit in the State Budget. The State Controller was unable to sell the necessary Bonds to support this and many other Programs. The PTMISEA Program is expected to be restored as the economy recovers.

California Transit Assistance Fund (CTAF)

California voters approved Proposition 1B in November 2006. It included $600 million for Transit System Safety, Security and Disaster Response to be available over a ten year period per Senate Bill (SB) 88.

Fresno County's share of the first year's apportionment was $821,939. The program is to be administered similar to the Public Transportation Modernization, Improvement and Service Enhancement Program (PTMISEA) in that the funds are allocated to Transit Operators per the formula used to allocate State Transit Assistance funds. Project applicants submit projects to the Fresno COG in its role as the Metropolitan Planning Organization (MPO). Fresno COG forwards them to the State Office of Homeland Security, (OHS) who then instructs the State Controller to make allocations directly to the applicant.

The State Controller's office first notified the Fresno COG of this program in January 2007, however at the time the Department of Homeland Security had not published grant guidelines. In the subsequent organization, the Fresno COG was omitted from the initial mailing list, but repeated contacts resolved the matter. The deadline for the projects was April 11, 2008. Funds not requested in the year of apportionment will carry over to the following year but may be subject to changes in legislation. Currently, the Department of Homeland Security will allow applicants to submit a project based on future allocations, however, they will not guarantee the amount of year to year allocations.

Eligible activities include:

A) A capital project that provides increased protection against a security or safety threat, including, but not limited to the following:

- Construction or renovation projects that are designed to enhance the security of public transit stations, tunnels, guideways, elevated structures or other transit facilities and equipment.
- Explosive device mitigation and remediation equipment.
- Chemical, biological, radiological and nuclear explosives search, rescue or response equipment.
- Interoperable communications equipment.
- The installation of fencing barriers, gates or related security enhancements that are designed to improve the physical security of transit stations, tunnels, guideways, elevated structures or other transit facilities and equipment.
- Other security related projects approved by OHS.

B) A capital project that increases the capacity of transit operators to prepare for disaster response transportation systems that can move people, goods, emergency personnel and equipment in the aftermath of disaster.

The Fresno County transit operators (fax, Clovis and FCRTA) were notified and put together 8879.55(a)(2) applications totaling $719,757. The FCRTA submitted an Application for a Phase 1 On-Board Vehicle Video Surveillance Recording System for $165,381. The second year funding for the three (3) operators increased to $$819,958. The FCRTA submitted it's second Application for Phase 2 for an additional $170,941.

Centralized Dispatch and Route Consolidation

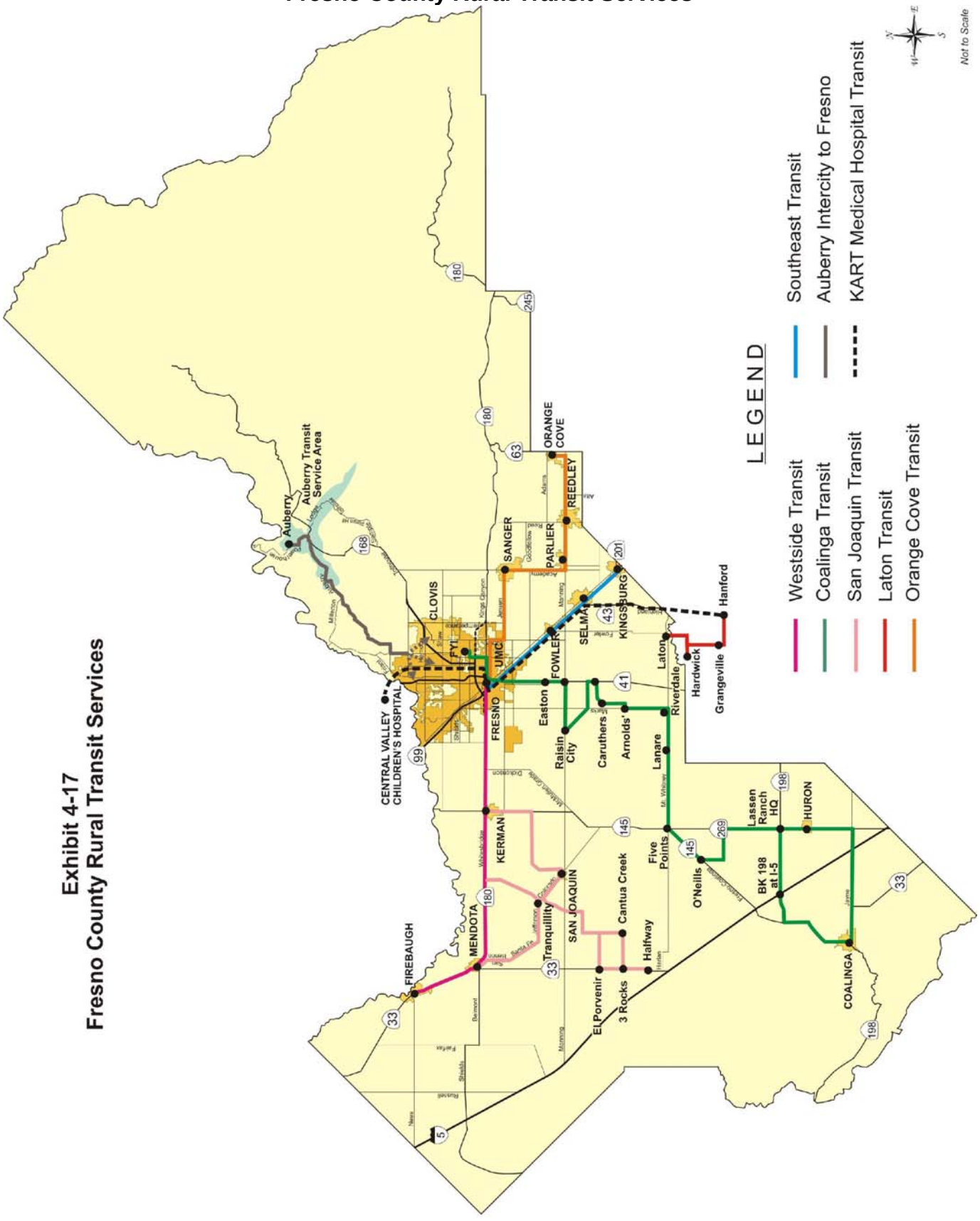
The Rural CTSA continues to primarily utilize its centralized dispatching system for transportation routes. FCEOC's centralized Food Preparation Center continues to have a measurable positive effect on the routing system of the meal congregate site delivery program and related operations.

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.

In 2009-10, as a result of ongoing State budget cuts, the FCEOC worked closely with the Central Valley Regional Center to consolidate client routes to reflect a twenty percent funding reduction.

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	M-F; 8:00am-6:15pm	Fixed-Route with Route Deviation	One R.T. M-F	Coalinga, Huron, Riverdale, Lanare, Caruthers, Easton, Fresno
General Public/Disabled Huron Transit	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	M-Sa; 7:00am-5:30pm	Demand-Responsive	--	Sphere of Influence
Inter-City Service	M-F; 7:00am-5:30pm			
General Public/Disabled Orange Cove Transit		Fixed-Route with Route Deviation	**Two R.T. Wkdays**	Orange Cove, Reedley, Parlier, Sanger, Fresno
Sanger Transit				
Intra-City Service	M-Sa; 7:00am-5:30pm	Fixed-Route and Demand Responsive	--	Sphere of Influence
Inter-City Service				
General Public/Disabled Orange Cove Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. Wkdays	Orange Cove, Reedley, Parlier, Sanger, Fresno
San Joaquin Transit				
Intra-City Service and Inter-Community Service	M-F; 8:00am-5:00pm	Demand-Responsive	One R.T.	Sphere of Influence San Joaquin, Cantua Creek, El Porvenir, Half Way, Tranquility, Three Rocks, Kerman, Mendota, Firebaugh
Westside Transit	M-Sa; 7:00am-5:30pm	Fixed-Route with Route Deviation	Two R.T. M-F	Kerman, Fresno
Selma Transit				
Intra-City Service	M-F; 7:00am-5:30pm Sa; 8:00am-5:00pm	Demand-Responsive Fixed Route	--	Sphere of Influence
Southeast Transit	M-F; 7:00am-5:30pm	Fixed-Route with Route Deviation	Three R.T. Wkdays	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.

- The FCRTA has implemented several Demonstration Programs in recent years. They include: Biola Transit (within the community and to the FCMA); Coalinga Transit Express Transit (service to the FCMA for medical appointment); Friant Transit; Juvenile Justice Campus Transit (first for the Juvenile Campus and second for the Juvenile Court System); and South Sierra Transit (between Dunlap, Miramonte, Pinehurst, Squaw Valley and eastside cities and to the FCMA). We also were able to utilize Welfare to Work funding for several years from the Fresno County Employment and Temporary Assistance Department for: Coalinga Transit service to the I-5 Interchange Development between Coalinga and Huron; Eastside Transit (between Reedley and Selma). They also funded the FCRTA to expand its service hours from 6:00am to 6:00pm, include Saturday Service, and reduced the observance of holidays to just four days per year. Unfortunately, in each case minimum ridership did not materialize to warrant continuation. Minimum performance standards, including ten percent farebox receipts, were simply not met.

- *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.

4.5.4 Proposed Actions

Short-Range Improvement Plan

The 2009-2014 Rural Short Range Transit Plan (Rural SRTP) was adopted by the COG Policy Board in June, 2009. 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 completed the first phase of a "Public Transportation Regional Formation Study
The evaluation study was completed by Nelson/Nygaard Consulting Associates in June 2007. The results reflected recommendations for Policy Board consideration. The three public transit operators have committed to a number of actions to enhance coordination between agencies towards seamless transit services for the general public. The agencies are currently purchasing new electronic farebox equipment that will include utilization of Smart Cards. The use of these Cards will facilitate travel transfers between transit systems and insure the necessary tracking of farebox receipts for accounting purposes. Clovis Transit piggy backed on recent vehicle procurement by the FCRTA. The FCRTA was able to utilize the same vendor, as the Clovis Transit did in purchasing audio-video surveillance equipment to monitors on-board activities by a recorder or by emergency personnel that may wirelessly view on-board activities from a following vehicle.. The FCRTA is coordinating with FAX to purchase and install additional Bus Stop Shelters, benches, and waste receptacles. The FCRTA has received a Grant to purchase two vehicles that are expressly designed to accommodate the transporting of individuals and their mobility

equipment, when they exceed the maximum six hundred and fifty pound limit under the Americans with Disabilities Act (ADA). The vehicles are intended to be available, as needed, by FAX, Clovis Transit, the FCRTA, and County-wide emergency service personnel. The three agencies personnel, assisted in interviewing RFPs, towards the purchase of Trip Planning Software; and Automated Passenger Counting equipment.

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 second phase is for a specific study, with options and alternatives, for management staff and Policy Board consideration. The contract was awarded to Nelson/Nygaard Consulting in March 2010. This study is to recommend Business Plans to facilitate further consideration for the implementation purposes. This action become even more important as each transit agency experience deep funding cuts in traditional transit funding programs.

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 hour operating period continues to 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 (VMT) 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 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; (Table Mountain has recently taken over Millerton - Brighten Crest New Town development) Reedley College; Reedley Regional Job Initiative Center; community medical facilities; Fresno County One-Stop Centers; connectivity to Tulare County – Cutler, Orosi, Dinuba (the FCRTA, in cooperation with the City of Dinuba in 2008-09, implemented an inter-County service that is paid for with local half cent sales taxes, between Dinuba and Reedley), Tulare, Visalia and the College of the Sequoias

In Central Fresno County to institutional facilities, including medical, education, shopping, and recreational. There may be consideration for a "cross town medical express service" to permit faster access to medical 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, Light Rail Transit and Bus Rapid Transit (BRT) stations.

In 2009-10 the FCRTA programmed roving Rural Transit vehicles to provide transit services beyond traditional City Sphere of Influence (SOI) boundaries The program is intended to 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

The tragic 1999 collision of a van transporting field laborers with a semi truck at Five Points in Fresno County caused thirteen (13) farmworker fatalities and became an unfortunate landmark in the history of transportation for agricultural workers in the State of California. This event, which resonates for farmworkers even today, resulted in a directive from the Governor's office to begin the Agricultural Industries Transportation Services (AITS) Project in July 2001 with funding from Caltrans and the Federal Transit Administration. Its purpose was to address the pervasive absence of safe and viable options for traveling "to" and "from" the agricultural worksites for thousands of workers who sustain California's agricultural industry.

The California Department of Transportation (Caltrans) funded the AITS Statewide Needs Assessment Study to determine the existence and extent of the unmet transportation needs among the State's agricultural worker population. Additionally, Caltrans wanted to initiate a pilot agricultural worker transportation program in four (4) Central Valley Counties: Fresno, Kern, Kings and Tulare. The objective of the study was to build upon the limited information compiled on this population, and to recommend strategies to address the outstanding issues surrounding this form of transportation. In order to achieve the stated goals, the consultant team engaged in several data collection activities which included focus groups and community forums with farmworkers and their families conducted throughout the State's major growing regions, telephone and personal interviews with major stakeholder representatives, and mail surveys to the State's licensed farm labor contractors.

The results of the study are contained in a 132 page final report entitled "Agricultural Industries Transportation Services (AITS) Statewide Needs Assessment Study" that was completed after a three year effort in May 2003. There are several transportation and related improvements needed to create sufficient opportunities for farmworkers to avail themselves of safe, affordable and dependable transportation. Further, fundamental changes in access to vehicle insurance, the introduction of vanpools, modifications of federal rules and greater enforcement of vehicle safety laws will improve the existing situation for the targeted implementation. The final report includes seventeen recommendations for Caltrans to consider for further review, and implementation. The report also recommends further review of both AITS Pilot Program and the Farmworker Driver Safety Program, which were beginning to be implemented in late Spring 2003.

The initial AITS Pilot Project budget totaled $8 million; $4 million from an FTA Job Access/Reverse Commute (JARC Grant) and $4 million in matching funds from the Public Transportation Account. An additional $1 million grant from the National Agency of Traffic Safety Administration to the California Office of Traffic Safety was to fund seat belt education and CHP inspection of farm labor vehicles.

The AITS needs assessment was used to guide the expansion of the Pilot Project currently underway in Fresno, Kern, Kings and Tulare counties into a statewide public transportation service available to farmworkers and meeting the needs of the agricultural industry.

The Fresno, Kern, Kings, Tulare County AITS project is operated as a public transit component in order to come into compliance with the Federal Department of Labor regulatory guidelines. An ever-expanding fleet of fifteen passenger vans has been purchased. The program began with forty-eight (48) vehicles in Kings County. Following the FCRTA Board of Directors action to enter into a Memorandum of Understanding with Kings County, seventy-five (75) additional vans were ordered for eventual service introduction to address the needs in Fresno County.

The Central Valley AITS Pilot Project sought to target transportation services specifically for agricultural workers. Via inter-agency agreements with Fresno and Tulare counties, the Kings AITS project endeavors to deliver a unique hybrid system of public transportation that is a combination of public sector

management services and a private sector business model to aid sustainability. They have collaborated with Proteus, the leading service provider in the region and have designed the pilot program with the potential of inherent sustainability given a business model of affordable fares and controlling program overhead costs.

In the Spring of 2007, the Project had 105 farm labor vanpools in operation by residents in each of three (3) counties. The residents are trained and certified to safely operate the vanpool vehicles. The operators of these vehicles both drive the vans and work at the agricultural fields and packing facilities in the designated service area. Vanpool fares are $25 per week based on a total trip length of less than three hundred (300) miles per week, with operating costs averaging $880 per month.

The initial efforts of the Pilot Program were confronted with numerous obstacles, barriers and unforeseen challenges. A few examples of these barriers are the United States Department of Labor (USDOL) regulations barring the project from charging passengers the estimated fares, limits on the number of passengers that can be transported in these vehicles by drivers that are also workers and other impediments that have prevented the Project from being fully implemented in a timelier manner. Over the past several years, additional concessions have been reached with the Department of Labor.

The Pilot Program now focuses on marketing to target populations while assisting other agencies in establishing their own projects. Valley farmworkers now see the AITS project as a viable option in getting to work. Outreach continues at various events held in the area. Extended outreach to other agencies is taking place in areas outside the original three (3) county project area. Interested individuals continue to participate in bilingual classroom and behind-the-wheel- training. Numerous participants have graduated, been tested and licensed and are now successfully providing transportation service to fellow farm labor workers.

The Central Valley AITS Project has been embraced by workers, local community service providers, legislators, the media and the California Highway Patrol as the single best effort in meeting the transportation needs of both the agricultural industry and the people that work for them. Ongoing performance evaluation status reports will be provided to the FCRTA Board of Directors and the general public.

The AITS program continues to receive recognition for the positive results benefiting valley farm workers. This resulted in the passage of SB 1135 in 2006, funding expansion into Kern and Madera counties, as well as spurring others to implement Projects in other areas of the State. During the first cycle in 2006-07, $5,255,552 was awarded. A second cycle in 2007-08 funded additional projects worth $10,166,506. The final cycle in 2008-09 funded $4,577,942 in projects. Presently, all funds are expended with projects underway in 12 additional counties.

Expansion of the project outside of Kings County has resulted in the move to create a regional Joint Powers Agency (JPA) for the future operation. The Agency would assume operation of both the AITS Project and the KART Vanpool Program. The Agency would include representatives from each of the five (5) counties (Fresno, Kern, Kings, Madera and Tulare) now served by the project. The formal creation of the Agency is anticipated to take place in 2009.

The “San Joaquin Valley Express Transit Study” conducted by the County of Merced, is recommending the creation of the regional agency. It also made the finding that a publicly operated vanpool system is the most practical and cost effective way of addressing transit needs in the rural San Joaquin Valley. In addition, they recommend the establishment of a central rideshare website and creation of additional park and ride lots.

Locally, Measure “C” will add to additional available funding in Fresno County. Annually through 2027, $1,000,000 will be available to expand farmworker van pools and an equal amount ($1,000,000) will be available for commuter vanpools.

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, hydrogen 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 at the FAX near Downtown Fresno, Clovis, Sanger, Reedley, Southwest Transportation at Elkhorn and State Highway 41, Fresno State and at Harris Ranch. Specifically a station should be considered near Kerman for the Westside, and Selma for the Southeast side of Fresno County. It should be noted the San Joaquin Valley Clean Cities Coalition, in cooperation with the San Joaquin Valley Air Pollution Control District, submitted a joint valley-wide U.S Energy Department Application in the Summer of 2009. Among other things, he Application included the placement of additional CNG refueling stations in our area. However, California's entire Federal Stimulus funds for this expressed purpose, were awarded to a Southern California for profit company

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

The FCRTA maintains a website at www.ruraltransit.org to explain our services to the inquiring general public. Transit service information, phone numbers and schedules are highlighted.

The COG has published editions of their *"Fresno County Transportation Guide"*. The guide has been 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.

An alternative marketing flyer is actively being considered for future implementation. The pocket sized flyer would unfold as a large sheet of paper. It would illustrate FAX and Clovis Transit on one side and FCRTA information on the other. The multi-colored maps would include routes and service area maps, basic service information and the phone numbers for more information.

The implementation of Trip Planning Software would also provide specific information, identify routes and service pick-up and drop-off location information for the inquiring public.

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-eight years ago.

FCRTA currently contracts with the Rural CTSA for driver and dispatcher for the following public transit subsystems: Auberry Transit; Del Rey Transit; Firebaugh Transit; Fowler Transit, Huron Transit; Kingsburg Transit; Mendota Transit; Orange Cove Transit; Parlier Transit; San Joaquin Transit; Selma Transit; Southeast 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.

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 thirty years the FCRTA has recognized its responsibilities in ensuring accessible services to passengers. The agency has had a one hundred percent 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 thirteen 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
    - 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
    - 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 a dozen primary issues:

1. Continue *Implementation of adequate rural transit inter-city services to augment Common Carrier 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 is being implemented in 2009-10.

3. *Expanded service to unincorporated rural area residents who live beyond city transit area boundaries.* The Rural Transit subsystem service is being implemented in 2009-10 with Measure-C funds. Marketing the service to remote rural area residents only is problematic. Service requests are expected to be sporadic at best. Fares needed to reflect distance/time traveled is yet another issue. Monitoring the actual service will assist staff in implementing further modifications

4. *Adequate and stable funding for additional transportation improvements.* Traditional transit funds are being subjected to legislative actions as a reflection of the state of the economy. The Passage of Measure-C funding was intended to augment traditional funding for capital and operating assistance. The collective resources have declined double digit percentages. Projected growth has shown a collective decline. Delays in grant funding are being experienced. Congress and the President have yet to address Reauthorization legislation for the Federal Department of Transportation. Transit vehicles and passengers are being subjected to less than optimum driving conditions over roadways that have not been receiving adequate funding for even minimum maintenance projects. 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 all transportation providers.

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 (VMT) and thus air quality emissions, of single occupancy vehicles. The public is beginning to accept carpooling, vanpooling, and commuter bus service. Measure-C has 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 was the first of its kind in California, and continues to expand throughout California. To date, nearly one hundred 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. The success of the local program is increasing to the point that a separate Joint Powers Agency is being considered in 2009-10 for implementation in 2010-11.

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. The FCRTA has made significant progress in addressing its responsibilities under the Federal Clean Air Act of 1990.

    A new series of responsibilities are pending to address the issue of Global Warming, California has enacted SB375 and AB 32 to specifically address Greenhouse emissions. Reportedly, Federal legislation may be introduced for consideration by the end of March 2010.

    The FCRTA will strive to do what it can to address the unfunded mandated of both State and Federal laws, because future funding may depend on compliance.

11. *Elimination or reduction in administrative paperwork.* The FCRTA continues to be adversely affected by continuous requests for increased documentation in support of new funding programs.. The hiring of additional staff to address the additional requirements should not adversely increase operating expenses, and further impact the achievement of minimum farebox recovery requirements. It should not be necessary to consider a fare increase to the riding public, just to address ever increasing administrative paperwork that is seldom acknowledged. or utilized for a meaningful purpose.

12. *Further Consolidation and Coordination of Transportation Services*. The public transit agencies have previously responded to retained consultants who prepare evaluations towards additional consolidation and coordination of transit services. A new study begins in March of 2010 in an effort to prepare business plan alternatives for management and Policy Board consideration and possible action. during the time period of the RTP.

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. New unfunded mandates to address ongoing pollution reduction requirements will be further impacted in

an entirely different way as the awareness for Global Warming, is understood further. The comprehensive recognition of carbon emissions and there relationship to the reported problem of greenhouse gas coupled with requirements for major reductions is difficult to fully appreciate at this time.

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 is focused on aviation related 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 157 feet and encompasses 37 acres. It has one runway that is 3,102 feet long and 60 feet wide. It has about 12 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 336 feet and encompasses 1,728 acres of land located approximately five miles east of downtown Fresno. It has two runways, a principle runway (11L/29R) 9,227 feet long and 150 feet wide and a parallel general aviation runway (11R/29L) 7,205 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 148 general aviation aircraft are based at FYI and there are approximately 104,200 annual operations. The number of enplaned passengers at FYI was 1.253 million passengers in 2008. While this is a slight decrease from recent years, it is not nearly as significant a decrease, on a percentage basis, as most other commercial airports. The amount of enplaned cargo has also recently decreased with the relocation of DHL to Ontario Airport in Southern California and the national recession. However, the amount of enplaned cargo and number of passengers are once-again expected to grow over the next twenty-five 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.

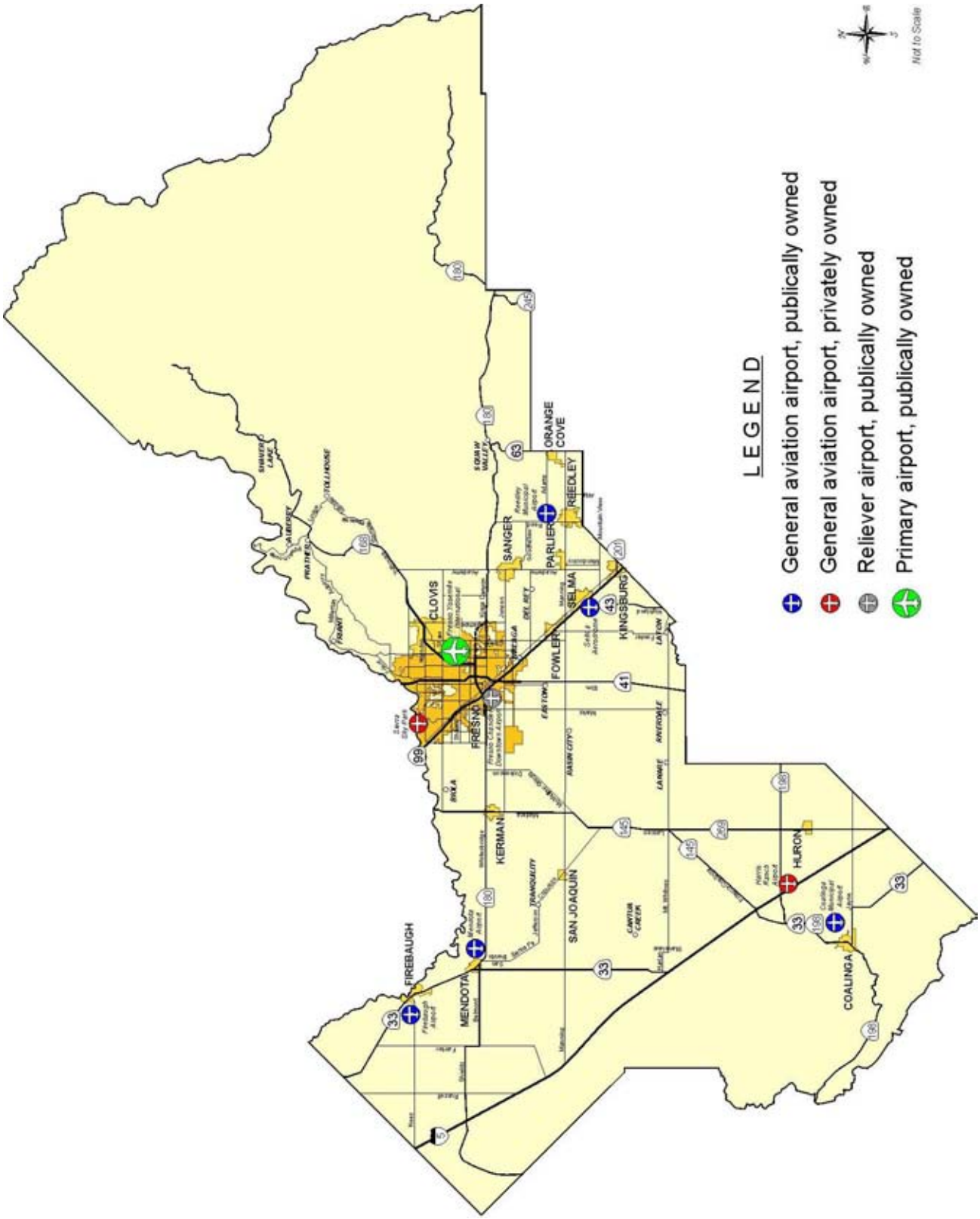
Fresno Chandler Executive Airport

Fresno Chandler Executive Airport is a federally designated "reliever" airport. Chandler is at an elevation of 279 feet and encompasses 200 acres. Runway 30L/12R was recently extended to 3,630 feet long and is 75 feet wide. Chandler currently has 113 based aircraft, five fixed based operators and handles approximately 25,000 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 130 acres. It has one runway that is 3,499 feet long and 50 feet wide. It has no based aircraft and handles about 4,000 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 62 based aircraft and two fixed based operator and handles about 33,000 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 50 based aircraft and four fixed based operators and handles about 12,000 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 40 based aircraft and handles approximately 12,500 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 444 based aircraft and the public use airports combined handle a total of about 216,000 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 the City Council adopted on January 17, 2008, an Airport Master Plan for the Coalinga Municipal Airport, prepared by Aries Consultants Ltd. The Plan will accommodate the type and extent of aviation facilities needed at the Airport through the year 2025.

Airport Land Use Commission

Beginning in October 2008, the Council of Fresno County Governments assumed responsibility from the County of Fresno for staffing the Airport Land Use Commission (ALUC). As the Metropolitan Planning Organization (MPO) and Regional Transportation Planning Agency (RTPA) for Fresno County, the County of Fresno and the 15 incorporated cities agreed that Fresno COG was the logical place to house the ALUC. The ALUC reviews land uses and land use changes, rezoning applications, zoning ordinance text amendments, airport master plans and building regulations proposed by local jurisdictions when located in the review area of Fresno County airports. This review process is established to determine a project's or proposed land use's consistency with the adopted Fresno County Airport Land Use Compatibility Plan (ALUCP) for noise, safety, airspace protection, and avigation easement and protection. Further, proposed transportation projects that are part of the Regional Transportation Plan (RTP) undergo an environmental review process which is also reviewed by the ALUC for a determination of consistency with the ALUCP. This ensures that RTP projects have met the requirements of the adopted Fresno County ALUCP prior to inclusion in the RTP or upon major scope changes that require an RTP amendment. 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 ALUC 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.

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.

More recent improvements include the construction of a new rental car facility; an expansion of the baggage claim area; a remodel of the terminal lobby, including consolidation of ticket counters, an expanded meet and greet area, and a "sense of place" art project; and, an expansion of the security checkup area.

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.

Fresno 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. Runway 30L/12R was recently extended to 3,630 feet, Taxiway A was rehabilitated and, airfield drainage improvements and security improvements were made.

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. Also completed was the 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.

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.

Recent improvements at the Harris Ranch Airport include a major asphalt sealing project.

Recent improvements at the Mendota Airport include a major overlay runway project.

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.

Recent improvements at the Reedley airport include a 60-foot by 240-foot paved runway stopway and an 80-foot by 100-foot blast pad, a taxiway widening from 25 feet to 30 feet, and installation of an Automated Weather Observing System (AWOS).

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 January 1, 2009 of 1,965,609 or 5.1 percent of the total California population of 38,292,687. 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. Surveys show that FYI is losing perhaps several hundred thousand passengers to Southern California and Bay Area airports and passengers instead driving to their final destinations. 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 gross domestic product.

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 may experience significant air cargo constraints that include both facilities and operations capacity, thereby presenting an opportunity for Fresno's FYI. Intermodal goods movement planning in the near future should, therefore, focus on 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.

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, installation of reflective markers and security fencing, a 150-foot runway extension, and reconstruction and repaving 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 and rehabilitate aircraft taxiways. 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).

At FYI, numerous short-range improvement projects are planned. Some 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 is notable because of its cost of 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, widen the runway by ten feet on the west 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 Brawley Avenue west of Freeway 99 and Temperance Avenue to the east while Freeway 168 has been completed between Freeway 180 and Tollhouse Grade. On Freeway 180, interchanges have been 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 provides 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. This RTP does recognize 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 comprehensive 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.

Furthermore, the relationship between transit, bicycling, and pedestrian trips is important to the Fresno COG and to the communities within Fresno County. The Blueprint Planning Program along with the Public Transportation Infrastructure Study (PTIS) are of primary importance in addressing this relationship. For example, Blueprint Smart Growth Principles include "create walkable neighborhoods, mix land uses, and provide a variety of transportation choices" among many others. Within the new Measure C Program, 4% of funding is allocated to pedestrian/trails/bicycle facilities subprograms while fully 24% of funding is allocated to the Regional Public Transit Program, including the Public Transit Agencies Subprogram (19.66%), the Farmworker/Car/Van Pools Subprogram (1.16%), the New Technology Reserve Subprogram (2.10%) and the ADA/Seniors/Paratransit Subprogram (0.79%), among others. In addition, the 2011 RTP includes new policy regarding Complete Streets and policy enhancements suggested by the Fresno County Department of Public Health that emphasize walking, bicycling, and transit for reasons of health and well-being. Policy and funding are finally coming together to establish an achievable, not just theoretical, relationship between transit and bicycling/pedestrian infrastructure.

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

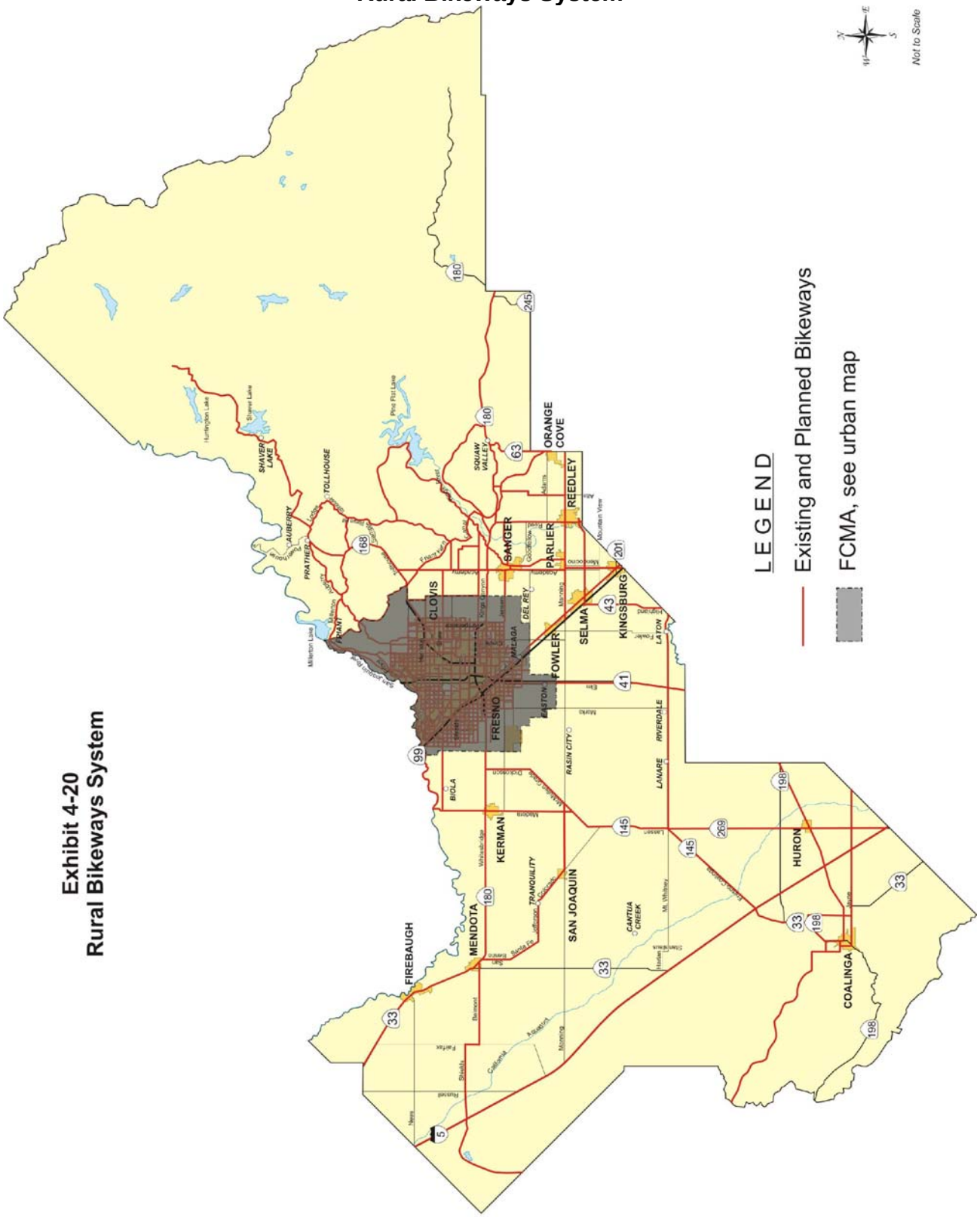
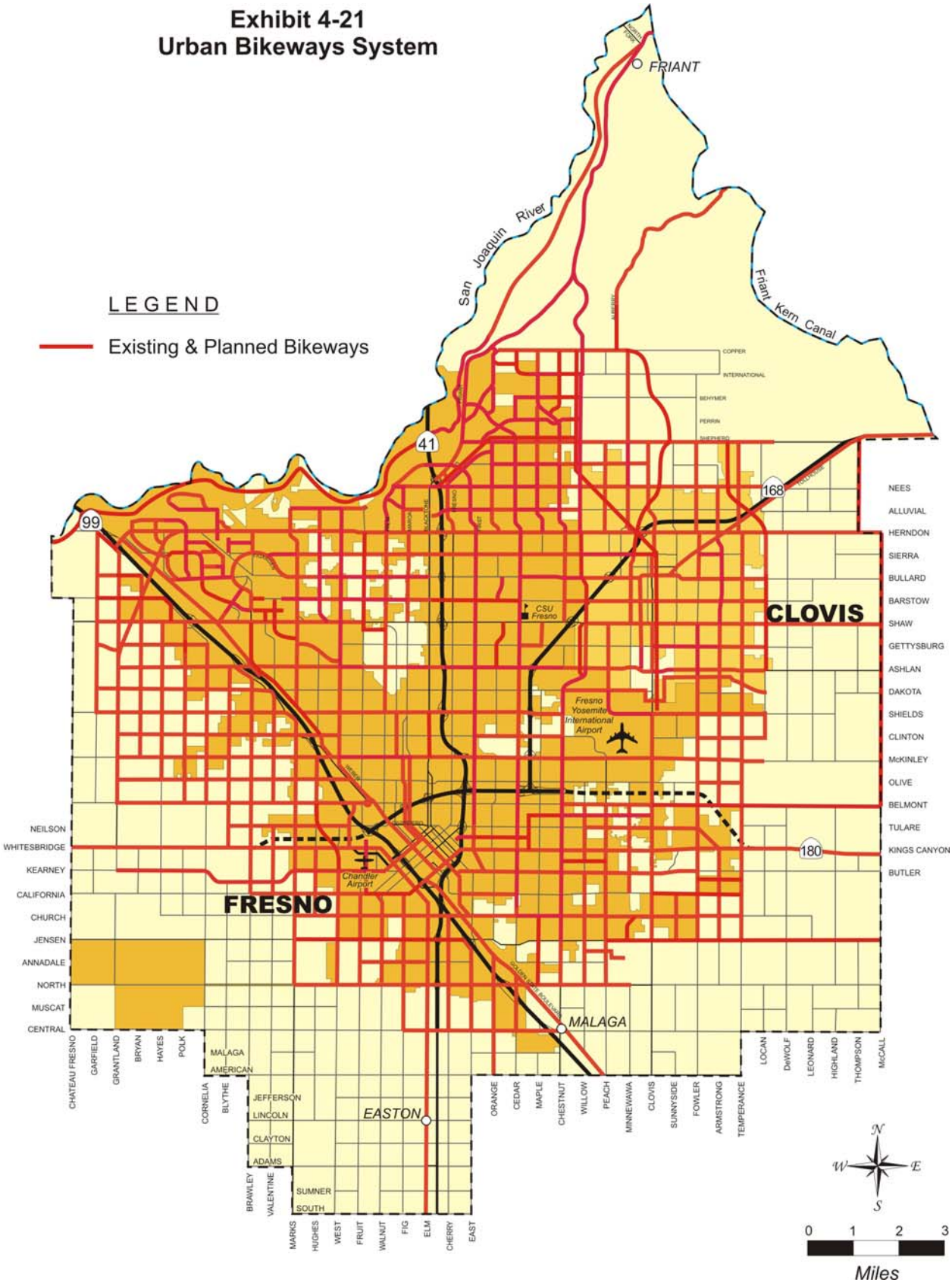


Exhibit 4-20
Rural Bikeways System

Exhibit 4-21
Urban Bikeways System



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. These include Clovis, Reedley, Kerman, Fresno, Mendota, Sanger, Orange Cove, San Joaquin, Firebaugh, and the County itself.

The City of Fresno requires 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. In addition, the City of Fresno contracted with the consulting firm Fehr and Peers in 2009 to prepare a comprehensive Bicycle Master Plan. The Plan is estimated to be completed by mid-2010. The County of Fresno has also begun the preparation of a Regional Bicycle Master Plan. That Plan is estimated to be adopted in August 2010. The City of Clovis will also likely update its Bicycle Master Plan in 2010. All of this activity provides a unique opportunity to develop a comprehensive and coordinated bicycle/trails system within the Fresno-Clovis Metropolitan Area and the entire county.

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, bikelanes, 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. As noted above, both the City of Fresno and the County of Fresno are currently developing comprehensive revisions to their Bicycle Master Plans/Bicycle Transportation Plans, with completion in 2010. The City of Clovis also expects to update its Bicycle Transportation Plan beginning in 2010. 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.

There is an ongoing need to focus on implementation of facilities through development project requirements and 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 particularly 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

The Fresno COG began implementation of the Measure C Extension Pedestrian/Trails/Bicycle Facilities Program in Fiscal Year 2007-08. 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.

In 2008, the State of California enacted AB 1358, the Complete Streets Act, which requires cities and counties to incorporate provisions for multimodal streets into their General Plan Circulation Elements starting in 2011. This requirement will result in streets, roads and highways that better meet the needs of pedestrians, bicyclists, and others in a manner that is suitable to the rural, suburban or urban context of the General Plan.

Long-Range Improvement Plan

The proposed Fresno COG 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 2011-12. Through this planning effort and other means, the Fresno COG, in conjunction with its member agencies, will renew efforts to encourage bicycle travel and to coordinate metropolitan and regional planning efforts.

The 20-year Measure C Extension Program estimated countywide 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 $16.3 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 proposed Fresno COG 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 Amtrak San Joaquin passenger rail 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 RailAmerica 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

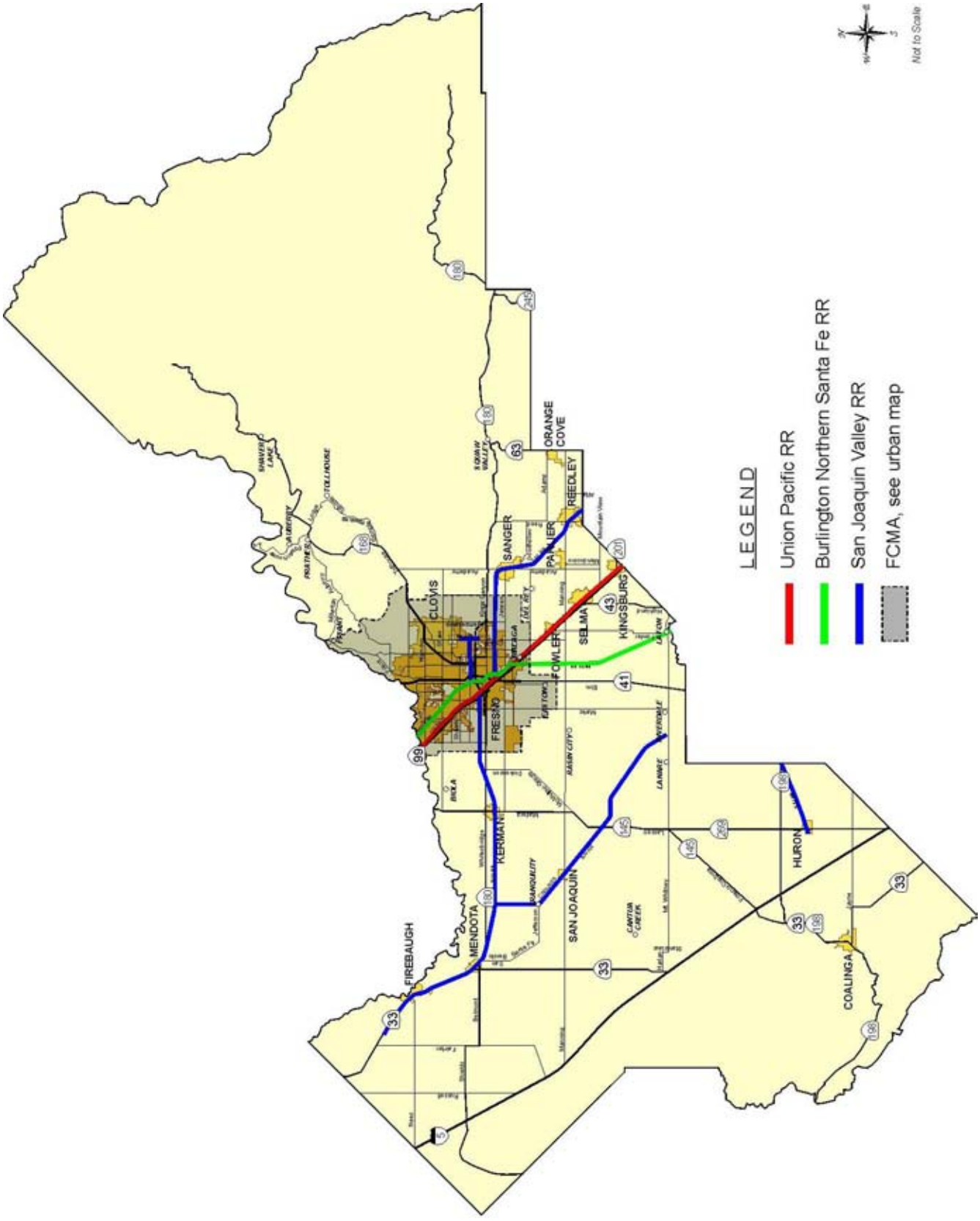
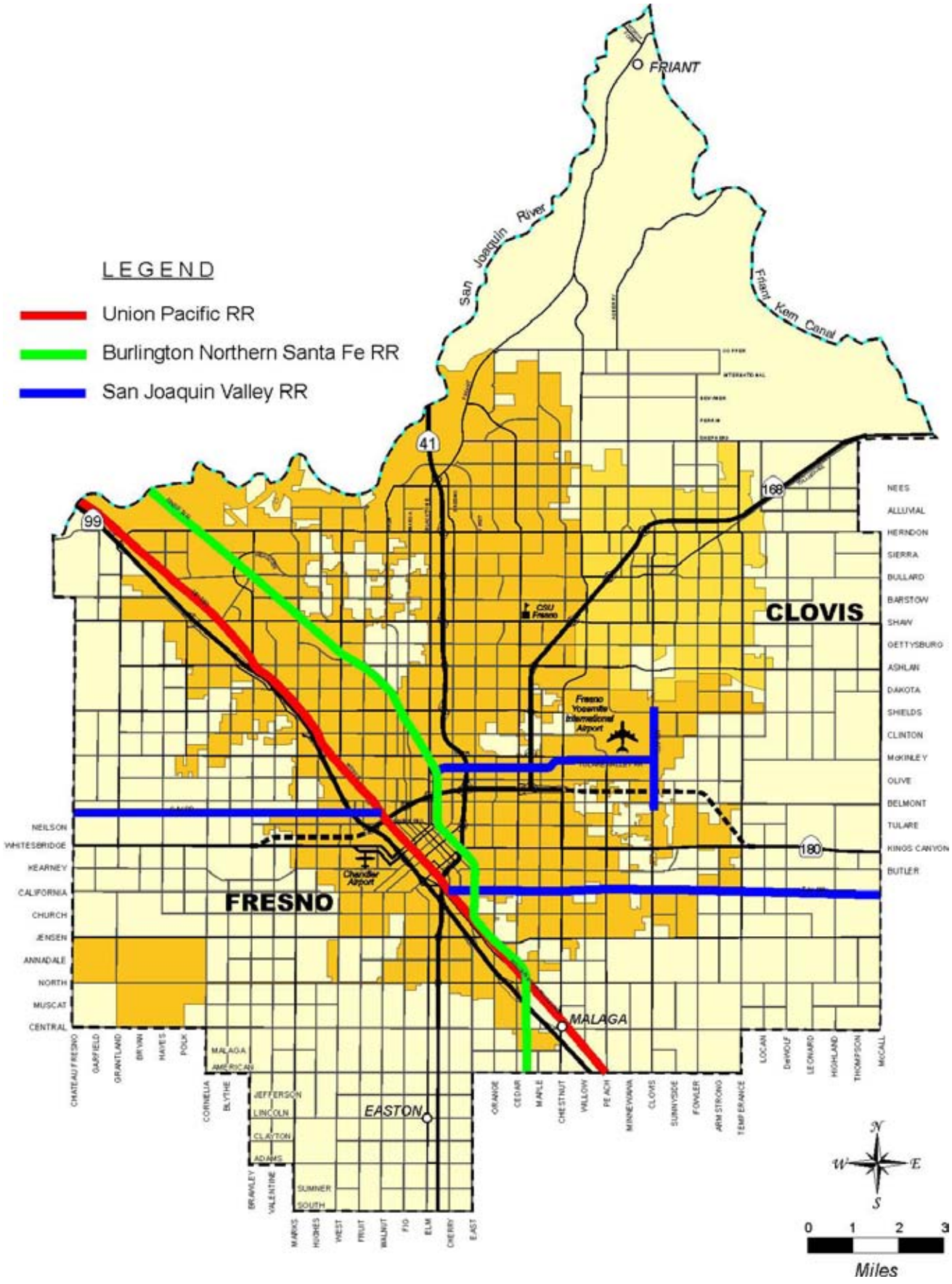


Exhibit 4-23
Urban Rail System



Fresno plays a strong role in the success of the San Joaquin service. Fresno is the second busiest origin/destination of all the stations serving only the San Joaquin Route. As ridership between the Valley and Southern California has increased, these trips to and from Southern California cities have become a significant share of the San Joaquin Route revenue miles.

The Amtrak San Joaquin trains have made significant improvements in fare recovery, operating efficiency, and on-time performance. The feeder bus service, more frequent service, and improved on-time performance are the major reasons the service has increased ridership over the last several years.

The trains continue to provide an important service to the residents of the Valley and ridership figures indicate the service is being used by more people every year. The retention and expansion of this service is essential to the continuation of a balanced transportation system in Fresno County.

4.8.3 Accomplishments

Recent Planning Activities

Consolidation Efforts

The existing BNSF tracks pass through the urbanized portion of the City of Fresno, thereby creating numerous transportation problems. Moving all BNSF rail traffic to the UP corridor or to an alignment that bypasses the metropolitan area to the west is important as it would: 1) eliminate at-grade train/vehicular conflicts along the BNSF corridor, resulting in a safer environment for motorists and pedestrians; 2) eliminate delay to emergency service vehicles due to train/vehicular conflicts; 3) eliminate the slower speeds required on the BNSF corridor because of its location in more urbanized areas of the community; 4) eliminate the need for additional grade separation structures on the BNSF; 5) make available the BNSF corridor or portion thereof for multi-use trail purposes and/or potential local or light rail service; and 6) reduce air pollution emissions through traffic flow improvements.

Exhibit 4-24
Conceptual Alignment of the Proposed BNSF/UP Rail Consolidation

The City of Fresno, Fresno County, the COG, and the railroads previously contracted with HDR Engineering to provide an independent cost analysis for rail consolidation in the Fresno Urban Area. That analysis was completed in July 1993 and included preliminary cost estimates to relocate the BNSF mainline track into a single corridor now owned and operated by the UP, and build needed grade separation structures. BNSF and UP trains, under this option, would operate on the UP alignment, from the point where the two railroad tracks now cross at North Avenue and Golden State Boulevard near Calwa to a point north of Herndon Avenue. At that point, the BNSF would cross the San Joaquin River on a new bridge structure and curve into Madera County to connect again with BNSF's existing main line north of Avenue 7 as illustrated in Exhibit 4-24. The study estimated the total cost of consolidation to be

about $206 million, including additional grade separation structures in the Union Pacific corridor costing an estimated $96 million. Many of these grade separation structures will eventually 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.

In 2009, the Fresno COG entered into an agreement with the California High-Speed Rail Authority to jointly fund a study to define and evaluate an alignment that would accommodate both high-speed trains and rail consolidation or rail realignment. The study evolved to focus more narrowly on rail realignment as the Authority acted to implement the high-speed train project. The study concludes a stand-alone rail realignment projects can be expected to cost between $803 million and $1.38 billion depending on the alignment developed.

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. A team of consultants led by Kimley Horn and Associates has been retained to conduct the study, to be completed in 2010.

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 and the eighth round trip by rail from Stockton to Oakland, planned in FY 2011-12, when Caltrans expects to procure new cars and locomotives.

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. This plan has since been updated and approved by the Authority in 2009. The Authority certified the Final Program EIR/EIS for the statewide high-speed train project, with the exception of the Bay Area to Central Valley segment, on November 2, 2005. The Authority certified the Final Program EIR/EIS for the Bay Area to Central Valley segment on July 9, 2008. 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, including the location of the heavy maintenance facility in Fresno County, 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 completed subsequent 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. COG staff is currently monitoring the potential abandonment of the segment of the San Joaquin Valley Railroad in Tulare County between Exeter and Jovista for its implications for Fresno County and future freight and passenger rail.

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 be extended to Coalinga and 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, completed 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. Alternatively, realignment of the BNSF by itself or in conjunction with the UP to a new corridor that would bypass the metropolitan area to the west.

- 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/realignment and high-speed rail.

- Obtaining and preserving appropriate 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/rail realignment, 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/rail realignment. 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 will take place at ten years. If rail consolidation/rail realignment 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 could 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. Should rail consolidation/rail realignment 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 extension of Measure C includes funding for Phase II of this Study. The purpose of the PTIS 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 also 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.

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 Burlington Northern Santa Fe, Union Pacific, and high-speed rail traffic may 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/Rail Realignment

The extension of Measure C provides for an estimated $102.5 million over the twenty-year period for rail consolidation/rail realignment. Effective July 1, 2007, funding became available for planning, design, and environmental studies as well as lobbying activities required to secure additional funding. In 2009, the COG entered into an Agreement with the California High-Speed Rail Authority to retain a consultant to define a potential project that would achieve the objectives of both high-speed rail and rail consolidation/rail realignment. While the Authority subsequently withdrew its support for a joint solution, instead focusing on just the high-speed train project, 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

Annual Business Plans for the San Joaquin Corridor, prepared by the Caltrans Division of Rail, identify 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. Recent performance standards include one percent ridership and two percent revenue gains, a farebox return projected to increase to 47.5 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 are efforts by Caltrans to more effectively market Amtrak San Joaquin train service to the senior market (50+ years) and minority groups, particularly Latinos because of their relatively large population, and expand the college student travel discount 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 multimodal rail passenger station along the Union Pacific corridor in downtown Fresno and new grade separation structures, which might also benefit rail consolidation/rail realignment, 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.

- The American Recovery and Revitalization Act (ARRA) and the reauthorization of the Surface Transportation Act may provide a source of funding for high-speed train projects in Fresno County, the San Joaquin Valley, and elsewhere.

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/rail realignment 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 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 the current Surface Transportation Reauthorization Act 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 and trails. The efficient functioning and the reduction of congestion on 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 Unified Air Pollution Control District contribute education, research, and regulation efforts related to transportation strategies. Fresno COG and local agencies involved in transportation and land use planning work cooperatively with the San Joaquin Valley Unified Air Pollution Control District to enact strategies working toward the goal of improved 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)

In 2006, the eight regional planning agencies in the San Joaquin Valley came together in an unprecedented effort to develop a coordinated valley vision – the San Joaquin Valley Regional Blueprint. This eight county venture was conducted in each county, and was ultimately integrated to form a preferred vision for future development throughout the Valley to the year 2050. On April 1, 2009, the San Joaquin Valley Regional Policy Council adopted a preferred growth scenario for the Valley along with 12 Smart Growth Principles to guide development and promote the livable and sustainable communities mentioned above.

.

4.9.2 Existing Requirements

Transportation conformity, which originates from the Federal Clean Air Act, is the main requirement. In order to receive transportation funding or approvals from the FHWA/FTA. state and local transportation agencies with plans, programs or projects in nonattainment or maintenance areas, must demonstrate that they meet the transportation conformity requirements of the Clean Air Act as set in the transportation conformity rule. 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 plans, known as State Implementation Plans (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 Air Quality Conformity Analysis for the 2011 Regional Transportation Plan. The conformity rules also require interagency consultation. Fresno COG along with the other seven Valley Regional Planning Agencies (RPAs) are parties in a Memorandum of Understanding (MOU) with the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) to jointly develop and implement transportation control measures. This MOU was updated and approved by each of the eight Valley RPAs and the SJVUAPCD on September 9, 2009.

There have been many changes in the requirements since the 2007 RTP update.

- On April 30, 2007 the SJVUAPCD adopted the *2007 Ozone Plan.* This plan addressed the attainment of the federal 8-hour ozone standard for all San Joaquin Valley residents.
- On April 30, 2008 the SJVUAPCD adopted the *2008 PM2.5 Plan.*
- And on September 25, 2008 EPA redesignated the San Joaquin Valley to attainment for the PM10 National Ambient Air Quality Standard and approved the *PM10 Maintenance Plan.*

The eight San Joaquin Valley RPAs worked in concert with the SJVUAPCD to develop new transportation conformity motor vehicle emission budgets

Regulation of emissions, while efficient, is not the only means to reduce pollution from transportation sources. Public information and education campaigns certainly play a role in promoting the behavior change necessary to impact vehicle miles traveled. Under the current Surface Transportation Reauthorization Act, public participation is an integral component of the transportation planning process. Fresno COG continues to bring transportation-related air quality issues to our Transportation Technical Committee, Policy Advisory Committee, and the Policy Board in hopes of educating not only transportation professionals, but also informing 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 San Joaquin Valley Unified Air Pollution Control District continues in its path of ongoing adoption of new rules, strategies, and requirements with local agencies and local businesses. The major landmark accomplishment is the attainment of the National Ambient Air Quality Standard for PM10. This took the coordinated effort of the entire San Joaquin Valley, residents, businesses, agriculture management, as well as focused funding to reduce sources of particulate matter in the Valley. Change may be slow, but it is being accomplished through collaborative interagency consultation.

4.9.4 Needs Assessment

Fresno COG has worked with the San Joaquin Valley Unified Air Pollution Control District on the development of the local control measure section of each State Implementation Plan. Fresno COG continues to review and improve the programs that impact air quality, such as the Congestion Mitigation and Air Quality (CMAQ) program. All of the San Joaquin Valley Regional Planning Agencies have adopted policies for distributing at least 20% of the CMAQ funds to projects that meet a cost-effectiveness threshold for emission reductions. In the 2009 CMAQ funding cycle, Fresno COG awarded approximately 38% of the available funding to cost-effective projects.

4.9.5 Proposed Actions

Short-Range Plan

Actions required and taken between now and 2014 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 Process was completed in 2009. It is defined in Work Element 172 of our Overall Work Program (OWP). The CMP tries to optimize the efficiency of the existing and planned transportation system. Traffic conditions were evaluated, and a list of most feasible and appropriate alternative strategies was identified for the Fresno region to manage existing and future congestion. A process/methodology has also been established to analyze Single Occupancy Vehicle (SOV) projects in order to meet the requirement of alternative strategies being considered before constructing capacity increasing projects.

The 2009 Fresno County Congestion Management Process has been integrated with and implemented in the 2011 FTIP and RTP processes.

As documented in the Strategy Implementation section of the 2009 Fresno County CMP, in order to encourage member jurisdictions to consider alternative strategies for managing congestion/mobility issues, a competitive scoring system was set up in the TIP process to provide incentives for members to submit CMP projects. During the 2011/2012 - 2012/2013 RSTP call for projects, extra points were given to projects that met the criteria of the adopted congestion management strategies in the 2009 Fresno County CMP. Such CMP projects were scored based on how well they met the goals and objectives established during the congestion management process.

In addition, the 2009 Fresno County CMP adopted Level of Service (LOS) D as the minimum threshold for the streets and roads in the Fresno-Clovis metropolitan areas, and LOS C for the rest of the County. In the ranking of the RTP projects, no point was given to projects that have existing condition at LOS D or better in the Fresno-Clovis Metro area or projects at LOS C or better in the rest of the County.

As required by the congestion management legislation, appropriate analysis of all reasonable travel demand and operational improvement strategies should be conducted for the corridor in which a capacity increasing project is proposed. The 2009 Fresno County CMP adopted a Single Occupancy Vehicle (SOV) Alternative Analysis methodology to determine whether alternative strategies can meet the demand for capacity before SOV projects are constructed. The capacity increasing projects proposed by the jurisdictions for the 2011 RTP were first matched up with the CMP network that was established during the 2009 CMP process. The capacity projects on the CMP network were then run through the SOV Alternative Analysis process. Two projects failed to meet the threshold established for the SOV analysis: Elm from North to Central, widening from 2 lanes to 4 lanes in the City of Fresno and Tollhouse Road from Locan to Shepherd, widening from 2 lanes to 4 lanes in the City of Clovis. These two projects were subsequently excluded from the 2011 RTP.

Further documentation on the adopted Fresno County Congestion Management Process is included in Appendix F of the Final 2011 RTP.

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 the majority of the year. National Ambient Air Quality Standards (NAAQS) are established for criteria air pollutants in order to protect human health and welfare. Pursuant to federal law, the Environmental Protection Agency (EPA) has designated the entire San Joaquin Valley Air Basin (SJVAB) a nonattainment area that does not meet established standards for ozone and particulate matter. The San Joaquin Valley is designated as attainment/maintenance for PM10 and carbon monoxide (CO). In addition, the State of California also has set "health protective" standards for air pollutants that are even more stringent than federal levels. At the state level the SJVAB is designated as nonattainment for ozone and particulate matter.

The following section summarizes the air pollutants that are of major concern in the San Joaquin Valley.

Ozone
Ground level ozone is the major component of Fresno county's summertime "smog" and it affects human health and vegetation. Ozone is formed when two chemicals, volatile organic compounds (VOCs) and nitrogen oxides (NOx), interact with sunlight and heat. (VOC is also referred to as reactive organic gases or ROG) 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. VOCs and NOx are emitted from fuel combustion, agricultural processes, and industrial processes, consumer products as well as from natural sources (biogenic sources such as some species of plants and trees).

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, a combination of other chemicals, as well as in liquid form.. 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 particulate matter 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. This creates an additional concern for human health in our Valley in that we do not have a "clean" season that would allow for respiratory system recovery. The primary sources of particulate matter include farming operations, paved road dust, fugitive dust, unpaved road dust, and waste burning. In addition, residential wood combustion is a significant contributor in urban areas during the winter months, accounting for up to 30% of emissions.

Particulate matter is categorized by size: diameters larger than 2.5 microns and smaller than 10 microns is referred to as PM10, smaller particles with diameters 2.5 microns or less are referred to as PM2.5. (As a reference: a human hair is anywhere from about 50 to 100 microns.)

These finer particles pose an increased health risk, because they can reach deep into the lungs and are associated with both acute and chronic health effects including aggravation of existing respiratory diseases, heart and lung disease, coughing, and bronchitis. Diesel particulate matter is recognized by California's Air Resources Board as a toxic air contaminant based on its ability to cause cancer and other health effects.

Carbon Monoxide

Carbon monoxide (CO) is formed by the incomplete combustion of fuels. The main source is motor vehicles. 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. 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*. Currently the San Joaquin Valley is designated as attainment for CO and has an adopted maintenance plan to ensure continued control.

Air Quality Planning

Based upon the geographical shape of the San Joaquin Valley Air Basin , a regional approach to air quality planning is utilized. Currently, the eight Valley Regional Planning Agencies (RPAs) and the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) 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. The MOU was updated and adopted by all eight of the Valley RPAs and the SJVUAPCD on September 9, 2009.

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 be effective in reducing sources of air pollution from transportation sources.

The Regional Transportation Plan recognizes the importance of 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 contribute to the attainment 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, SAFETEA-LU and the current Surface Transportation Reauthorization Act delegates major planning decisions to the states and RPAs. 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, SAFETEA-LU, and the current Surface Transportation Reauthorization Act 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 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 EPA, California ARB and the San Joaquin Valley Unified Air Pollution Control District are responsible for implementing most federal Clean Air Act requirements, the RPAs are responsible for the development and implementation of transportation control measures and compliance with the transportation conformity regulation.

Under certain conditions failure to meet requirements may be met with sanctions. Under the Federal Clean Air Act the EPA is required to impose automatic sanctions . The EPA can apply two sanctions:

1. Offset Sanctions: Establishment of a 2 to 1 emission offset ratio requirement for new stationary sources.

2. Highway Sanctions: A restriction on federally funded highway projects, plans and programs.

The first sanction could make most industrial expansion prohibitively expensive in the Valley while the second sanction could delay needed highway improvements and jeopardize economic growth and jobs.

If the above sanctions are not resolved in a timely manner, the EPA would also be required to file a Federal Implementation Plan (FIP) which would detail how the region will reduce emissions to reach attainment, effectively taking control away from the state and local air district.

State Implementation Plan (SIP)

Federal clean air laws require areas with unhealthy levels of criteria air pollutants to develop plans, known as State Implementation Plans (SIPs). SIPs are comprehensive plans that detail how an area will attain national Ambient Air Quality Standards (NAAQS). SIPs are not single documents, but a compilation of new and previously submitted plans, programs, district rules, state regulations and federal controls.

As previously mentioned, the San Joaquin Valley Air Basin does not meet air quality standards for ozone and particulate matter. As such, the San Joaquin Valley Unified Air Pollution Control District is required to prepare a SIP to address each air pollutant.

2007 Ozone Plan

- The District approved the *2007 Ozone Plan* on April 30, 2007. This plan included an in-depth analysis of all possible control measures and projected that the Valley will achieve the 8-hour ozone standard (as set by EPA in 1997) for all areas of the SJVAB no later than 2023.
- The ARB approved the *2007 Ozone Plan* on June 14, 2007.
- EPA published transportation conformity budget adequacy determination on January 22, 2009

2007 PM 10 Plan

- The District has compiled a series of PM10 Plans, with the first one in 1991. Based on PM10 measurements from 2003-2006, EPA found that the SJVAB had reached the federal PM10 standard.
- The District's *2007 PM10 Maintenance Plan and Request for Redesignation,* approved on September 21, 2007, assures that the Valley will continue to meet the PM10 standard and requests that EPA formally redesignate, or label, the Valley to attainment status.
- On September 25, 2008, EPA redesignated the SJV to attainment for the PM10 standard and approved the Maintenance Plan.

2008 PM 2.5 Plan

- The District approved the *2008 PM2.5 Plan* on April 30, 2008. Building upon the strategy used in the *2007 Ozone Plan,* the District agreed to additional control measures to reduce directly produced PM2.5. The *2008 PM2.5 Plan* estimates that the SJVAB will reach the PM2.5 standard (as set by EPA in 1997) in 2014.
- The ARB approved the Plan on May 22, 2008, and the plan has been submitted to EPA.

1996 Carbon Monoxide Redesignation Request and Maintenance Plan

- 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 2007 RTP include the following measures:

Regional Transportation / Air Quality Planning

The eight Valley Regional Planning Agencies (RPAs) 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. This MOU between and among the eight RPAs was revised and adopted by all eight RPAs on September 21, 2006.

Interagency consultation is generally conducted through the San Joaquin Valley Model Coordinating Committee (MCC). The MCC was formally revised in 2009 incorporating quarterly workshops, RPA staff conference calls, and interagency conference calls. This committee is now called the San Joaquin Valley COG Director's Association Interagency Consultation Group (IAC). The IAC has been established by the Regional 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 Regional Planning Agencies (RPAs) and the San Joaquin Valley Unified 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 members of 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 has been renewed since then, and continues today.

Regional Transportation/Air Quality Plans and Programs
The Valley RPAs have continued their involvement and contribution to the San Joaquin Valley Unified Air Pollution Control District's State Implementation Plans. The Valley RPAs continue to work in concert with SJVUAPCD providing updates and information.

Transportation Modeling for Air Quality Conformity
The Valley Regional 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 well as from individual county data.. A staff level committee of the Valley RPA Directors, Interagency Coordination Group and the Statewide 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.

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 Congestion Mitigation and Air Quality Improvement 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 improvements 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 2010 and 2014. 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, and 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 is 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 cleaner burning fuels that can reduce pollution and provide 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 2011 RTP and 2011 RTP EIR comply 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).

2011 RTP Environmental Impact Report

Following the provisions and requirements of CEQA, Fresno COG has prepared a subsequent programmatic environmental impact report for the 2011 RTP that describes strategy-level mitigation measures which could avoid or minimize significant adverse impact of implementing the 2011 RTP. In doing so, the 2011 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 2011 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 2011 RTP EIR.

SAFETEA-LU Compliance

CEQA requires the identification of potential environmental impacts due to the implementation of the 2011 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 they 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 2011 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 required 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 4-25
Development Constraints in Fresno County