Chapter 5

Sanger, California Campbell Mountain

Actions:

Assessing Our Transportation Needs

The Actions Chapter establishes a plan for addressing identified needs and issues amongst the various modes of travel, consistent with the goals, policies and objectives of the Regional Transportation Plan.

5.1 Moving People and Goods

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 section attempts to show the relationship between transportation modes. Each mode available for the movement of people and goods in and through Fresno County is then addressed along with other transportation and air quality strategies, as listed below:

- Multimodal: Section 5.2
- Highways, Streets, and Roads: Section 5.3
- Urban Mass Transportation: Section 5.4
- Rural Area Public Transportation & Social Service Transportation: Section 5.5
- Aviation: Section 5.6

- Non-Motorized: Section 5.7
- Rail: Section 5.8
- Congestion Management: Section 5.9
- Air Quality: Section 5.10
- Environmental Mitigation: Section 5.11

Each mode or transportation strategy is presented in a separate section and includes an inventory of the existing system, an assessment of needs, and proposed actions. The latter will be divided into short-range (0-4 years) and long-range (5-26 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 2014/15 to 2017/18. The RTP also includes projects which are deemed necessary, but do not have identified funding sources, in order to show a complete picture of transportation improvements that are needed for the future vitality of the region.

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 national 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. The final Transportation Conformity Analysis for the 2014 RTP can be found on the fresnocog.org website.

5.2 Multimodal

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.

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.

Figure 5-1 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.

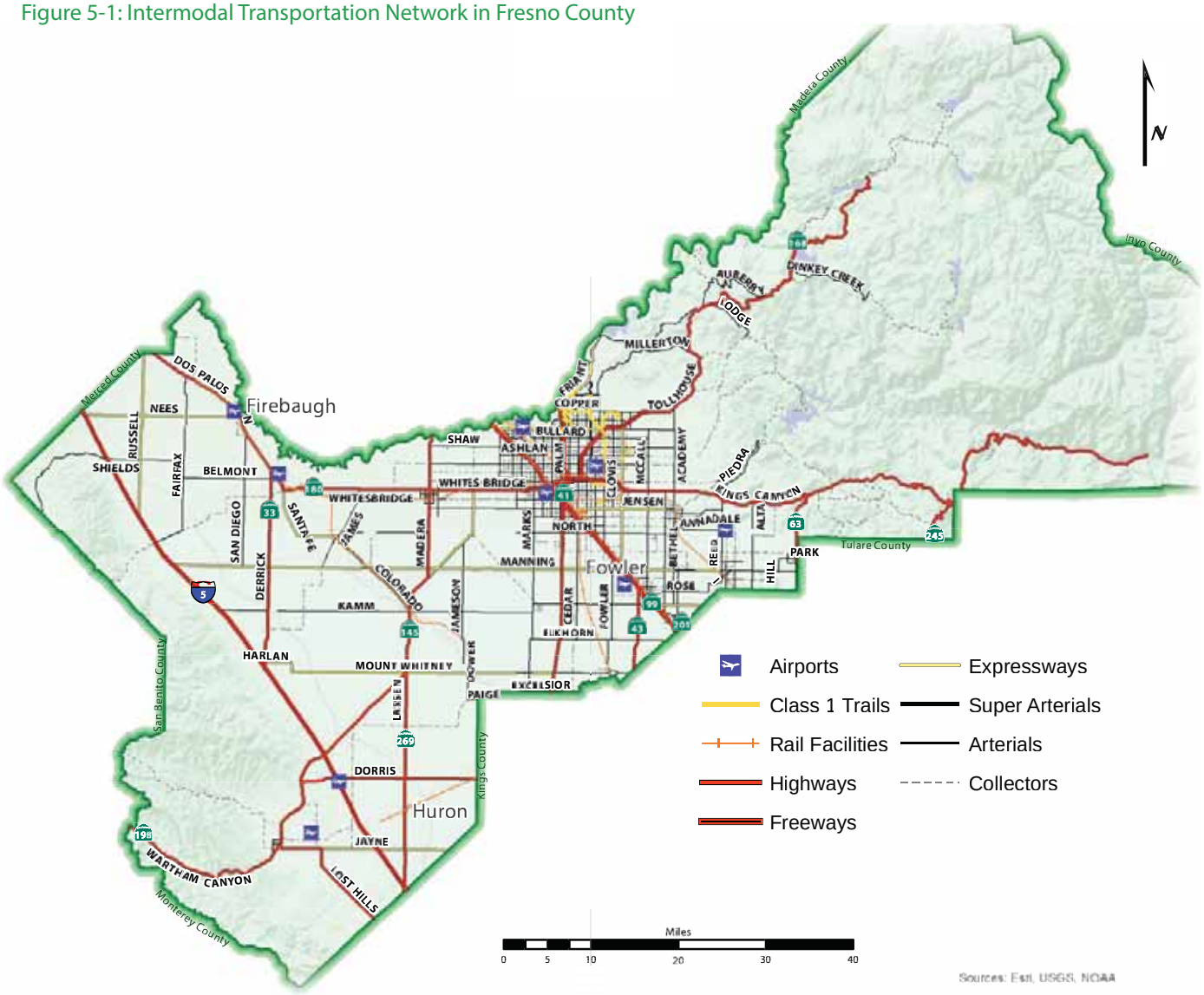
Through the use of this local funding source, which has been extended for a twenty-year period, and federal and state participation, Caltrans continues to work on the completion of a metropolitan freeway system which includes Freeways 41, 168, and 180. Major improvements have been made to overcrossings 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 COG joined the statewide effort to form an airport land use professional organization, the California Airport Land Use Consortium (Cal-ALUC), to address land use planning issues in and around airports in California. Fresno COG along with the Mendota Airport as the qualifying sponsor, applied for funding through the State Aeronautics program to develop a Fresno County Airports Compatibility Land Use Plan.

In continuing to foster efforts to improve intermodal transportation strategies, Fresno COG has sponsored a CMAQ funding request for transit service from Fresno, to

Figure 5-1: Intermodal Transportation Network in Fresno County



the national parks in the Fresno Region, with a dedicated stop at the Fresno Yosemite International Airport (FAT).

In 2012, the ALUC (Airport Land Use Commission) adopted and updated the Fresno Yosemite International Airport Land Use Compatibility Plan to take into consideration the $40 million runway safety and improvement projects at FAT that were completed in 2013, and the 144th Fighter Wing's conversion from F-16 aircraft to F-15 aircraft. This effort changed the review area and associated maps, representing the airspace protection surfaces, noise and safety contours.

Highway access to FAT and Chandler Executive Airport has greatly improved. State Routes 168 and 180 provide much better access to FAT and connect the airport with the Fresno highway system and beyond. Freeway 180 has been improved between Brawley Avenue west of Freeway 99, providing freeway access to Chandler Executive Airport; and east of Academy Avenue to the City of Sanger, improvements continue to connect to the Sequoia National Park entrance. Freeway 168 has been improved between Freeway 180 and Tollhouse Grade. The braided ramp project, partially operational during the latter part of 2013 and scheduled to be fully operational in 2014, will improve the interchange system between 180, 168 and 41, providing safer and more efficient access to and from FAT.

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.

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.

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

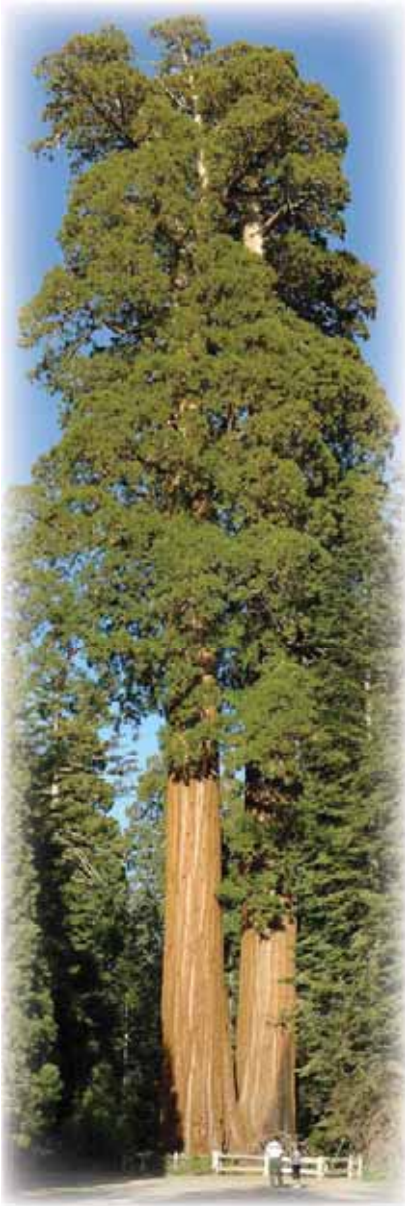
improving the safety and efficiency of freight movement in the region. The Freight Advisory Committee meeting schedule varies. The importance of this Committee is expected to increase over the coming years as the ability to move an ever-growing amount of freight becomes more challenging and as state 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. Figure 5-2 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 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 annual, agricultural economy.

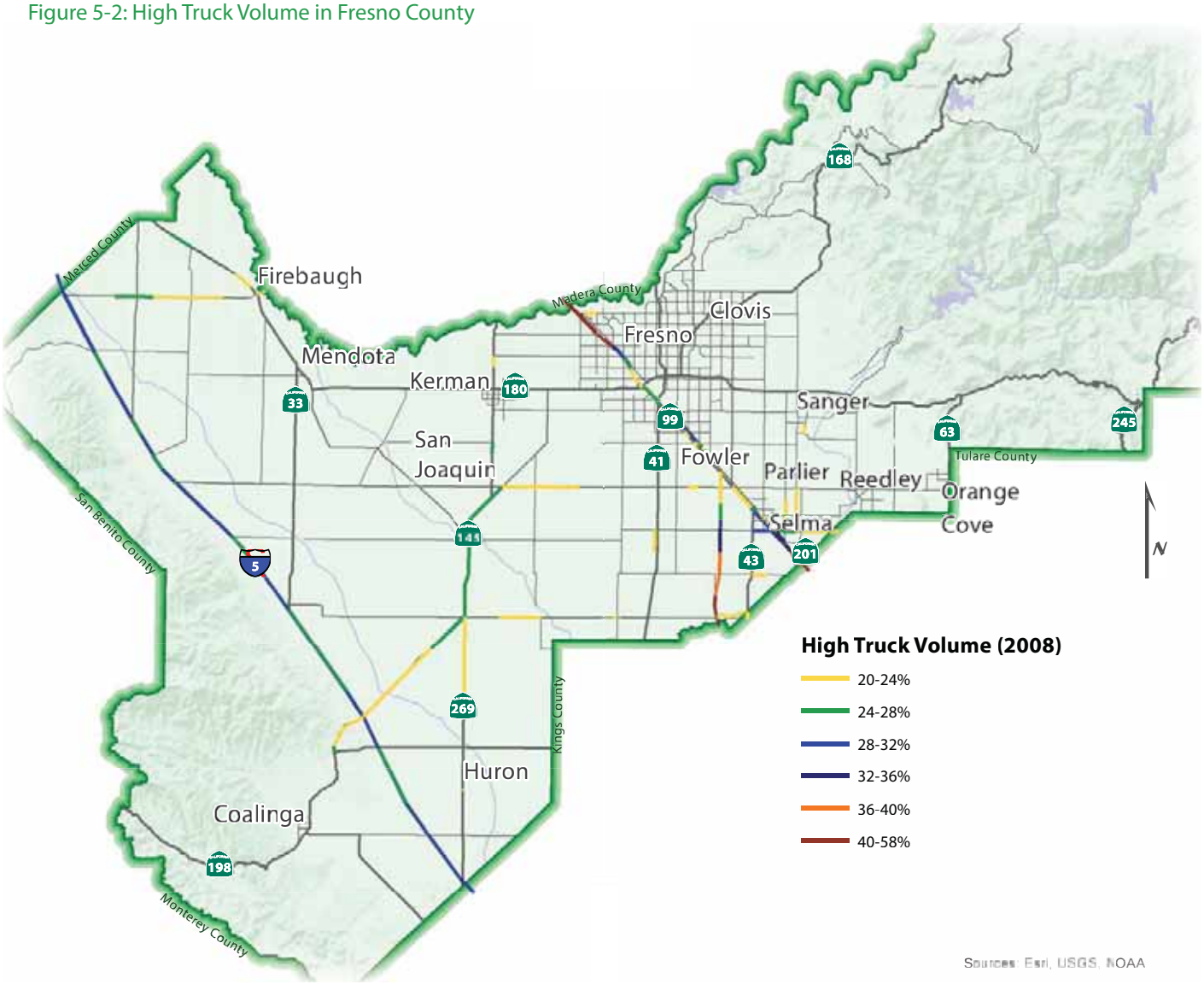


In addition to the San Joaquin Valley Goods Movement Study, Fresno COG served as the project manager for a Caltrans-funded study focusing on the potential for a short-haul rail intermodal service that would connect the San Joaquin Valley with the Port of Oakland. The study, known as the California Interregional 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:

Figure 5-2: High Truck Volume in Fresno County



- 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
- 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 was completed in fiscal year 2010-11.

5.3 Highways, Streets and Roads

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 with a total gross production value of agricultural commodities of nearly $6.6 billion in 2012, 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.

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 Highway plus additional facilities of regional significance. Figures 5-3 and 5-4 show the Regionally Significant Road System for the Fresno County region.

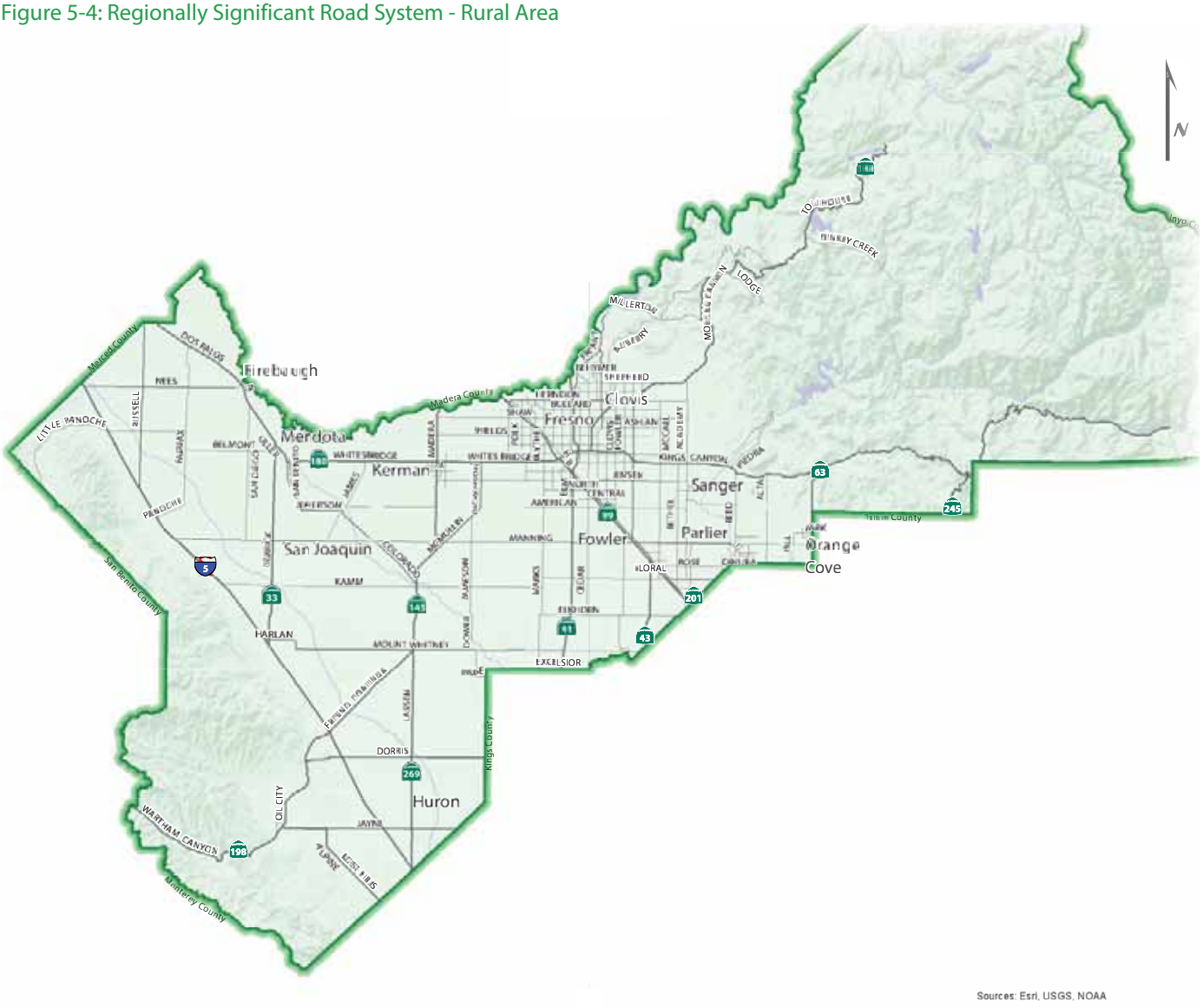
Figure 5-3: Regionally Significant Road System - Metro Area

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.

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.

Figure 5-4: Regionally Significant Road System - Rural Area



Sources: Esri, USGS, NOAA

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.

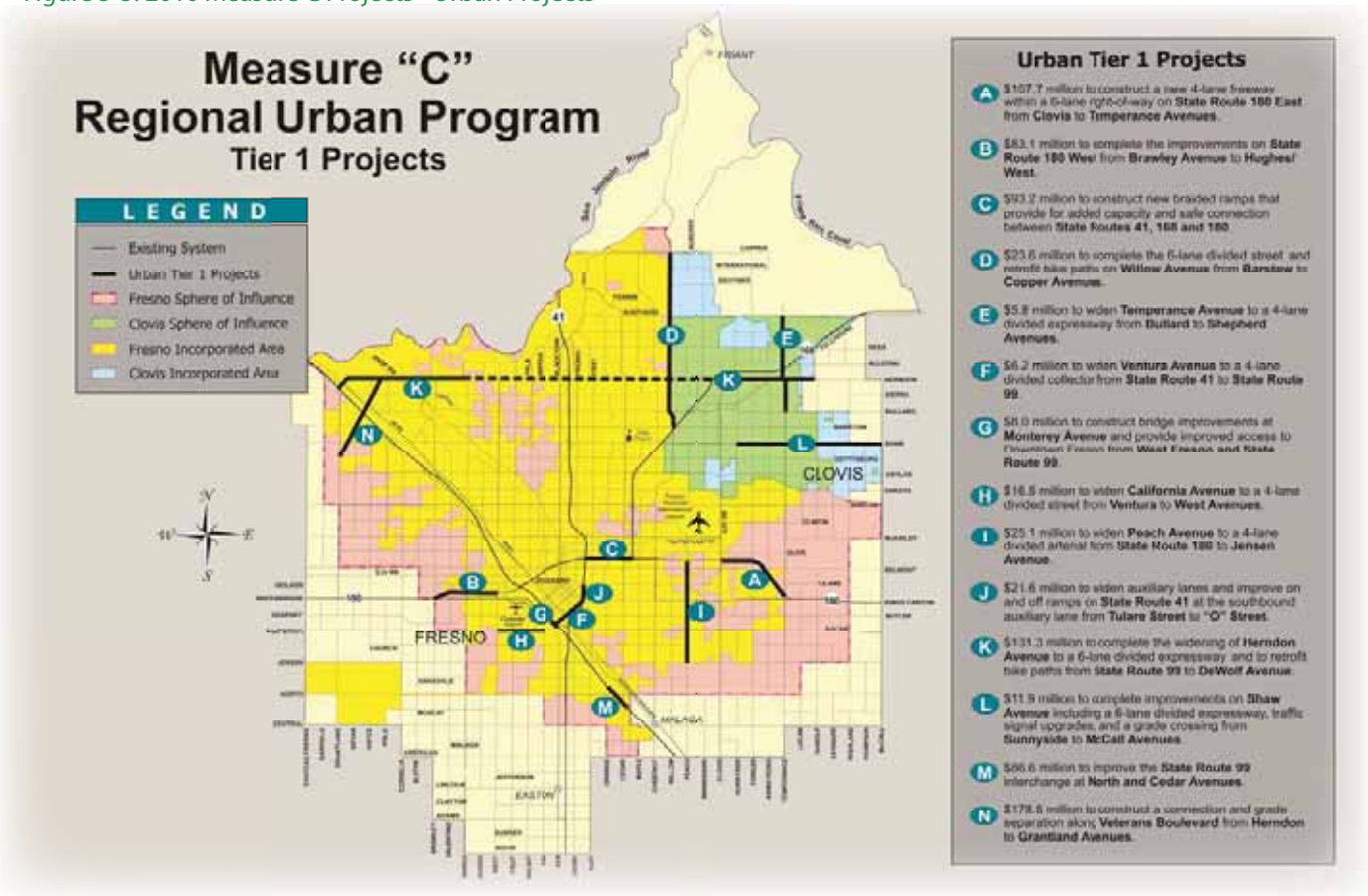
Accomplishments

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), 2012-2017, 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

In 2006, voters in Fresno County 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

Figure 5-5: 2010 Measure C Projects - Urban Projects



Expenditure Plan for use of the revenues. It is estimated that Measure C will generate approximately $1.5 billion in revenues over its life which will be used to construct and implement the multi-modal projects and programs contained within the measure.

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 Figures 5-5 and 5-6) 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

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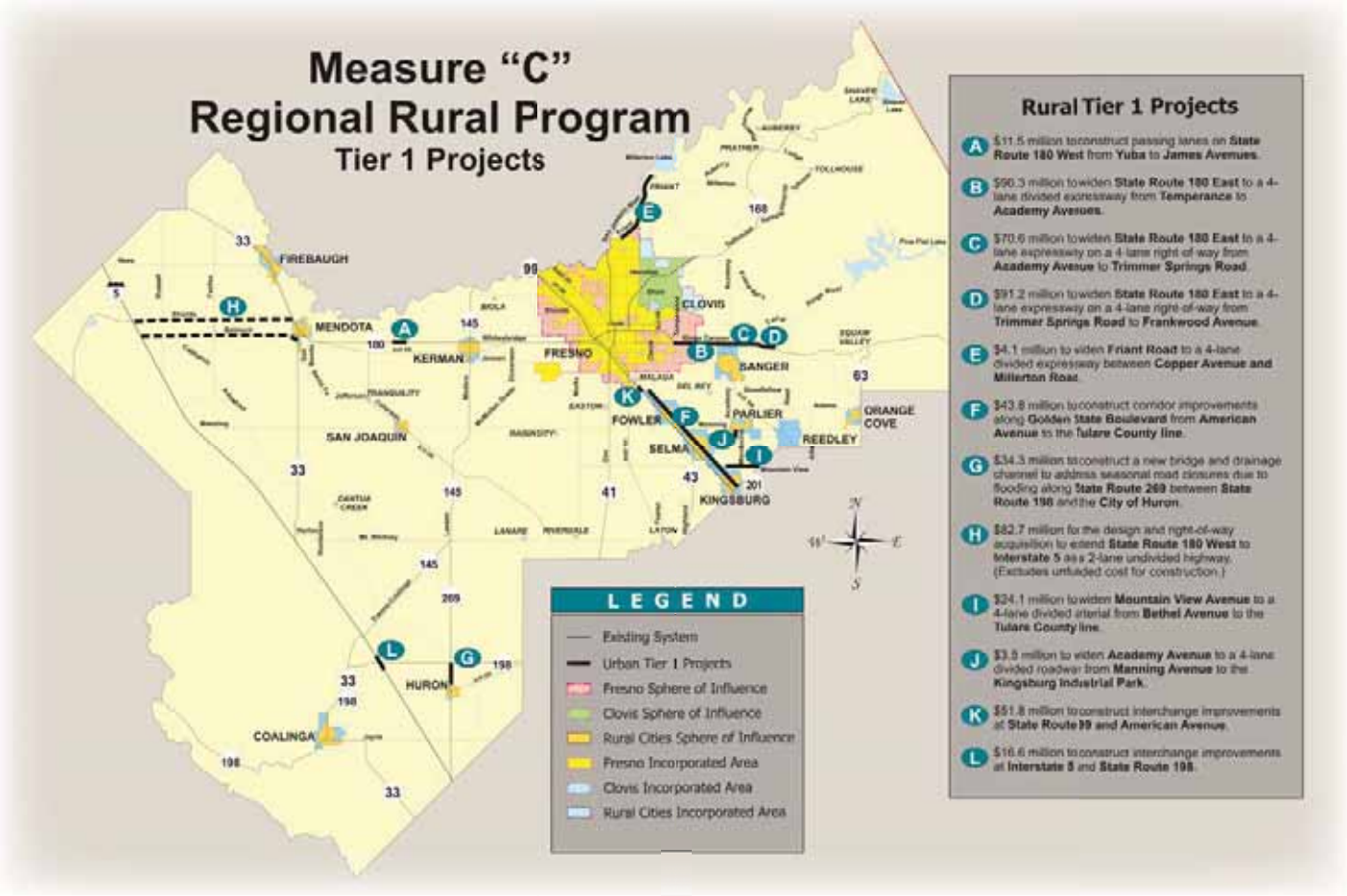
Figure 5-6: 2010 Measure C Projects - Rural Projects



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 Concept Reports (TCCRs).

Transportation Corridor Concept Reports

Transportation Corridor Concept Reports (TCCRs) are refinements of the DSMP and represent the next level of system planning done by Caltrans. TCCRs 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 TCCR is that it should only outline affordable multimodal alternatives and these should be both politically and environmentally realistic. TCCRs must also be consistent with the policies and strategies of the DSMP.

COG Regional Travel Demand Forecast Model

Since the mid 1980's, the Fresno Council of Governments, its member agencies and Caltrans have jointly developed and maintained a microcomputer-based traffic simulation model.

In 2010, the eight MPOs in the San Joaquin Valley (SJV) embarked upon an ambitious joint effort to upgrade their land use and travel demand forecasting model systems. This San Joaquin Valley Model Improvement Plan (MIP) was funded by a grant from the Strategic Growth Council of $2.5 million in Proposition 84 money.

The largest coordinated modeling project in the history of the San Joaquin Valley has resulted in a significant increase in all 8 MPOs' modeling resources, and in time for application for SB 375 target setting and RTP/SCS development, as well as for Climate Action Plans and other local and regional projects.

The Fresno COG travel demand forecast model is used extensively to:

- Fulfill Requirements
  - Air Quality
  - Congestion Management
  - Project Development
  - SB 375 and Sustainable Communities Strategy
  -
- Long Range Transportation Planning
  - Regional Transportation Plans
  - Design new roads
  - Passengers on new transit services
  - Evaluate land use alternatives

The Fresno COG model and the eight MPO models have all been upgraded to a much higher standard. They are both more advanced and have more in common with one another than before. The standardization of much modeling practice in the Valley will make collaboration and sharing of information among the MPOs much easier. Collaboration and information sharing in turn will allow for greater compatibility between models in neighboring jurisdictions, and greater understanding of how to meet common modeling challenges.

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

The Fresno County Region is a microcosm of the nation in terms of the resources needed to keep people and goods moving in a swift and efficient manner. Most residents travel the Region's freeways and highways without knowing the effort taken to build this infrastructure and keep it clear of congestion and incidents. People do not give much consideration to the details of the transportation system that makes their day to day travel relatively safe and efficient. However, they do take notice when problems occur which delay or inconvenience their travel. Unfortunately, these problems are occurring in ever increasing numbers at ever increasing intervals.

The Fresno County Region is somewhat fortunate in that many of the more pressing transportation problems have yet to occur, and there are still significant efforts underway to enhance the basic transportation infrastructure of freeways, highways, and streets. However, it has been widely recognized that the construction of new infrastructure is not as simple or affordable as it used to be. Transportation professionals have recognized the need to turn to Intelligent Transportation Systems (ITS) as a means to improve performance on the transportation system in order to provide for the most efficient movement of people and goods possible within the limited funds available to them.

ITS technologies refer to a wide variety of tools and techniques that focus on addressing transportation problems by improving the efficiency and safety of the existing transportation infrastructure through the application of communications, computers, information and other "high level technologies." They include more immediately recognizable features such as: Traffic Operations Centers, changeable message signs, roadway cameras, signal synchronization and emergency vehicle preemption; and also more advanced technologies including, real-time traveler information, Automatic Vehicle Location devices, Vehicle Collision Avoidance, and electronic toll collection.

In September of 1999, the Fresno Council of Governments Policy Board adopted the Fresno County Intelligent Transportation System 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. The ITS SDP represents a comprehensive effort to deploy ITS systems that are integrated, shared, and coordinated to allow public agencies to better manage the existing transportation system.

The development of the Fresno County ITS Plan followed the required federal ITS planning process. As the lead agency, the Fresno Council of 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.

Currently the Fresno Council of Governments is in the process of updating the ITS SDP. The 1999 ITS SDP is now outdated because many of the recommended projects have been completed, technologies have evolved significantly and the infrastructure "landscape" has changed. Therefore, a new ITS SDP is required as a guide for future ITS planning and deployment to maximize the effectiveness of Fresno County's multi-modal surface transportation network and to ensure compatibility and promote cooperation. This update is funded by the Federal Transit Administration (FTA) and mandated by the Federal Highway Administration (FHWA).

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. The City of Fresno is leading the way with ITS projects in Fresno County. The completion of the City of Fresno ITS Phase 3 Project connects their Traffic Operations Center to a fiber network, connecting key arterials and expressways for an efficient citywide traffic coordination system. Their projects have reduced emissions by thousands of metric tons, saved millions of gallons of fuel, and reduced travel times. The total project cost for ITS Phases 1-4 has reached approximately $18 million in Federal Congestion Mitigation Air Quality (CMAQ), Regional Surface Transportation Program (RSTP), and State of California, Proposition 1B, Traffic Light Synchronization Program (TLSP) grants awarded through Fresno Council of Governments and administered through Caltrans Local Assistance Program for FHWA.

San Joaquin Valley Intelligent Transportation Systems Strategic Deployment Program

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 an overall ITS deployment plan for the entire San Joaquin Valley. In 2001, the eight counties of the San Joaquin Valley: Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare adopted a Strategic Deployment Plan (SDP) for the San Joaquin Valley Region. 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 FHWA for the 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 Valley-wide system architecture and will have access to those federal funds that may become available for Valley-wide ITS projects. The San Joaquin Valley ITS Plan was a 20-month study jointly funded by California Department of Transportation (Caltrans) and the individual counties. This plan is a foundation for integrated ITS applications that help keep people and goods moving safely and efficiently within and through the Valley. The plan coordinates architecture, standards and institutional issues and also provides the framework for deploying an integrated ITS.

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 Planning Agencies in the

San Joaquin Valley has established a maintenance plan to support the regional architecture in compliance with federal deadlines.

Needs Assessment

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 $1.5 billion, to be expended through the Fresno County Transportation Authority. Fresno COG and the Authority have developed a Strategic Implementation Plan to facilitate expenditure of those funds.

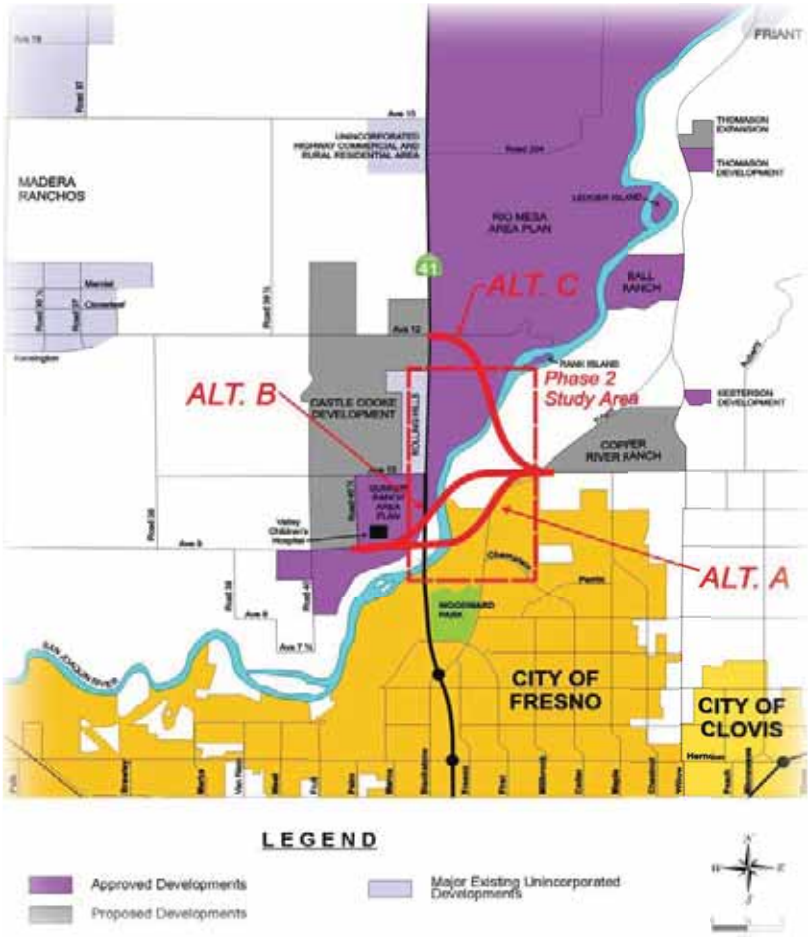
Transportation Corridor Needs

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.

Figure 5-7: Fresno-Madera East-West Corridor Study

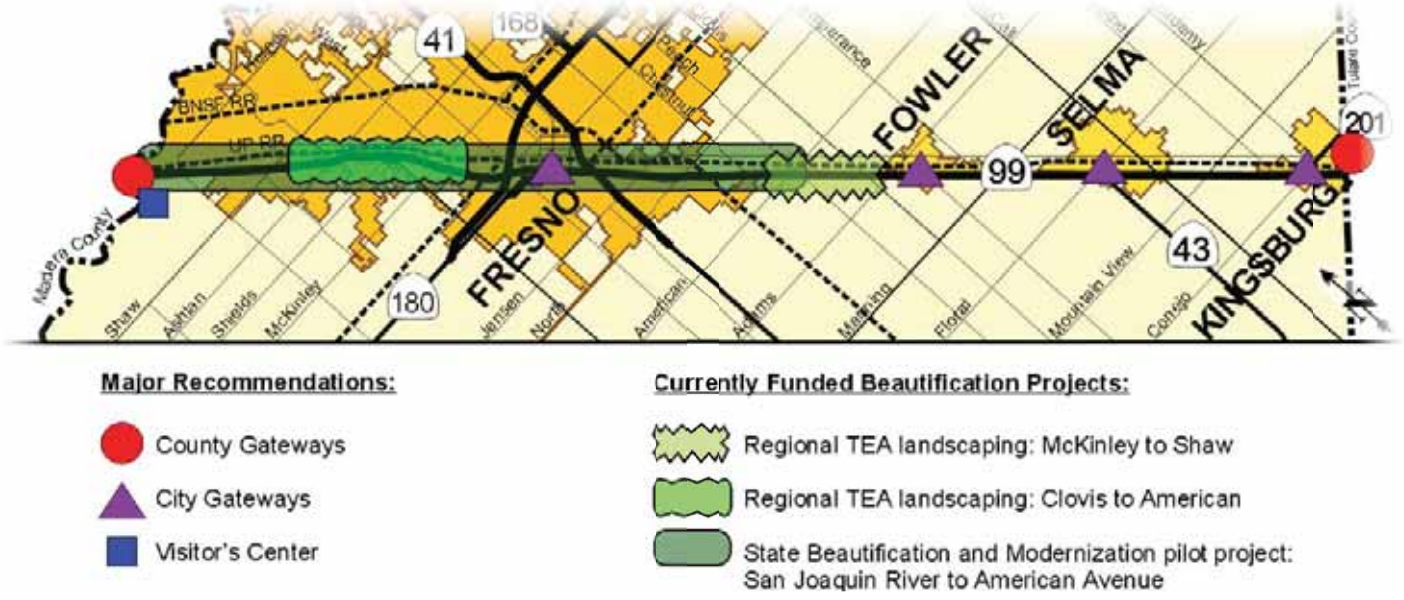


Phase One of the study focused on examining Fresno and Madera Counties' long-range transportation needs within the study area by considering various future land use plans together with circulation element policies and engineering and environmental constraints. Phase Two focused on the preliminary engineering 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 Figure 5-7.

Association for the Beautification of Highway 99

In 1998 concerned policy makers and citizens began meeting regarding the appearance of Highway 99 (State Route 99), which is one of the region's main north-south routes and a major connector route to other areas of the state such as the San Francisco Bay area, Sacramento, and southern California. Policy makers and citizens were concerned that the appearance of Highway 99, both inside and outside of the State right-of-way, was poor, and stifled economic development in the area.

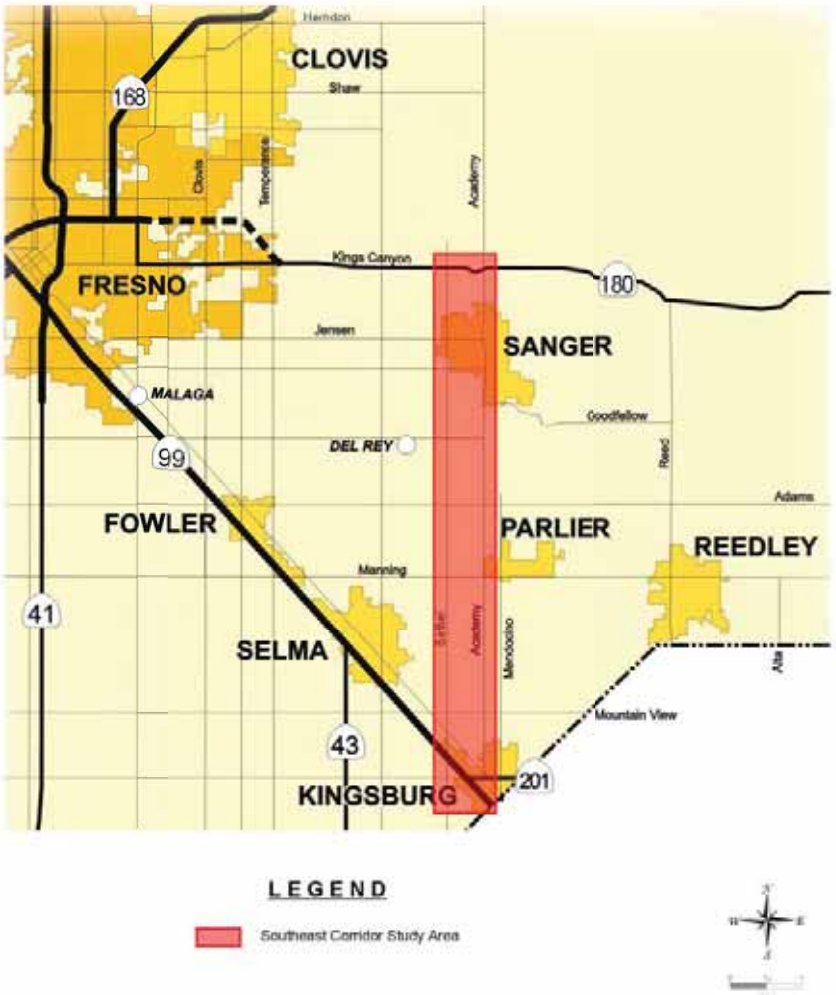
Figure 5-8: Highway 99 Beautification Master Plan



Caltrans, the County of Fresno, and the cities of Fresno, Fowler, Selma, and Kingsburg, through individual Resolutions, agreed to form and participate in the Association for the Beautification of Highway 99. The Association consists of the folowing members: one from Caltrans, one from the Fresno Chamber of Commerce, one from Tree Fresno, one elected official (the mayor or a city council member) from each city and the county (a member of the Board of Supervisors), and one private sector representative from each city and the county. The Association for the Beautification of Highway 99 continues to meet bimonthly and work with Fresno COG on improving the appearance of Highway 99. See Figure 5-8.

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:

Figure 5-9: Southeast Corridor Study



Southeast Corridor Study

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 (Figure 5-9). Academy Avenue project construction north and south of the City of Sanger was funded through the original Measure C program. Funding for the segment through Sanger has not been identified.

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 (Figure 5-10). The basic purpose of the 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.

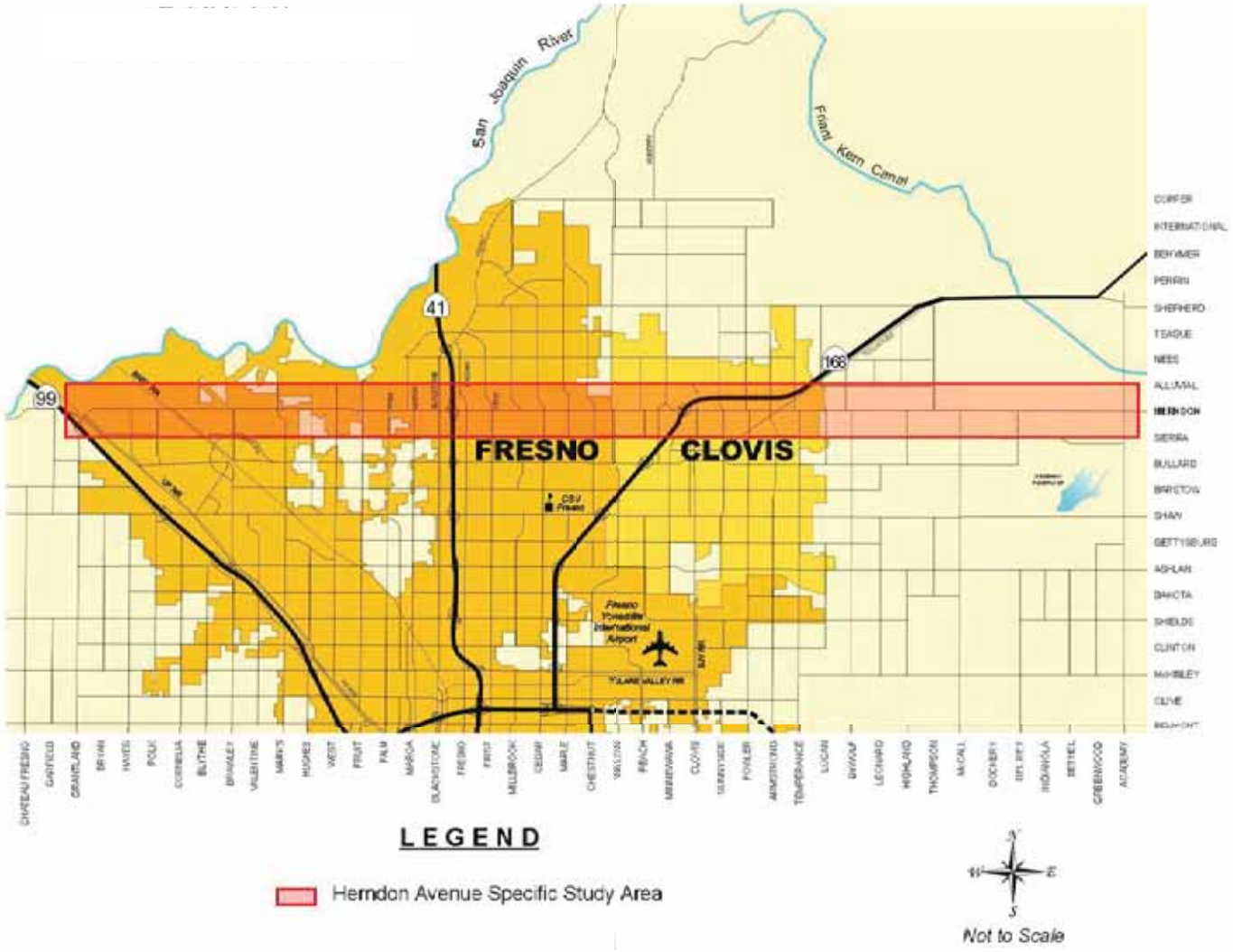
Fresno-Madera County Freeway Deficiency Study

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 purposes of the project were to analyze planned land uses and transportation projects within the counties and determine which interchanges will be deficient by the year 2025, and provide an assessment of financing options.

State Route 180 Western Extension Corridor Study

Caltrans and COG conducted a route adoption study for

Figure 5-10: Herndon Avenue Specific Study



the extension of State Route 180 West from SR 33 to the I-5 corridor. The study looked 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. See Figure 5-11.

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 prepared 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

Figure 5-11: SR 180 Western Extension Corridor Study

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.

Proposed Actions

Future Planning Activities

The Fresno Council of 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.

In the short-term, the COG will continue to work with its member agencies to address any general plan circulation element inconsistencies. 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 Highway 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 (2014-2018)

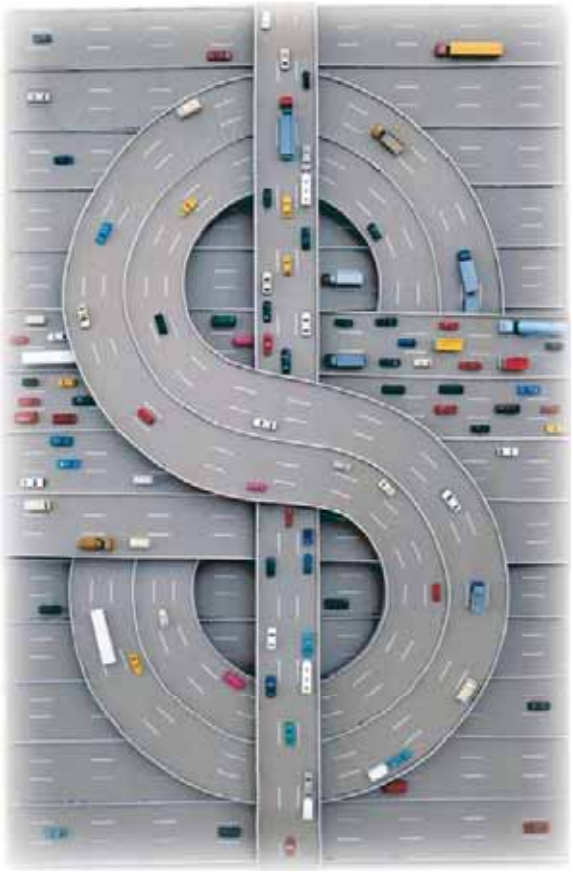
The various jurisdictions within Fresno County have completed numerous projects over the last several years, while highest priority has been given to maintenance of the existing street and road system. Special emphasis has also been given to the optimization of the existing system through traffic signal improvements and operational improvements. The following are the top priorities in the region for the short-term (2014 through 2018):

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 and Measure C Extension Urban Area and Rural Area Tier 1 Street and Highway Projects;
3. Provide necessary further operational improvements;
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; and
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 Improvement Program (2019-2040)

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 2040 approximately 1,374,000 people will inhabit Fresno County. This increased number of people will further strain 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.

Unfinanced Needs



State highway funding and local streets and roads funding, available from statewide fuel subventions, have decreased dramatically. 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 still face an unmanageable backlog of rehabilitation needs.

It is estimated that the County of Fresno alone has an approximate shortfall of upwards of $50 million annually in the areas of maintenance, rehabilitation and reconstruction. These shortfalls, in conjunction with the existing shortage of transportation funding available for projects which would expand capacity, create 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 $6.6 billion 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.

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 (HSIP) that replaces the Hazard Elimination Safety Program (23 U.S.C §152). The purpose of the HSIP is to achieve a significant reduction in traffic fatalities and serious injuries on public roads. The HSIP, with the exception of the High Risk Rural Roads subprogram, is also included in the current Federal Surface Transportation Act, Moving Ahead for Progress in the 21st Century or MAP-21.

As previously required under SAFETEA-LU, the California Department of Transportation led the effort to develop the statewide 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.

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 2014 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.

5.4 Urban Mass Transportation

Overview

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

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

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

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. However, actual revenues have been significantly lower than expected. In 2009 Measure C was expected to provide an estimated $11 million per year. It is anticipated that in fiscal year 2013 Measure C will account for less than $8.5 million 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 disabled persons; however, effort must also be directed towards other mass transportation challenges including improving air quality, reducing congestion, and expanding service for an ever-increasing population. If public transportation is to play an effective role in addressing these issues, a greater emphasis must be placed on providing attractive alternatives to the ubiquitous private automobile. Legislative mandates including the Americans with

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

constructed using accessible features.

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

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

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

Social service transportation in Fresno County is being guided in a direction consistent with the Social Service Transportation Improvement Act of 1979 (AB 120). The primary goal of the legislation is to improve transportation service provided by social service agencies through coordination and consolidation of their transportation services. The 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

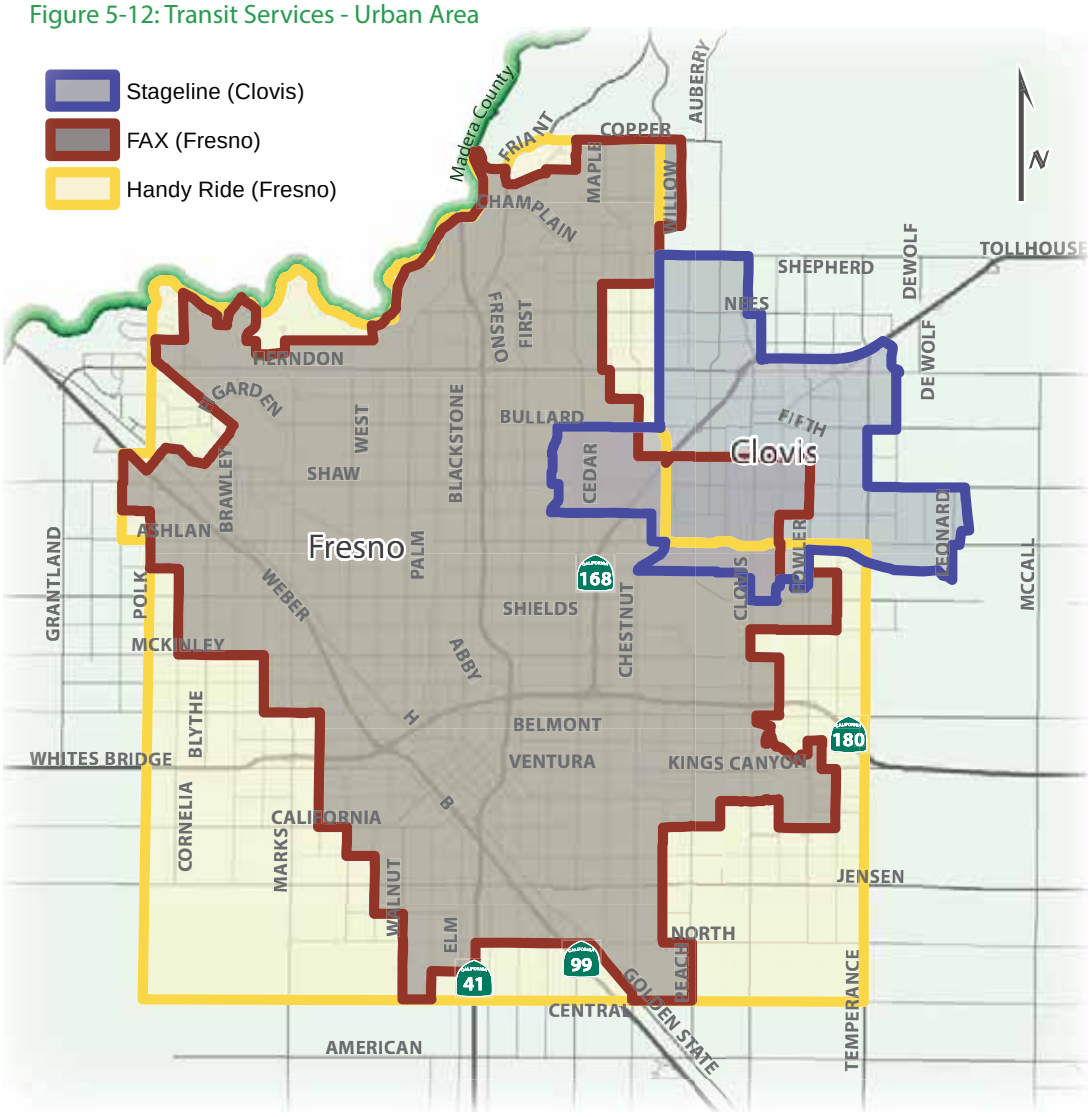
Where appropriate, the discussion will distinguish between the services of Fresno-Clovis Metropolitan Area Public Transportation, the Fresno County Rural Area Public Transportation, and Social Service Transportation.

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

Figure 5-12: Transit Services - Urban Area



transportation service in the FCMA: the fixed-route service for general public riders, and Handy Ride, a demand-responsive service designed for individuals who, because of an impairment or disability, are unable to use the regular fixed-route bus service. The fixed-route network follows a modified grid pattern with intersecting north-south and east-west bus lines. The Handy Ride demand-responsive system provides complementary paratransit service as required by the Americans with Disabilities Act (ADA) of 1990 to paratransit certified disabled persons.

The City of Clovis also provides public transportation in the FCMA. Clovis operates two types of service: Clovis Stageline, a general public fixed-route service, and Round-Up, a demand-responsive paratransit service. Stageline operates on 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 Figure 5-12.

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.

Accomplishments

Fresno Area Express (FAX)

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 underserved areas with the demand to provide reliable service within the existing system. During the 10-year period from 2003 to 2012, actual revenue service miles decreased from 4.03 million to 3.88 million, a 3.7% decrease. During that same period, total ridership rose from 11.2 million in 2003, to 14.3 million in 2012, an increase in ridership of 21.7%. The decrease in service miles is primarily driven by the elimination of unproductive routes.

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. The Fresno County Regional Transit Consolidation Plan is intended to provide a detailed analysis of potential service consolidation options for Fresno County's three public transportation operators. This study is a follow up to the 2007 Public Transit Regional Agency Formation Study

which provided an initial assessment of consolidation opportunities and challenges. The Plan was completed in two phases:

1. Evaluation of existing conditions and potential "roadblocks"
2. Development and evaluation of potential consolidation options

The services provided by the three agencies are distinctly different by design. FAX provides an urban level of service, with many routes, high capacity buses, high frequencies (at least in some corridors), and full weekly service. Clovis Transit, alternatively, provides a more modest, suburban level of service with only a few routes and limited weekend service. FCRTA fixed-route service is limited to a few inter-city corridors, some of which operate only once or twice a week, while intra-community service is provided by demand-respond systems.

Implementation of additional regional coordination activities would be far less complicated and easier to implement than would full consolidation. Coordination efforts through MOU's to address fares, transfers, route integration, and other operating details could be accomplished without creating a new organization with a new governing structure. Each entity has a functioning governing body. Two entities have elected city councils. The third has a joint powers authority board made up of appointed elected officials from participating jurisdictions. Agreements between the entities regarding elements of coordination would require approval by a majority of the council or board from each entity. Consolidation of the transit providers into a new organization structure would require agreement to a new governance configuration. The existing three operating entities are governed by different voting structures. In the cases of the two cities, each council member has one vote. Transit decisions are voted on as are any other issue facing the city. In the case of FCRTA, a 14 member board is the decision making body. Each of 13 city members has one vote on the board. The 14th member is the county represented by a member of the Board of Supervisors. That representative has 6 votes.

Many of the consolidation and coordination activities that Nelson\Nygaard recommended back in 2007 are still relevant today. There's no reason the transit operators can't move ahead with any of these items that are still on the "To Do List." The three systems continue to operate with a high level of coordination, but additional opportunities exist in terms of schedule coordination, on-line services, customer service and universal fare media.

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 implemented a Trip Planning Software System. After fully testing, effort will be made to include Clovis Transit and Fresno County Rural Transit.
- In early 2013, FAX completed the installation of Automatic Passenger Counters (APC's) on all fixed route buses. These counters will provide additional ridership information that will allow FAX to better report passenger trips and improve service planning and delivery.
- FAX purchased an additional nine 40-foot CNG buses and three 30-foot CNG buses bringing its alternative fueled fleet to 80 vehicles.
- FAX completed the installation of On-Board Video

Surveillance System on all FAX buses. The video system has benefitted FAX in the defense of bogus lawsuits as well as identifying suspected criminals. It functions as a training tool to improve the safety of bus operators.

- Successfully applied for and received a $48 million FTA Very Small Starts Grant to bring Bus Rapid Transit (BRT) to Fresno. The initial corridor will run from River Park Shopping Center in the north along Blackstone Avenue to Downtown. From Van Ness Avenue, it will continue on Ventura Avenue and Kings Canyon Road to Clovis Avenue in the southeast.
- Utilizing funding from California Proposition 1B, FAX purchased a paratransit facility in central Fresno. The new facility allows for FAX staff to be stationed in the same building as the paratransit contractor. This provides better oversight of the operations and improves the communication between the vendor and FAX.
- In January 2013, FAX contracted with Keolis Transit America to operate the Handy Ride paratransit service.

Clovis Transit

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

- Purchased six (6) new Arboc low-floor kneeling buses.
- Clovis Transit made route adjustments to shift

service from low productivity areas to areas of higher demand. The redesign of the routes improved on-time performance, shifted service hours from a lower producing area in the south of town to a higher demand new area in the northwest, and route modifications on Gettysburg Avenue captured an entire new area with substantial ridership.

- Completed the installation of Digital Video Recorders on all transit buses. The video system has been invaluable in reducing incidents on the bus, identifying those passengers who do commit violations on the bus, is a method to solve disputes and passenger complaints, and facilities the investigation of employee incidents and discipline.
- Clovis Transit installed a Zonar pre-trip system fleet wide. The Zonar system ensures proper pre-trip

inspection of all transit vehicles. The Zonar units also incorporate a web-based GPS system that allows for instant tracking of vehicles and on-time performance from any computer with Internet capability.

- Clovis Transit made significant improvements to its fixed route bus stops. Concrete improvements were completed at over 50 stop locations by modifying the slope and space for ADA compliance, thus improving the access for persons with disabilities. In addition, Clovis Transit installed 42 benches at the stops.

Urban Transit - Safety and Security

FAX customers value safety and security when using the transit system; FAX addresses these concerns:

1. Transit Security Plan: FAX security plan provides a highly visible security presence for our transit customers and employees. FAX uses City of Fresno police officers to deliver system wide protection. Customers see uniformed patrol officers on buses and at transit facilities. As a result of the police presence, passengers feel safer, and public property has been protected from vandalism and graffiti. Since the introduction of the police officers, the number of crimes has been reduced
2. Video Surveillance System: In an effort to prevent graffiti and vandalism on buses, and to increase the safety of our passengers and drivers, FAX installed 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. City of Fresno Emergency Operations Plan: The Department of Transportation/Fresno Area Express (FAX) is included in the City's Emergency Response Plan. This plan addresses the response to extraordinary emergency situations with natural disasters, technological incidents and national security emergencies in or affecting the City of Fresno.

Needs Assessment

Urban 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.

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 Fresno COG is the lead agency for the development of a Coordinated Human-Services Transportation Plan (CHSTP). 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 Fresno County CHSTP will be updated in 2013.

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 Council of Governments (Fresno

Proposed Actions

Short-Range Transit Plan

Fresno Area Express (FAX)

The most recent Short-Range Transit Plan (SRTP) for the Fresno-Clovis Metropolitan Area was adopted on June 27, 2013. 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 2011

Public Transportation Infrastructure Study and the 2008 BRT Master Plan.

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 discrimination under any program or activity receiving Federal financial assistance."*

As part of the Title VI regulations, FAX must provide a Title VI Evaluation Report every three years. There are two sections to this report. The first section, General Reporting Requirements, contains information concerning active lawsuits and complaints, a description of any pending applications for Federal financial assistance, a summary of civil rights compliance review activities, FTA civil rights assurances, and fixed facility impact analysis. The second section, Program Specific Requirements, contains information regarding the Title VI internal review process for service delivery, the internal monitoring process, the service standard policies, and a description of service changes specific to the Fresno Area Express fixed route transit system and its impacts on the minority population. The Title VI assessment is designed to ensure that FAX provides its services equally among various population groups. Specifically, census tracts designated as "Minority Census Tracts" must be evaluated and compared to Non Minority Census Tracts to determine whether any discriminatory practices are evident.

The State Transportation Development Act (TDA) regulations require FAX to maintain a minimum 20 percent farebox recovery ratio. The TDA also places restrictions on the use of State Transit Assistance (STA) Funds. Regulations require transit agencies to keep cost increases under the State Cost of Living Index (CPI). If cost increases exceed the State CPI, transit agencies are not allowed to use STA Funds for operating expenses. Finally, local and regional concerns are used to develop minimum productivity standards. For FAX, these standards are developed through a coordinated, comprehensive, continuous process carried out by the Fresno Council of Governments (Fresno COG). The Fresno COG's Regional Transportation Plan (RTP) and Short Range Transit Plan (SRTP) for the Fresno Clovis Metropolitan Area (FCMA), sets guidelines for service evaluation. Additionally, each year the Fresno COG prepares the Annual Transit Productivity Evaluation. 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 dependent 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 outreach events and a bi-annual customer survey. The survey is more detailed and takes place on-board the buses and at stop locations. 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 its passengers. For example, it was one of these passenger surveys that allowed FAX to prioritize service improvement options and select night service in 1999.

Clovis Transit

Clovis Transit has also been affected by limited funding, which necessitated changes with an added emphasis on efficiency. Route changes will be implemented based upon demand, reducing transfers and elimination of unproductive routes or portions of routes. Increased emphasis will continue to be placed on peak-hour service.

Clovis Transit will continue to monitor existing services for productivity and internal efficiencies. Efforts to coordinate services among transit systems for maximum delivery of service throughout the region will also continue. Ongoing coordination and consolidation of all Clovis transportation service for social service agencies will continue to be the focus of Clovis' specialized services.

Long-Range Improvement Plan

Fresno, like other Central California cities, is expected to continue experiencing 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 experienced growth in the northern neighborhoods abutting Herndon Avenue, west of Highway 99 and in the southeast. 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.

With Fresno County's population expected to grow from the current 945,000 people to 1.3 million people by 2035, the topics of growth management, transit and land development policies are timely for Fresno for proactive planning that may stem the tide of Fresno County's past trends.

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 of 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' s 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 current FAX system, as with many other areas around the county including those within Fresno County, is one that primarily addresses social service transportation needs. The typical FAX passenger tends to come from a transit dependent household and has few, if any options other than riding the bus. If public transit is going to play a role in addressing mobility and air pollution challenges, the system will need to be structured, or restructured, in a manner that can attract choice riders. It must become competitive with the automobile.

With limited resources, shifting the service objectives of the FAX system could result in the need to make some difficult trade-offs. A system that is designed to be competitive with the automobile is not always appropriate for serving social service needs. This could become an issue for current riders and social service agencies. The question is, how limited resources will be distributed between competing needs. FAX identifies two short-term scenarios as well as long-term strategies that build upon these scenarios.

1. Short-term scenario A focuses all resources toward maximizing system-wide ridership. This scenario reduces service in areas that currently generate low ridership, while increasing the frequency of service to every 15 minutes all day in areas of high ridership. The service assumes a 25% increase in resources and suggests that ridership growth in the range of 35-50% is conceivable.
2. Short-term scenario B retains coverage to all areas now served, and even expands the coverage area to include most developed parts of the city. Relatively few improvements are made to increase productivity, although some frequencies are improved. This scenario is likely to increase the growth rate in ridership slightly, but at a rate below that of scenario A. To date, this has been the scenario of choice for FAX and other Fresno County service providers.

For long-term growth, the service plan recommends the implementation of either of the short-term scenarios, and then to grow service only as funding resources permit. The approach presumes that the 30% growth in travel projected for the region will occur overwhelmingly in the form of single-occupant auto trips.

The Public Transportation Infrastructure Study (PTIS) began as an effort to identify strategies for transportation investments and land use policies that would result in measurable reductions in vehicle miles traveled (VMT) and improve mobility choices for greater Fresno County residents. Improving transportation choices for Fresno County and City residents makes taking transit, bicycling and walking more attractive than driving alone for every trip. And, less reliance on the automobile translates to air quality improvements, setting achievable benchmarks for reducing greenhouse gases. The following recommendations were developed through the PTIS for the Fresno Clovis Metropolitan Area (FCMA):

1. Apply for funding for a second bus rapid transit corridor along Shaw Avenue from Highway 99 to Clovis, serving CSU Fresno within 5-6 years. The eastern end of the Shaw alignment could be either north on Highway 168 to a future high density employment center, or it could continue into downtown Clovis on Shaw Avenue if sufficient base zoning has been implemented to support the high capacity investment.
2. The third priority for high capacity transit investments was identified for Cedar Avenue from Shepherd Avenue to near Butler Avenue (and serving the CSU Fresno campus). The timeframe for this investment has not been identified, but would depend on an assessment of transit travel demand on existing local buses serving that route.
3. Restore 15 minute service frequency on high demand routes #34 (First Street) and #38 (Cedar Avenue). Increase frequency on route #32 (Fresno Street) to 15 minutes.
4. Implement "Owl Service" on 6-8 routes, extending service hours until midnight.

As policy decisions are implemented to support higher density development, housing and mixed use projects in downtown and when the High Speed Rail project becomes operational, the following transit investments could be considered:

1. Provide a direct link between the planned BRT system and the planned High Speed Rail (HSR) system to serve as a transit connection to destinations beyond downtown and to minimize the parking footprint needed for the future HSR station.
2. Consider building and operating a streetcar in downtown Fresno, serving Chinatown, the future HSR station and the regional medical center along Fresno Street, and terminating at San Joaquin Memorial High School.
3. Pursue funding for an expansion of the streetcar project that would operate along Fulton or Van Ness to connect the downtown convention center, the Fulton Mall, and continuing up to the Tower District, terminating at Fresno City College.
4. Pursue federal funding assistance to convert the BRT lines to LRT, particularly along Blackstone Avenue and Ventura Avenue/Kings Canyon Road.

In addition to the PTIS, several other regional studies of concern to public transit are currently active. The Fresno COG is conducting the Fresno-Clovis Metropolitan Area (FCMA) Public Transportation Strategic Service Evaluation and the City of Fresno's Fresno County Public Transportation GAP Analysis and Service Coordination Plan.

The purpose of the FCMA Strategic Service Evaluation is to examine metro travel patterns through extensive origin and destination studies; transit ride check and transfer studies; and public and stakeholder input with a goal of reducing transit travel times, and improving linkages to major trip generators. Improving transit travel time and responsiveness to community needs is critically necessary to making transit a viable alternative in contemporary urban environments. As Transit Oriented Development (TOD), and other measures geared toward alignment with the San Joaquin Valley Regional Blueprint and Sustainable Communities Strategy (SB375), continues to be introduced and come to fruition in the FCMA, it is the intention of this planning effort to be ready to adjust routes and meet the increased demand in a smooth fashion.

In addition, the FCMA as the rest of the Central Valley continues to suffer the economic impacts of the Great Recession. Identifying the most effective and efficient service design and operating strategies is critical for the long-term sustainability of public transit services in the area. Objectives of this study are:

- Assess metro travel patterns through extensive origin and destination studies; transit ride check and transfer studies; and public and stakeholder input.
- Identify transit route alignments and operating policies that could reduce transit travel times, and improve linkages to major trip generators.
- Make transit a viable alternative in the FCMA contemporary urban environments.
- Improve overall productivity, cost effectiveness and sustainability of transit service.

The Public Transportation GAP Analysis is a planning and research project that will meet the goals of the Fresno County Human Services Coordinated Transportation program by identifying specific needs of the transportation disadvantaged people in Fresno County and preparing an implementable plan to meet those needs. Identifying the barriers and gaps experienced by these groups as they seek to gain employment or simply travel to and from work, and determining the best methods to overcome those barriers will be of the highest priority.

The Fresno County Human Service Coordinated Transportation Plan identifies, in broad strokes, general transportation needs and gaps that exist within the Fresno COG jurisdiction. Although general transportation improvement opportunities are identified, there is insufficient data to develop meaningful transportation solutions. At the heart of this project, we intend to conduct a countywide survey of transportation needs that will focus on low-income, minority and transportation disadvantaged populations. According to the Fresno County Human Services Coordinated Transportation Plan, Fresno County has a higher percentage of disabled and low-income residents than statewide. Due to lower real estate prices and lower cost of living, many retirees relocate to Fresno County from major metropolitan centers. As this segment of population ages, it is expected there will be increased demand for specialized services for senior citizens.

Additional 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 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 Pocket Guide is a bilingual (English/Spanish), user friendly pamphlet which describes provides basic information such as maps and fares. The Guide also includes contact 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 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 Fresno Council of 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:

Table 5-1: Fresno Area Express (FAX) Performance History (1993-2012)

Year	Total Passengers	% Change	Total Serviced Miles	% Change	Square Miles	% Change	City Population	% Change
1993	8,283,499	-2.3%	3,025,476	-0.9%	100.53	1.1%	389,200	2.4%
1994	7,950,970	-4.0%	3,017,917	-0.2%	101.01	0.5%	395,700	1.7%
1995	8,552,797	7.6%	3,053,058	1.2%	101.03	0.0%	401,400	1.4%
1996	9,225,096	7.9%	3,048,962	-0.1%	102.11	1.1%	406,400	1.2%
1997	9,545,574	3.5%	3,050,894	0.1%	102.11	0.0%	410,900	1.1%
1998	10,399,087	8.9%	3,061,294	0.3%	102.44	0.3%	414,700	0.9%
1999 (1)	11,021,716	6.0%	3,281,329	7.2%	102.89	0.4%	419,800	1.2%
2000	12,419,412	12.7%	3,966,338	20.9%	104.56	1.6%	426,900	1.7%
2001 (2)	13,178,495	6.1%	4,277,175	7.8%	104.85	0.3%	434,948	1.9%
2002	11,905,195	-9.7%	4,289,968	0.3%	105.1	0.2%	442,279	1.7%
2003	11,213,049	-5.8%	4,026,408	-6.1%	106.04	0.9%	448,453	1.4%
2004	10,854,859	-3.2%	3,957,463	-1.7%	106.7	0.6%	458,170	2.2%
2005	11,241,838	3.6%	4,101,325	3.6%	107.35	0.6%	464,784	1.4%
2006	11,808,724	5.0%	4,229,020	3.1%	108.82	1.4%	471,479	1.4%
2007 (3)	15,542,564	31.6%	4,335,012	2.5%	110.4	1.5%	470,817	-0.1%
2008	16,925,826	8.9%	4,661,278	7.5%	111.4	0.9%	477,499	1.4%
2009	18,049,827	6.6%	4,690,193	0.6%	111.85	0.4%	487,353	2.1%
2010	17,589,425	-2.6%	4,586,748	-2.2%	112.4	0.5%	494,054	1.4%
2011 (4)	15,778,132	-10.3%	3,893,426	-15.1%	112.5	0.1%	497,561	0.7%
2012	14,304,222	-9.3%	3,881,078	-0.3%	112.5	0.0%	505,009	1.5%
Total % Change		**72.7**		**28.3%**		**11.9%**		**29.8%**

Notes: (1) FAX began operating night service until 10 PM on weekdays (September 1999); (2) Base cash fare increased to $1.00 per trip in 2001; (3) Began using an FTA approved stratified sampling plan to determine ridership; (4) Base cash fare increased to $1.25 per trip in 2011

- 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.

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 in Table 5-1. During the period between 1993 and 2012, the population in the City of Fresno grew by 29.76 percent. The geographic area within the city's boundaries grew by 11.9 percent during that same period. During this period, FAX service miles increased by 28.3 percent, primarily due to the addition of 15 minute frequencies on four of FAX's busiest routes, and total passengers increased by 72.7 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 dependent 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 public transit to play a meaningful role in improving air quality, promote mobility among transit dependent 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 over the last three years have decreased by 4.2%, primarily from continued reduction in "no shows". Staff has been effective in identifying "no show" customers and working with the client to better understand the process. Service miles have decreased over this same three year period because of the change in service to the City of Clovis. FAX and the City of Clovis continue to facilitate trip transfers for clients wishing to travel into Clovis.

The demand for paratransit service requires constant service evaluation, and FAX is working closely with the contracted service provider and the City of Fresno Disability Advisory Council (DAC) to improve on the provision of paratransit service.

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 per year. It is anticipated that in fiscal year 2014 Measure C will account for just over $8.6 million dollars in revenue.

5.5 Fresno County Rural Area Public Transportation & Social Service Transportation

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 service to a few of the County's incorporated cities. Their routes are shown on Figure 5-13.

Rural General Public Transportation

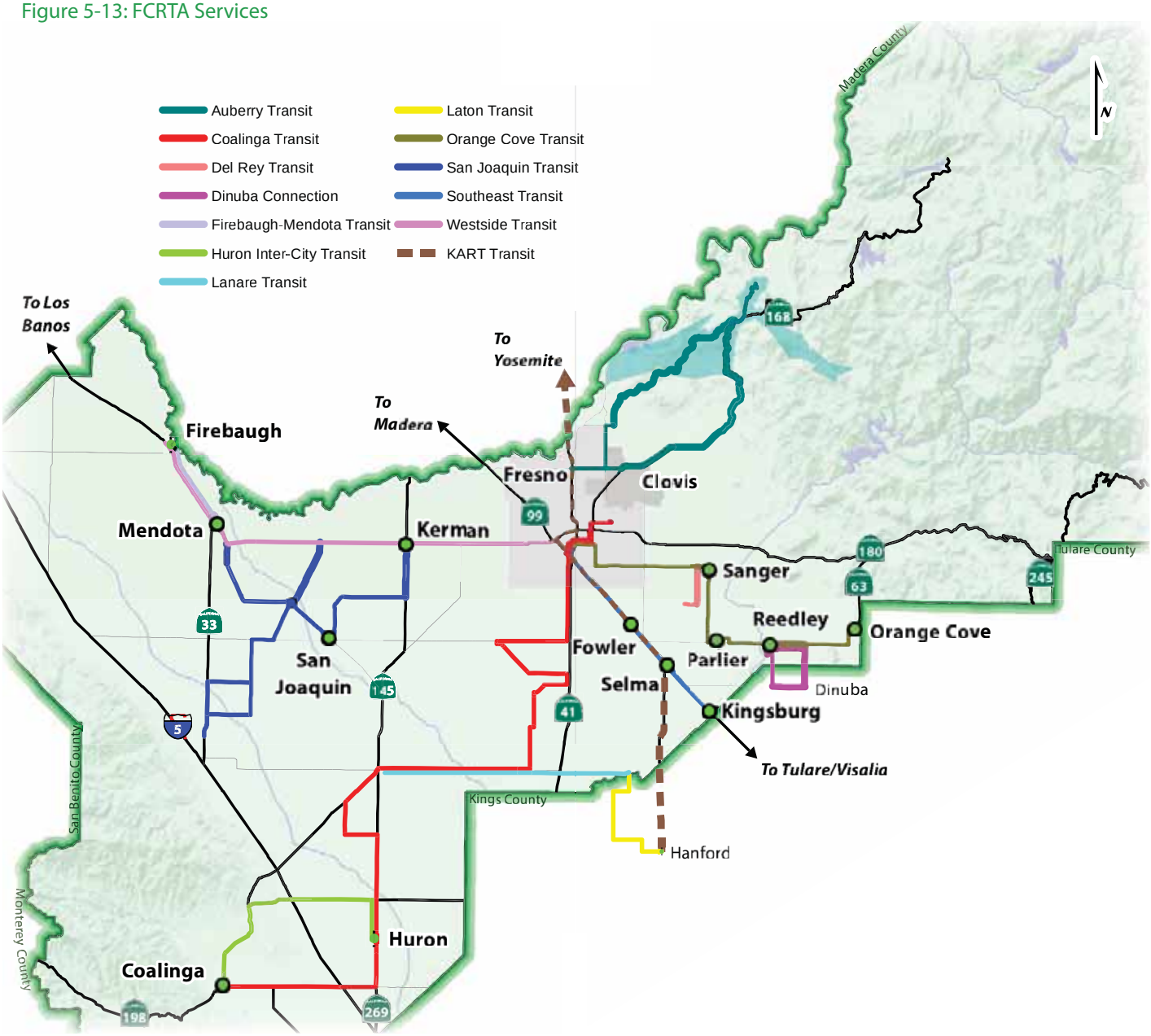
The primary provider of rural general public transportation is the Fresno County Rural Transit Agency (FCRTA). The Joint Powers Agency was formed in 1979 to address transit needs of the rural incorporated cities including: Coalinga; Firebaugh; Fowler; Huron; Kerman; Kingsburg; Mendota; Orange Cove; Parlier; 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 – San Joaquin - Kerman Corridor
- Kingsburg – Selma – Fowler Corridor
- Orange Cove – Reedley – Parlier – Sanger Corridor

Additional inter-city corridors also provide linkages between rural incorporated cities:

- Huron – Interchange Developments at State Highway I-5 and 198, Harris Ranch, West Hills College, and Coalinga.

Figure 5-13: FCRTA Services



Appendix K displays a summary table of the FCRTA's services in the rural system.

Rural Social Service Transportation

The COG has co-designated the FCRTA and the Fresno Economic Opportunities Commission (FEOC) as the Rural Consolidated Transportation Service Agency. The Rural CTSA celebrated its thirty-second anniversary in 2014. FEOC 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, and 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 three social service agencies: 1) Central Valley Regional Center (CVRC); 2) Fresno County Economic Opportunities Commission; and 3) 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 2013-14 edition of the OPB was adopted by the respective agencies policy boards and the COG Policy Board in June 2013.

Fresno County Coordinated Human Services Transportation Plan

In June of 2012, Congress passed the Moving Ahead for Progress in the 21st Century Act (MAP-21), which is the funding authorization bill that governs federal surface transportation spending. Specific transit programs are part of the Surface Act. They include several programs, including the following :

- Enhanced Mobility of Seniors and Individuals with Disabilities - (Section 5310)
- Bus and Bus Facilities – (Section 5339)
- Fixed-Guideway Capital Investment Grants - (5309)
- Public Transportation Emergency Relief Program – (Section 5324)Transit Asset Management – (Section 5326)

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

- identifies resources currently in use for public transit; and
- 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 forty-five day review period for public comments, the document was adopted by the Fresno COG Board on January 24, 2008 by Resolution 2008-03. The FCOG is responsible for updating the plan in Fiscal Year 2013-14.

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 Fresno Council of 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".*

In March 2009, the California Association for Coordinated Transportation (CalACT) awarded recognition plaques to the FCRTA and the FCEOC for twenty-five (25) years as founding members and continued recognition of active involvement to promote exceptional transit services to the public. The FCRTA General Manager, Jeffrey D. Webster, also was singled out for the distinguished service award for *"Always working hard to improve coordination of rural transportation in California".*

In May 2012, the Community Transportation Association of America (CTAA) recognized the FCRTA General Manager, Jeffrey D. Webster, as *"Transit Manager of the Year"* at their Annual Meeting in Baltimore, MD.

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, 2013-2018".*

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.

Transit Systems Building Evolution

During the period of 1985 through 2009 the Fresno EOC Transit Systems had operated its operations from a metal building with a 1,250 sq. ft. office located at 3120

W. Nielsen Ave. Transit operations and services grew to a level which consisted of twelve staff persons and over one hundred drivers accessing this 1,250 sq. ft. office. It became evident that a larger office was necessary to effectively carry out the work in an appropriate setting. The FCOG's Triennial Performance Auditor, Derek Wong, had conducted the performance audit for the 2003-2006 period and remarked that consideration should be given to expanding the facility to facilitate FEOC's mission to coordinated transportation services to the social service sector. Management began to analyze the possibility and logistics involved with a new building venture.

During the Spring and Summer of 2009 the Fresno EOC Management team moved forward and solicited design build estimates from architects in this area. An architect was selected and a design build team met weekly to approve a building design which would incorporate three main features:

1. A large administrative area with room for some anticipated growth;
2. A training center so that Transit Systems could perform their own driver training meetings on site and that the room could also be available as a conference center for outside agencies to utilize; and
3. A driver lounge area.

A parking lot was built in early 2009 to provide a much needed designated parking area for staff and training room attendees. Previously many transit drivers had to park their personal vehicle in unoccupied service vehicle space while the vehicle was out providing service. Problems occurred when service vehicles returned and needed to park in their assigned space.

Transit Systems Building Specifications

The new Transit Systems building contains approximately 5,800 sq. ft. It is located at 3110 West Nielsen Avenue just west of the Marks Avenue exit from Highway 180. It is a commercially rated building with stucco exterior with metal stud construction. The building utilizes energy efficient lighting throughout. It has a reception area located at the entry and six modern modular office cubicles in the interior for Transit Supervisors and other administrative positions. A state of the art Dispatch area, with four current dispatch positions, is located in the rear of the administrative section. There are two available desk settings in this area for expansion of the

dispatch or other operations. Both the Transit Director and Business Manager positions have private offices. Additionally a secure file room / small meeting room is available as well as a larger private conference room with video capabilities. The large Training Room is over 2,000 sq. ft. with a very large video screen curtained wall with a ceiling mounted projector and sound system and a state of the art dimmable lighting system. Seating and table configurations for varied meeting venues comprises of either banquet style round / or rectangle tables or classroom style rectangle shaped tables. Theatre style configuration seating, no tables, can hold a maximum of one hundred and twenty persons. An adjoining storage room holds all center furniture and audio / visual equipment, as well as shelving for supplies and file archiving.

The driver lounge has a large wall mounted television and Blu-ray player for small training group needs as well as kitchen accessories for driver / staff convenience. Any food catering for the training center can be staged in this adjoining lounge area as well.

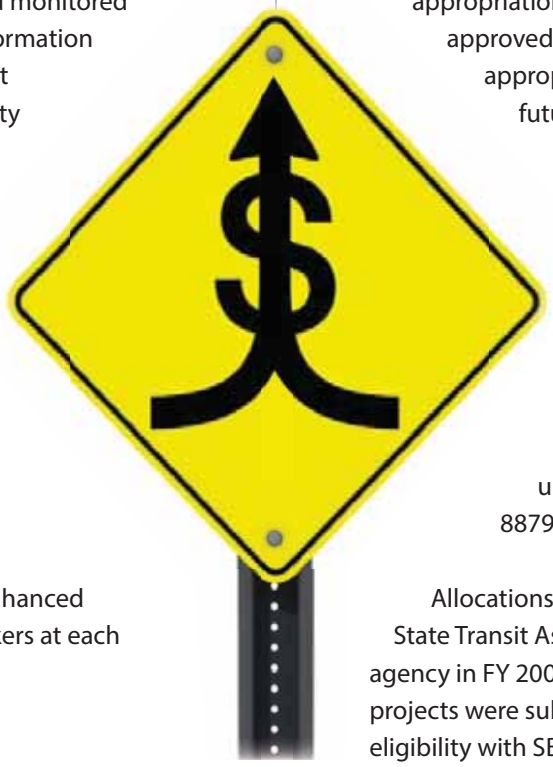
An added convenience is the Fresno EOC Food Service building located is on the same Nielsen Avenue property. That means that any on site meeting or activity with catering needs, can be accomplished with ease.

Transit Systems Building Technology and Capacities

It should be noted that the facility was designed with Intelligent Transportation Systems (ITS) features in mind. AT&T extended their Fiber Optic lines to the Nielsen office location and provided fiber optic services increasing the internet capacity and speed tenfold, which is more than sufficient to handle the increased demands of the new Mobilitat Computer Dispatching Software applications from individual work stations. The phone lines were also updated for the new Transit Systems Building to a "PRI" telephone service which has a capacity of twenty-three phone lines for simultaneous use. This provision anticipates future growth, and eliminates the need for adding more single phone lines. The internet service at the Transit Systems is supported and monitored by the Fresno EOC corporate office Information Technology (IT) technicians and staff. It meets all thresholds for insuring security of electronic information.

The Dispatch area also has two large screen wall-mounted televisions for displaying transit route data and / or live on-board video review from the transit vehicles. All primary dispatch positions have dual computer monitors at each work station for viewing data and mapping software simultaneously.

The two-way radio system has been enhanced with separate volume controlled speakers at each station.



Consolidation of Funding

The Rural CTSA maximizes available services by aggregating various operating revenues from social service agencies. These additional revenues help to 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. The FEOC has also sought and received FTA Section 6316 Job Access / Reverse Commute (JARC) funds to support specific programs for home to work trips for clients of its participating programs.

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

In November 2006, 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. In subsequent years they have delayed the sale of bonds to reflect the status of the economy. Recent appropriations were advanced for previously approved projects. They may continue to appropriate different funding levels in future years. The criteria by which they make allocations may also continue to be changed.

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 Organizations (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 include 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 2008, 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.

In May 2013, the FCRTA received an advancement of $4.3 million towards the purchase of previously approved applications for fleet replacement and expansion service vehicles. Caltrans asked for a projection of capital projects that the FCRTA had programmed in the coming years to assist in estimating the actual programming needs of further funding through the duration of the program.

The Governor's Office of Emergency Services (CalOES) (formerly referred to as California Emergency Management Agency – CalEMA and before that as the 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 similarly 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:

1. 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.

2. 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 its second Application for Phase 2 for an additional $170,941. The FCRTA has also submitted application to purchase mobile emergency radios, satellite radios, and emergency electric generators. In 2013 the FCRTA submitted phased applications to purchase and install electronic security gates at the rural City Corporation Yards where the FCRTA has its compressed natural gas (CNG) vehicles stored overnight for slow-fill refueling.

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.

The FCRTA has provided the majority of its services on a "real time" demand responsive basis since its inception in 1979. They have maintained the policy because it offers the highest level of service to its patrons. The patron calls the dispatch phone number for their area, they identify who they are, where they want to be picked-up and dropped-off at, and the vehicle is dispatched to that location to pick-up the patron in twenty to thirty minutes. The service is provided on a shared ride basis, so other patrons are also riding in the vehicle at the same time. The driver proceeds to drop off a patron at the next closest location. The driver precedes to pick-up and drop-off other patrons along the way.

The alternative was to take reservations a day or more in advance. The problem becomes the patron may forget about their appointment, and not be ready to ride, or they may change their mind at the last minute and decide they really don't want to ride that day. The transit agency then has wasted time and mileage, with no fare, for the unnecessary service. The delays affect the scheduling of the next trip. Confusion leads to a policy that when a person want to ride at a particular time, the transit agency can be considered to be on time if they arrive up to one hour before and one hour after the requested pick-up time. That may lead to missed time sensitive appointments. This only leads to even more "no show" pick-ups that are costly to the transit agency. The situation was addressed by the American with Disabilities Act of 1990 regulations. It set the standard for prior reservation services to be made at least twenty-four hours in advance, so the transit agency could program the trips in advance in an effort to provide more consistent services, especially to the disabled. The actual process became very cumbersome. Paper forms were converted to simple computer forms, but that didn't solve all the problems. Some agencies hired consultants to design a system to address their particular needs. Millions and millions of dollars were spent across the Nation trying to develop appropriate programs with very limited success. A couple of computer companies began to develop computer programs to address the industry's needs. The programs were expensive, cumbersome to customize for each transit agency. Additional features increased the initial costs significantly. After the initial purchase, agencies were surprised about annual license fees that escalated year after year. If a better program came along, the opportunity to change programs required another major purchase and time to enter the base data all over again.

The FCRTA was contacted over a twenty year period by each of the major companies who attempted to sell their products. Their programs simply did not meet FCRTA's needs as a "real-time" transit service provider. During the past three year, those companies finally realized that in order to secure additional customers, their products needed to be changed. They redirected their sales pitches, trying to convince agencies, such as the FCRTA, that their new products could now be used for spontaneous service request. The pricing appeared to be more reasonable for a small agency that operated with limited funds. FCRTA staff carefully reviewed their products, in an attempt to determine how they could be used. The cost quickly increased as additional functions needed to be addressed. They could indeed do anything, for an additional fee. In

checking with their recent customers, we actually learned just how expensive a working system really costs, and the necessary modification to their operations that they were not expecting to have to make.

With one company, we learned from their clients just how much they liked their systems. The prices were very reasonable. We reviewed their product carefully and determined that a very similar transit agency was about to proceed with a procurement Request for Proposal (RFP) approved by the FTA so FCRTA's, could "piggyback" with them. The procurement was awarded to the Mobilitat Company that was founded by a former rural transit general manager. The staffs had excellent talents, and were very interested in evolving their program to further address the particular needs of a "real time" demand responsive and scheduled fixed route service. The FCRTA Board of Directors awarded the contract at the end of March 2013. The following two months were used to understand our operations and make the necessary adjustments to introduce the program for actual implementation. Presentations were made to the staff supervisors, dispatchers and drivers. At first, no one really wanted to change their existing practices. They were all tied to their paper forms, and two-way radios. When they learned that computers were to be utilized by the dispatchers, and they would be sending the ridership request to the driver by way of a cellular computer tablet, everyone rejected the idea. But over several months of transition between paper forms and computer recordkeeping, everyone began to appreciate the program and what it could do for their jobs, to actually make it easier. Six months later, fourteen of FCRTA's subsystems were totally operational. Everyone loves the system, and no one would want to go back to the way it was before. The patrons appreciate the speed that they can make their request. If a delay problem is experienced dispatch can call them back and tell them. If a request was made the day before, a recorded message in English and Spanish is made to the patron to remind them of their trip later that day. The drivers no longer have to write anything down about their next service request. The tablets keep track of everything, the pick-up location, the requested destination, the number of patrons to be transported, the fares to be charged, times and mileage of each trip. The driver also has the opportunity to press a single button on the tablet's screen that will make a recorded phone call, in English and Spanish, to the patron that the driver is on their way to pick them up, so be ready!

Another button is available that the driver may press to alert the dispatch center personnel and supervisors of a particular emergency that can't, for some reason, be reported immediately by the two-way radio. The dispatcher can review the exact vehicles location by way of onboard Global Position Satellite (GPS) reception. The onboard audio video surveillance equipment constantly records the situation in the vehicle. Law enforcement and/or emergency personnel may be dispatched to the vehicle's exact location. Before boarding the vehicle, personnel can wirelessly connect through their laptop computer to view and listen through the surveillance equipment the actual activity going on the vehicle at that moment, before taking further action. To further improve their awareness of the reason why the driver pressed the button in the first place, the FCRTA is also upgrading the surveillance equipment to permit the live transmission of the onboard signal back to the dispatch center to immediately evaluate the situation. When warranted, the two-way radio can be utilized by dispatch to review the situation with the driver.

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.

Driver 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.

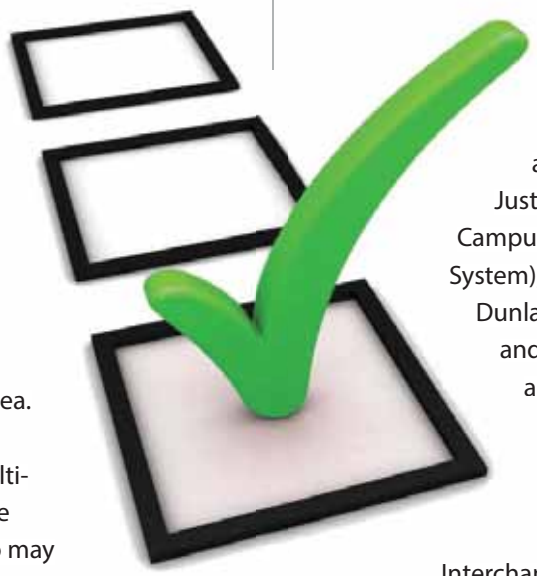
The maintenance component continues to purchase stock inventory that allows the facility to perform most repairs to the Rural CTSA's vehicles. This inventory of stock reduces required services by vendors, eliminates manpower involved in delivering vehicles for these minor

repairs, and lowers mileage and cost per vehicle. Thus, lowering vehicle cost and reducing air pollution.

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 findings 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.

Proposed Actions

Short-Range Improvement Plan

The 2013-2018 Rural Short Range Transit Plan (Rural SRTP) was adopted by the COG Policy Board in June, 2013. The following points outline the purposes of the Rural SRTP: to provide a five-year, action-oriented program to implement the public transportation as defined in the RTP; to provide a basis for local governments to demonstrate that public transportation needs within their jurisdictions have been reasonably met; to serve as the planning basis for Federal and State assistance to rural public transportation operations in Fresno County, and; 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.

Previously, with the deregulation of common carrier service, some rural communities within Fresno County experienced a lack of 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 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.

FCOG 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 plays an important role in that evaluation. Social service agencies must also recognize their responsibility under statute and continue to fund services for their clients.

Recap of Transit Service Expansions

Over the past thirty-four (34) years the FCRTA has implemented several Demonstration Programs including:

1. Coalinga Transit Inter-County Extension Service (through Avenal and Lemoore Naval Air Station in Kings County, to Fresno) – discontinued.
2. Westside Transit (Intercity service between San Joaquin, Tranquility, Mendota and Firebaugh - discontinued);
3. Kerman Transit's Service Expansion (between Kerman and Biola - discontinued);
4. Firebaugh Transit's Inter-County Extension Service between (Firebaugh and East Acres in Madera County - discontinued);
5. Auberry Transit (service from Auberry and the foothill communities of: Adler Springs; New Auberry; Big Sandy Indian Rancheria; Friant; Jose Basin; Marshall Station; Meadow Lakes; Mile High; Prather; Sycamore; Tollhouse to the Fresno-Clovis Metropolitan Area - modified and ongoing);
6. Friant Transit (service within Friant and to the Fresno-Clovis Metropolitan Area - discontinued);
7. Laton Transit (service extension of Kings Area Rural Transit's Inter-County route from Laton in Fresno County to Hanford in Kings County - ongoing);
8. Coalinga Transit's I-5 Interchange Development Service (between Coalinga to Interchange developments at Interstate Highway-5 and State Highway 198, Harris Ranch with connection to Kings Area Rural Transit for service to Hanford in Kings County, and to Huron - discontinued);
9. Eastside Transit (between Selma, with connections from Southeast Transit and Reedley, with connections from Orange Cove Transit - discontinued);
10. Huron Transit's Inter-City Service (between Huron and Coalinga - ongoing);
11. Kings Area Rural Transit's Medical Service (to medical appointments in Fresno County at the Kaiser Clinic in Selma, Community Regional Medical Center in Downtown Fresno, Veterans Hospital, Kaiser Hospital, Saint Agnes Hospital, and Children's Hospital - Central California in Madera County - ongoing);
12. Biola Transit (within Biola and to Fresno - discontinued);
13. Juvenile Justice Campus Transit (between

Downtown Fresno and the Juvenile Justice Campus at State Highway 99 and American Avenue, twice - initially (September 2006-June 2007) to provide service for visitors of clients retained at the facility, and reintroduced July 2009 – November 2009) when the Juvenile Justice Courtrooms and Probation Offices were completed - discontinued);

14. Dinuba Transit Connection (Inter-County service between Dinuba in Tulare County and Reedley in Fresno County with connections to Reedley Transit and Orange Cove Transit - ongoing);
15. South Sierra Transit (within the foothill communities of Dunlap, Miramonte, Pinehurst, and Squaw Valley and to Orange Cove, Reedley, Parlier, Sanger and the Fresno-Clovis Metropolitan Area - discontinued);
16. Rural Transit (service to unincorporated areas of Fresno County, beyond incorporated cities - ongoing);
17. Firebaugh – Mendota Transit (inter-city service between Firebaugh and Mendota, - discontinued, reinstituted and ongoing), and
18. Coalinga Transit's Medical Express Service (from Coalinga to medical appointments in the Fresno-Clovis Metropolitan Area - discontinued).

A Demonstration Service is subject to meeting stipulated minimum performance criteria. In each case where a service was "discontinued" actual ridership and farebox receipts did not meet minimum expectations and standards, despite extra efforts.

Fresno COG is striving to meet the goals of SB 375 by engaging the Fresno County Rural Transit Agency (FCRTA) to work with community representatives especially those from the communities of Lanare, Laton, Riverdale, Huron and West Fresno County. As a result of these collaborative efforts there is one new service (Lanare Transit) planned and programed for the Lanare, Riverdale communities which will be a transit shuttle service connecting those communities along this southern corridor of Fresno County with intra community and Inter-City transportation needs to those residents.

This service will connect passengers to the Coalinga Transit into Fresno daily and Kings Area Rural Transit (KART) into Hanford as well as scheduled stops within Lanare and Riverdale. The service has been in the works since first meeting with the residents of the Lanare community in September of 2012 with multiple meetings through February of 2014 and surveys taking place in cooperation with the Leadership Council staff and former CRLA staff. The service is set to commence after July of 2014 once all the scheduling, days and hours of service is confirmed. Another change in rural service is the expansion of the Huron Transit Inter-City into Coalinga which currently operates from 9am to 3pm for 5 hours per day. As of July 1, 2014 the Huron transit Inter-City will operate from 9am to 5pm for 7 hours per day so Huron residents will be able to attend college classes and extended business in Coalinga.

Future Expansion Service

Inter-City Service Modifications.

Years ago, inter-city services in Fresno County were primarily provided by two common carriers, Greyhound and Orange Belt Stages, which are regulated by the California Public Utilities Commission (PUC). Previously, Greyhound provided inter-regional services through the Fresno County Cities of Firebaugh, Mendota, Kerman, to Fresno; and through Kingsburg, Selma, Fowler to Fresno; while Orange Belt Stages provided inter-regional service through Reedley, Parlier, Selma, and Fowler to Fresno. Over the past ten years their respective services have declined significantly. During the 2004-05 fiscal year Greyhound proceeded to eliminate approximately seventy-two additional cities from its inter-regional service program in California. Specifically impacted were the Cities of: Firebaugh; Fowler; Kerman; Kingsburg; Mendota; Parlier; Reedley; and Selma.

The local agency representatives (elected and staff) and the general public asked the FCRTA to respond to these deteriorating circumstances. The adopted Rural Short Range Transit Plan recommended that the FCRTA become responsible for assuming inter-city service responsibility for "general public patrons". To this end, the FCRTA acquired Grant funding through the Federal Transit Administration's Congestion Mitigation / Air Quality program to purchase inter-city compressed natural gas powered buses. The original objective of these inter-city replacement services was to attract a mix of "transit dependent" and "choice" riders. Commuter travel was intended to reduce vehicle miles traveled (VMT) by single occupancy vehicles. The air quality benefit of this form of

transit service has proven beneficial to Fresno County.

FCRTA members have also expressed a desire to program a couple of inter community/regional demonstration programs to promote economic and community development. They envision short-term, subsidized transit operations that could prove self-supporting and assumable by the private sector.

Several specific projects have been suggested. FCRTA's plans could include subsidizing a service for three to 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 Fresno County Communities. The program could involve multiple vehicles.

In 1994, the Fresno County Economic Opportunities Commission (FCEOC) as the Consolidated Transportation Service Agency (CTSA) submitted a Grant Application for a Federal Demonstration Program through the U.S. Department of Health and Human Services' - Job Opportunities and Basic Skills Training Program. The demonstration program was referred to as "Joblinks". It was administered by the Community Transportation Association of America (CTAA).

In February 1995, the CTAA awarded California's only Joblinks Contract to the FCEOC. The FCEOC provided transportation services for clients participating in Job Training Partnership Act (JTPA) training programs for three (3) employment and training agencies in Fresno County: the Fresno Private Industry Council (FPIC); the Fresno County Department of Social Services' Greater Avenues in Independence (GAIN) Program; and Proteus, Inc. The target area of service consisted of the thirteen incorporated rural cities in Fresno County and inner-city neighborhoods of the City of Fresno. The eleven month Contract was for $108,148, of which $83,000 came from the grant and $25,148 will come from the CTSA's Transportation Development Act, Article 4.5 Local Transportation Funds.

The program proved to be a success for addressing commuter "home" to "training / work" needs in Fresno County. The model may be utilized in the future.

- Volunteer Driver Mileage Reimbursement Program for rural residents who do not live within existing transit service areas.
- FCEOC's Rural Passenger Transportation Technical Assistance Plan for the I-5 Business Development Corridor Area in Western Fresno County.

In December 1996, the Fresno County Economic Opportunities Commission (FCEOC) as a non-profit organization submitted a Grant Application to the Community Transportation Association of America (CTAA) in response to a U.S. Department of Agriculture funded program. The grant was one of just five projects that were selected nationwide for funding.

The purpose of the study was to develop a comprehensive Subregional Transit Plan to address and facilitate inter-community travel needs of Firebaugh, Kerman, Mendota, San Joaquin and unincorporated communities of Western Fresno County. The study results complemented the I-5 Business Development Corporation's School-to-Work Grant from the Federal Departments of Education and Labor; address the dynamics of community health care services; and inter-community transportation to

employment opportunities in the area; and local adult education and training programs to address changes in the Federal Welfare Program.

The consulting firm of TPG Consulting, Inc. (Transportation Planning Group) of Visalia and Fresno was selected to perform the FCEOC's Rural Passenger Transportation Technical Assistance Grant for the I-5 Business Development Corridor Area of Western Fresno County.

The resultant plan was completed in September 1998. It recommended twelve hours of service per week day to adequately address the diverse needs of the Area. However, some entities felt that a phased approach would be more reasonable. Service was expanded to ten hours per day for the 1998-99 Fiscal Year. Ridership continues to grow in the Area. Service interaction to neighboring communities has proved to be very successful. Further expansion has been proposed since the 2000-01 Fiscal Year. Modifications to the operations were further funded with Measure C beginning in 2006-07. Consideration is given annually to further service expansion to address the growing needs of the Westside of Fresno County.

Service Expansion Analysis

Staff studied service expansion proposals to address changing service needs following the Federal adoption of the Welfare Reform Act (WRA). Extensive regulations were imposed on the State and County governments. Affected service needs included: home to work; home to job training; home to health care services; and home to child care services.

Staff initially attempted to work with the staff of the Fresno County Department of Social Services (DSS) to identify potential impacts to the rural transit services.

The State certified the County's CalWorks Plan in the Spring of 1998. It referenced a cooperative working relationship with the existing transit operators in Fresno County.

Sixteen years ago, attention was focused on the Fresno-Clovis Metropolitan Area (FCMA). The DSS and the Fresno Workforce Development Corporation (FWDC) purchased Fresno Area Express (FAX) monthly passes for social service case workers to hand out to welfare clients needing transportation within the FCMA. The arrangement was quite simple at the time, FAX operated on a twelve (12) hour per day basis (generally 6:30am to 6:30pm). The fixed route system operates on a grid pattern throughout the Area, clients can generally walk to a bus stop location within a half (½) mile of their residence and the buses generally takes them within a half mile of their employment or training location destination. The passes were the same ones used by the general public so no one could distinguish them as a welfare client. This arrangement continues to maintain a high degree of confidentiality and autonomy.

In the rural areas the situation is quite different. In 1975 when the Fresno Council of Governments (Fresno COG) first prepared and adopted its Regional Transportation Plan (RTP), the Plan reflected rural Board Policy stipulating that transportation "to" and "from" employment was the responsibility of the employee and/or the employer. This Policy was reinforced when specific Transportation

Development Plans (TDPs) were developed in 1978. Previously, rural transit service have "primarily" operated on a demand responsive basis Monday through Friday from 8:00am to 5:00pm with an hour lunch break for the drivers.

The FCRTA's twenty individual services have recognized the holiday schedule of the local City in which they are operated. As such, service may not be provided eight to thirteen weekdays a year. It was acknowledged that many employers do not recognize the same holidays as our local governments. This type of arrangement has been "certified" annually by the Fresno COG Policy Board at the recommendation of its advisory committees, and

following an opportunity for written and oral public testimony at legally noticed Public Hearings, to meet the rural transit needs within Fresno County.

Under the previous arrangements, a few of FCRTA's daily general public passengers used the rural transit services one-way to a full time job or round trip if they have a part-time position that takes place within FCRTA's operating period.

The circumstances of these previous arrangements were seriously challenged by the Federal Welfare Reform Act. The Federal law stipulates maximum walking distances and travel times while in transit for child day care and employment/training. The maximum travel time was one hour. No provisions existed to adjust this regulation. Simply, it is somewhat difficult (and in many cases impossible) to travel from "home" to "work or training" and "a child care location" within most urban metropolitan areas (including our own FCMA) within one hour. This provision is even more difficult in a rural County such as ours with six thousand and six square miles.

In preliminary discussions fourteen years ago with DSS staff, staff was told that approximately forty thousand Fresno County residents were on welfare. The location of these clients are scattered throughout the County, with concentrations in each incorporated City. The number of welfare residents living beyond the fifteen (15) incorporated City's Sphere of Influence boundaries (generally the rural intra-city service area boundary) is quite staggering. The referenced unincorporated communities include: Auberry; Big Creek; Friant; Pinedale; Prather; Shaver Lake; Tollhouse; Burrel; Caruthers; Del Rey; Dunlap; Laton; Piedra; Riverdale; Squaw Valley; Cantua Creek; Dos Palos; Five Points; Helm; Raisin City; Tranquility. No travel patterns were readily evident.

Staff respectfully asked if they could determine where specific clients live, their intended employment or training destination and when they need to come and go there. DSS staff reported that the information was "confidential". Staff informed them that they understood, but without this information it was impossible to provide appropriate services in existing service areas, or expand our operations to meet additional needs in unincorporated communities or areas.

In 1998-99 staff was faced with the dilemma of having to prepare plans and budgets with incomplete information. The result was a "status quo" Plan and Budget. Staff, however, felt that the Rural SRTP should be prepared to enhance flexibility for inter-community travel between Cities in sub-regions of our County. Existing transit service area boundaries were relaxed from the City's Sphere of Influence limits to accommodate residents within close proximity to their respective city. Such actions allowed the FCRTA to augment its services to respond to the changing needs of all residents. In support of this recommendation staff offered the following observations:

1. A number of new rural health care facilities have been created within the last sixteen years. Specific services are not being duplicated at each facility. Patients are needing to travel between facilities in the rural area to receive required care.
2. The County Board of Supervisors directed its staff in 1999 to merge the Departments of Health and Social Services. These departments operate numerous programs that directly impact rural residents. The delivery of service was oriented away from the FCMA to better serve rural residents. Specific proposals were evaluated.
3. The first Fresno County Human Service System Regional Center was established in Selma to serve the Eastern Communities in Fresno County. The site was dedicated in the Autumn of 1999. Nearly one hundred employees were reassigned to the Center to address the needs of Fowler, Kingsburg, Orange Cove, Parlier, Reedley and Selma.
4. The Coalinga Service Center was expanded in the Winter of 2000; a Satellite office was also opened in Huron.
5. The FCHSS staff worked to establish a Western Fresno County site to serve the needs of Firebaugh, Kerman, Mendota, San Joaquin and the surrounding rural unincorporated Communities. The implementation of a specific site was hampered by the unavailability of a vacant facility that could meet the needs of staff. The I-5 Business Development Corridor favored building a new facility in the areas between Kerman and Mendota. Financing and construction of a facility delayed implementation of a western regional center.

The one hour travel time limitation on rural welfare clients is requiring job creation and training programs to be located within closer proximity to rural cities.

In order to facilitate these changing objectives, the FCRTA Board felt the policy towards employment travel on FCRTA's subsystems needed to be refocused to a new minimum standard. FCRTA staff suggested that each of FCRTA's existing services be expanded one hour before an 8:00am work/training period and one hour after 5:00pm (representing the typical 8:00am to 5:00pm work day period). The FCRTA Board supported this recommendation realizing that FCRTA's services would be in operation from 7:00am to 6:00pm, or ten hours per service day, again considering an hour lunch period for the driver.

Staff initially suggested that these additional hours, beyond the existing service periods that have been deemed to "meet unmet transit needs" be paid for by new funding sources. The obvious new resources were tied to the Federal mandate and funding imposed by the Welfare Reform Act. Staff recognized that the County's CalWorks Plan was to receive $50 million per year for five (5) years. Staff also knew that the U.S. Department of Labor was funding Private Industry Councils (PIC), (Fresno County's Workforce Development Corporation), $50 million per year for five years. It was felt that between these two sources, there should be adequate monies to fund these minimal services. In fact, as these two agencies continue to refine their respective programs, and identify their additional needs, additional service hours may be funded for subsequent implementation.

The five year funding ended in 2005-06. Many welfare clients were unsuccessful in getting jobs to support themselves. The FCRTA discontinued the expanded services as ridership and funding decreased.

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 three-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:

1. 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.
2. Similar arrangements could be expanded to include workers or trainees who may be employed at a common business.
3. Farm worker transportation services from cities to field operations and processing plants. Services could include: vanpools; demand responsive services; and 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; community medical facilities; unincorporated communities service for Caruthers, Easton, Five Points, Lanare, Raisin City, and Riverdale; connectivity to Kings County with Kings Area Rural Transit (KART) – Lemoore, Hanford and Amtrak, Madera County; – Madera and the State Center College Center Campus; Merced County – Dos Palos and connectivity to Merced Transit; Tulare County for connectivity through Dinuba to Visalia and Tulare

In Eastern Fresno County they 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 - Brighton 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 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, Bus Rapid Transit (BRT) stations; Light Rail Transit and the future High Speed Rail Station.

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 and taxi scrip. Seek assistance through commercial companies and CalVans. 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 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 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 one hundred and thirty-two 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 vehicles in Kings County. Following the FCRTA Board of Directors action to enter into a Memorandum of Understanding with Kings County, seventy-five 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 one hundred and five farm labor vanpools in operation by residents in each of three 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 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 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 twelve 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.

Commuter Vanpooling

The KART program also had a very successful Commuter Vanpool Program. With ten (10) prisons in the San Joaquin Valley, the workers often travel great distances to their jobs. Allowance stipends encouraged consideration of shared rides. Vanpooling was seen as a means of reducing personal expenses of single occupancy travel and the depreciation of excess mileage on personal vehicles.

Combined Vanpooling

The "San Joaquin Valley Express Transit Study" conducted by the County of Merced recommended 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.

After considerable effort the new regional Joint Powers Agency (JPA) was formally authorized in December 2011. The "CalVans" Board of Directors was constituted a month later. Meetings are held every other month through teleconferences, to reduce the need for extended travel and time away from local responsibilities. Currently the following eighteen Counties are members: El Dorado, Fresno, Madera, Merced, Monterey, Napa, Kern, Kings, Placer, Sacramento, San Benito, Santa Barbara, Santa Cruz, Sutter, Tulare, Ventura, Yolo, and Yuba. The following nine adjacent Counties have CalVans traveling "to" and "from" them: Imperial, Los Angeles, Mendocino, San Joaquin, San Luis Obispo, Santa Clara, Solano, Sonoma, and Stanislaus. And the Agency continues to grow. Nearly five hundred Commuter and Farm Labor Vanpool vehicles are currently in service.

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.

The FCRTA continues to receive requests for rural transit expansion to further address commuter travel to work, education, and job training in the Fresno-Clovis Metropolitan Area (FCMA). Despite other subsidies, many of FCRTA participating agencies expressed concern that even the average $5.00 per day vanpool cost appeared to be beyond the reach of many unemployed and under employed people in the rural communities.

In 2010-11, after ongoing requests by individuals, City Managers, and City Councils and Departments of Fresno County regarding desire to see the FCRTA services expanded to address transportation service for employment and educational purposes. The diverse nature of such requests, including the location of the origins and destinations, and the time-frame for needed arrival and desired departure of such trips, and the resulting actual commuting time for such a service is very difficult to be viable for a rural public transit provider. A review of the vanpooling participant's actual share of the daily transportation is approximately $5.00 per day, depending on the actual distance traveled. For an employed person that cost is understood to be very reasonable. But some remarked that some individuals were just starting work, and they wondered if the cost could be even lower. FCRTA Staff recommended in the adoption of the 2010-11 budget to set aside up to $1 million of its capital reserve funds to purchase thirty-five (35) vehicles that were delivered and equipped for service in March 2011. The vehicles are available through the CalVans program for rural Fresno county residents. A vehicle was on display prior to the FCRTA's Board meeting in late March. A qualifying participant was present to be handed the first set of keys to begin utilizing the vehicle. The individual was a resident from Kingsburg that was a teacher in Pixley in Tulare County. He had organized a group that needed reliable transportation to South Valley communities. The monthly cost of the vanpool will not be required to include original vehicle costs paid for by the FCRTA. The next result is to lower the daily shared costs nearly $2.00 per day per participant. This amount is much less that what a rural public operator would have to charge in order to achieve the minimum ten percent fare ratio to actual expenses. Thirty-four similar vehicles are immediately available to specifically address this previous perceived need in a low-cost effective manner personalized to the very individuals participating.

In February 2013, the FCRTA Board of Directors directed staff to set aside another $1 million to purchase thirty-five vehicles to be as farm labor vanpools for CalVans to administer for Fresno County farm workers. The vehicles are being delivered in May 2013 for immediate use as the harvest season and processing begins. If work moves beyond Fresno County, the workers may continue to be employed to support their families. It should be understood that multiple trips per day are possible to meet workload demands in agriculture.

For more information to participate in carpooling, commuter vanpooling or farm labor vanpooling contact the Valley Rides Program. They may be contacted at 559-441-RIDES (7433) or valleyrides.com. Valley Rides staff and their designated program vendors (VPSI, Enterprise and CalVans) continue to be available to make on-site presentations to employers, employees and clients who may want to know more about the programs.

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 currently being produced. 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. A bilingual booklet would also contain important reference information.

The FCRTA hired a consultant to prepare the necessary

documentations with GPS coordinates for submission to "Google Transit". The material was found to be in conformance with their requirements. The FCRTA services are now available by accessing "Google Transit" on the internet. (FAX and Clovis Transit had previously been included on Google Transit.) FCRTA Staff was also contacted by two other internet search engines companies for inclusion on their websites for free public access.

"*Transportation Information*" (for all modes) is now also available to anyone by simply dialing "511" on your phone.

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

FCRTA Staff are also going to be contracting for the training of volunteers who want to participate in our "Transit Ambassador" program. Volunteers will be assisting "other people" who want to go to various destinations in the County. They will explain and assist the new patron in successfully making their trip and based on that experience become a regular user of public transit.

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.

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 with solar lighting, 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 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 of the Consolidation Study was 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 recommends the development of Business Plans to facilitate further consideration for the implementation purposes. Staff evaluation questioned the conclusions of the consultant effort. The actual economic basis for pursuing consolidation was clearly overestimated by the consultant. The respective agencies could not anticipate any savings as a result of formal consolidation, at this time. The determination become even more important as each transit agency experience deep funding cuts in traditional transit funding programs. Inherent liabilities expressed by each agency could not be resolved by the Consultant without further costly studies. On the other hand, the agency personnel nurtured further inter-agency opportunities to coordinate specific activities including: vehicle procurements; support technical equipment; maintenance services; electronic fareboxes; computer programs; communication equipment; alternative fuel support services; warranty follow through; and coordinated responses to State and Federal legislation and regulations.

Financial Capacity Planning

The FCOG 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 continues to receive 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. This practice has become reemphasized by the Federal Government in the past six years, as is now referred to as "sustainability".

Accessible Services in Compliance with the Americans 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 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 three-quarters 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 Fresno Council of Government's Transportation Control Measures Plan, and the State's Congestion Management System

Following the passage of the Federal Clean Air Act in 1990, the FCRTA followed pending regulations that were to mandate public transit agencies throughout the Nation to consider and implement alternative fuel programs as an example to other the public governmental entities, and the non-profit sector and private sector. These issues were also very important to the San Joaquin Valley Air Basin of California. At the time, the FCRTA Board of Directors

understood that the Valley had potentially the worst air quality in the Nation. This understanding is confirmed by the Valley's current non-attainment status for the eight hour ozone (extreme non-attainment classification) and the PM2.5 National Ambient Air Quality Standards.

The FCRTA Board of Directors, which is composed of the Mayors of each of the thirteen Cities and the Chairman of the County Board of Supervisors, has recognized its responsibilities to be part of the air quality solution, and an example for others to emulate. The FCRTA Staff consistently went with proven technology and readily

available fuels. Their commitment away from diesel was challenged by larger urban operators. Many of their own members' agencies have recognized and acknowledged that if the small rural agency could make it work, so could they. And so they too have chosen an alternative fuel path to achieve cleaner air.

From 1992 through 2010 the FCRTA successfully operated eleven vehicles on propane. In 1997 the FCRTA purchased twenty-three compressed natural gas powered vehicles, and two zero emission battery powered buses that were successfully operated through 2010.
The FCRTA's inter-city CNG vehicles take advantage of the five existing fast-refueling facilities throughout the County. The in-city CNG vehicles are refueled overnight on a slow-fill basis by forty-five FuelMakers placed in the individual rural communities.

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, and 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, the 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

The FCRTA vehicle fleet in 2012-13 consisted of seventy vehicles. Forty-nine were powered by CNG, and the other twenty-one are powered by unleaded gasoline, only because no conversion kits were approved by the California Air Resources Board. The FCRTA does not operate any diesel powered vehicles. The FCRTA identified thirty-two vehicles that had exceeded their useful life as per FTA criteria. They include: three 1997, one 1999; five 2001; eight 2002; ten 2004; and five 2006. Their age ranged from sixteen years old to seven years old, with mileage in excess of 300,000 to 450,000 miles each. The remaining thirty-eight vehicles included: three 2006 CNG powered thirty-seven passenger Blue Bird buses; four 2007 CNG powered thirty-seven passenger Blue Bird buses; eleven 2008 CNG powered twenty-two passenger modified GMC - Glaval Vans; sixteen 2009 CNG powered twenty-two passenger modified, GMC-Glaval Vans; and four 2009 gasoline powered five passenger modified Chevrolet Mini-Vans.

FCRTA Staff with the assistance of City of Fresno Maintenance Staff evaluated potential replacement vehicles. They were especially interested in the vehicles recently purchased by the City of Clovis. Their vehicle was a modified Chevrolet cut-away vehicle with a purpose built chassis that featured a low-floor design with a kneeling feature to permit access through the right front door by way of an unfolding ramp that was rated to 1,000 pounds. The ramp permitted very easy access for all passengers, including the frail elderly, disabled, and passengers (including the morbidly obese) in motorized wheelchairs who may exceed the 600 pound maximum limit as recognized by ADA regulations. The vehicles could accommodate up to three standard wheelchairs, and the provisions to handle oversized chairs. Seating for ambulatory passengers was convenient and comfortable. They were available with high capacity air conditioning. They include automated chainable signs in the front and curb side by the door to end the confusion of changing vehicles for preventative maintenance and repairs. There was ample storage for the driver's possessions. And the vehicles were available in different lengths and seating configurations. FCRTA Staff and City Maintenance Staff did a site visit to the factory to review actual vehicle production. The City Maintenance Staff also visited other rural agencies to talk with drivers and mechanics to seek their opinions. In the end we were able to take advantage of the California Association for Coordinated Transportation (CalACT) cooperative purchase program that had been approved by both Caltrans and FTA.

The FCRTA Board approved the purchase of thirty-two replacement vehicles that were funded with PTMISEA and Measure C funds. They also authorized the purchase of six additional service expansion vehicles, four were funded by FTA Section 5316 Job Access / Reverse Commute (JARC) funds and two were funded by FTA Section 5317

New Freedom (NF) funds. Measure C funds were used as matching funds for both Grants. The vehicles will also be Arboc vehicles. The thirty-eight vehicles are powered by CNG and unleaded gasoline. Two CNG service trucks were also purchased with a combination of CalOES and Measure "C "funds. Two, four-wheel drive modified and accessible vans were also purchased with Measure C funds to continue to provide service to the rural foothill and mountain communities of the County. The vehicles are being delivered and inspected by the California Highway Patrol's Motor Carrier Specialist and certified as General Public Paratransit Vehicles (GPPV). The vehicles will be presented to each respective City Council prior to actual service introduction in the Spring of 2014.

The FCRTA shall continue with the process of systematically implementing necessary modifications

to bring its fleet vehicles into full compliance with the spirit and intent of Federal and State air quality laws and regulations.

California has taken an additional step towards addressing Greenhouse Gas Emissions. The California Air Resources Board (CARB) has introduced their Cap and Trade Investment Plan. Simply put it fines those agencies or companies for the pollution that they emit into the atmosphere. The funds are then made available to fund programs that are to reduce carbon emissions. The first round of available funds were borrowed to balance the State's Budget. The economy has improved and the funds have been paid back. The Governor has stated that he wants to use a portion of the funds to help fund the implementation of the High Speed Rail System in California, because the electric train is emission free. The CARB's Plan also recognizes that zero emission vehicles should be the program's first priority. That intent is now focused on the implementation of electric vehicles and their needed infrastructure.

The program seeks to make funds available for such projects to the disadvantaged areas of the State. Specifically the top ten percent disadvantaged communities, by zip code. The Plan identifies the locations and communities that are eligible to submit applications for funding.

The FCRTA has ten years of experience operating two zero emission battery powered vehicles in Fresno County. They have the proven ability to operate such equipment. They have identified a vehicle manufacturer that has introduced a conventional cut-away modified van that is powered by electric battery. The FCRTA is interested in submitting applications for its members who have been identified as eligible to receive funds for such purposes. It could again be the leader in reintroducing zero emission vehicles in the State.

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 years. These provisions 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.

FCRTA 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 sixty-five 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 sixty-five years of age and older
- At five 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 Scrip Program for Seniors seventy years of age and Older
- Each of the three transit agencies will commit to develop a Taxi Scrip Program for persons seventy 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 scrip to be used for taxi service by those who are qualified to use the program
- The details of the "scrip ratio" will be determined by the transit agencies at the time the program is implemented
- At five 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 Scrip 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 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 Fresno Council of Governments Social Service Transportation Advisory Council (SSTAC) with final approval made by the appropriate transit agency board

PTIS / Transit Consolidation

Phase Two – 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 One of the Studies was recently completed and has identified existing infrastructure, review current policy documents and peer studies, and formulates recommendations for transit supportive strategies that will lead to a set of viable Public Transportation projects in Fresno County. The Phase One Study will set the stage for development of the Phase Two effort funded in this Expenditure Plan.

Transit Consolidation

- Fresno COG has already commissioned two studies 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 may 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 years is not imminent, or if construction is not imminent 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.

Identified Needs and Issues

Rural service needs have centered around nine primary issues:

1. 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 2013-14.

2. Adequate and stable funding for additional transportation improvements. Transit vehicles and passengers are being subjected to less than optimum driving conditions. A significant revenue base must be secured to replace the decaying infra-structure. The condition of the economy and the reaction of the public to any form of increased taxation have proven to be very detrimental to even short-term financial planning. Dedicated funding sources, with escalation factors for inflation and population growth are a common theme for transportation providers. Again, with the implementation of provisions and funding contained in the Measure C Expenditure Plan these very issues should be adequately addressed during the coming fourteen year period. Local, State and Federal programs are being delayed in an effort to balance their respective budgets. The federal two year transportation act will be expiring this year, with little hope for any timely consideration.

Staff continues to respond to periodic requests from the State and Federal Government to program our needs on an immediate, short-term, and long-term basis, with recognizing their inability to provide us

with any timely revenue projection information.

3. Home to work - commuter transportation services. The public appears to be reluctant to change, especially in matters of their "lifestyle". In order to significantly reduce the total vehicle miles traveled and thus air quality emissions of single occupancy vehicles, the public must accept carpooling, vanpooling, and commuter bus service. Suggested programs, to date, have not been universally embraced. Measure C specifically included funding and implementation provision for computer vanpool and farm labor vanpools services for the next twenty years.

   Current specific Measure C programs implementation programs to address this matter are now in place. They include: subsidized carpooling, commuter vanpooling and farm labor vanpooling. The financial

   incentives are significant and attractive, especially as the price of petroleum fuels continue to rise towards $5.00 per gallon. The Fresno COG programs have been offering monthly drawings for $1,000, with an annual drawing. Last year a hybrid vehicle was given away along with other valuable prizes. Vehicle pooling providers include VPSI, Enterprise and CalVans. Together they have provided well over four hundred and fifty vehicles in the South San Joaquin Valley in particular the counties of Fresno, Kern, Kings, Madera and Tulare. The Kings County program replaced by another public Joint Powers Agency that is called CalVans. CalVans has expanded from five counties to fourteen counties with additional members joining quarterly.

   In 2010-11, there were many requests by individuals, City Managers, and City Councils and Departments of Fresno County regarding the desire to see the FCRTA services expanded to address transportation service for employment and educational purposes. The diverse nature of such requests, including the location of the origins and destinations, and the time-frame for needed arrival and desired departure of such trips, and the resulting actual commuting time for such a service is very difficult to be viable for a rural public transit provider. A review of the vanpooling participant's actual share of the daily transportation is approximately $5.00 per day, depending on the actual distance traveled. For an employed person that cost is understood to be very reasonable. But some remarked that some individuals were just starting work, and they wondered if the cost could be even lower. FCRTA Staff recommended in the adoption of the 2010-11 budget to set aside up to $1 million of its capital reserve funds to purchase thirty-five vehicles that were delivered and equipped for service in March 2011. The vehicles are available through the CalVans program for rural Fresno county residents. A vehicle was on display prior to the FCRTA's Board meeting in late March. A qualifying participant was present to hand the first set of keys to begin utilizing the vehicle.

The individual was a resident from Kingsburg that was a teacher in Pixley in Tulare County. He had organized a group that needed reliable transportation to South Valley communities. The monthly cost of the vanpool will not be required to include original vehicle costs paid for by the FCRTA. The next result is to lower the daily shared costs nearly $2.00 per day per participant. This amount is much less that what a rural public operator would have to charge in order to achieve the minimum ten percent fare ratio to actual expenses. Thirty-four similar vehicles are immediately available to specifically address this previous perceived need in a low-cost effective manner personalized to the very individuals participating.

4. 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.

   To date the FCRTA has implemented several demonstration programs to facilitate access to adjacent counties. Coalinga Transit provided inter-city service to Avenal and the Lemoore Naval Air Station in Kings County. Firebaugh Transit provided service to Eastside Acres in Madera County. Kings County Public Area Public Transit Agency provides service to Laton in Fresno County for patrons going to Hanford in Kings County. Previously, they also provided connection between Hanford and Coalinga. They currently provide access from Hanford to Fresno and Madera for access to medical facilities. Dinuba Transit provides service from Dinuba in Tulare County to Reedley in Fresno County.

5. 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.

   In February 2013, the FCRTA Board of Directors directed staff to set aside another $1 million to purchase thirty-five (35) vehicles to be as farm labor vanpools for CalVans to administer for Fresno County farm workers. The vehicles were delivered in May 2013 for immediate use as the harvest season and processing begins. If work moves beyond Fresno County, the workers may continue to be employed to support their families. It should be understood that multiple trips per day are possible to meet workload demands in agriculture.

6. 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.

The FCRTA and the Rural CTSA have been implementing programs recommended in the recently adopted Human Service Coordination Plan for Fresno County. Both

agencies work closely with nearly two dozen other agencies to ensure that the transit dependent population may receive at least life-line service. However, many of the programs offered by non-profit and other public agencies have been dependent on County, State and Federal funding programs that may lose funding as each entity determines what they may need to cut in order to balance their respective budgets.

1. Additional marketing and education programs to promote services. There is always a need to market the services available, and there is never enough money to do everything suggested. The Fresno Area Express and FCRTA have received Federal Transit Administration Section 5316 (New Freedom) Grant funding to develop a volunteer "Transit Ambassador". The Ambassadors are then to do actual "Travel Training" of new passengers. The program would involve the Ambassador actually going to meet the "first time" rider. The Ambassador would then actually ride with the person on their entire trip. The net result would be to attract additional regular riders who could themselves help others navigate the services.

2. 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.

3. Further Consolidation and Coordination of Transportation Services. Efforts such as these are specifically being addressed and funded by Local, State and Federal sources. As mentioned previously, Fresno COG is taking a proactive approach to these previously identified needs and issues.

   The implementation of the Measure C Expenditure Plan specifically identifies a portion of funds be utilized to fully consider the consolidation of the City of Fresno's Fresno Area Express (FAX), the City of Clovis' Clovis Transit, and the services provided by FCRTA. A Consultant is currently working with a technical group to determine how the three Agencies are currently providing their respective services. The Study will identify which Agencies have successfully consolidated their service and further determine the details that made it happen. The study will examine the challenges they faced, the considered options, the selected alternative that was implemented, and evaluation of the results. The study was completed in October of 2011. A recommendation of "go" or "no go" is to be reported back to the Agencies' governing bodies for comment and direction. Further study would involve the elected policy makers.

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

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 their relationship to the reported problem of greenhouse gases 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 way to addressing this particular need over the fourteen years (the current twenty year Measure C programs expires in 2027). 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.

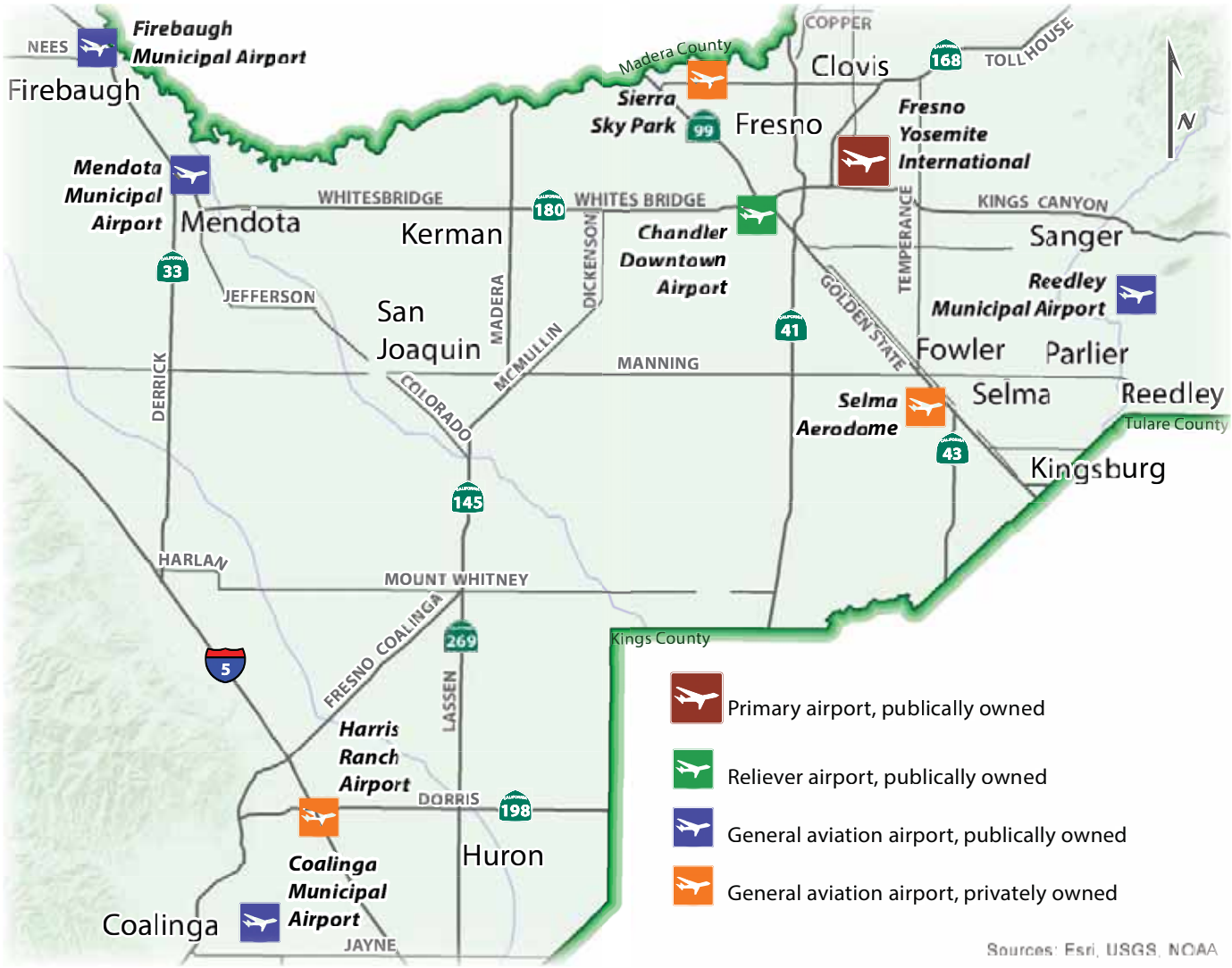
5.6 Aviation

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.

There are nine (9) public use airports in Fresno County, as shown in Figure 5-14. The precise location, facility design and detailed costs of specific facilities are contained in the

Figure 5-14: Airports Locations in Fresno County



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 short and long range improvements.

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), forecast demand, and determine funding levels and apportionment. The Central California region of the California Aviation System Plan is integrated into the California Aviation System Plan (CASP) 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. All non-NPAIS airports are considered worthy of consideration for improvement through state funding since these airports are not eligible for federal funding.

Many of the public airports in Fresno County are, 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.

Existing System Inventory

The California Aviation System Plan (CASP) is a multi-element plan prepared by the California Department of Transportation (Caltrans), Division of Aeronautics, with the goal of developing and preserving a system of airports responsive to the needs of the State. A segment of the CASP, the Central California Aviation System Plan, includes all the public use airports in Fresno County (can be found at dot.ca.gov). The Capital Improvement Plan (CIP) is a ten-year compiled listing of capital projects submitted to Caltrans for inclusion in the CASP predominantly based on general aviation airport master plans or other comparable long-range planning documents. The CIP allows Caltrans partners to actively participate and assist in the coordination of its ongoing, statewide, aviation system planning and project funding effort. The CIP is updated biennially (every two years) per PUC section 21704. Biennial updates to the CIP provide the basis for the development of the funding program, which consists of airport development and land use compatibility plan projects selected by Caltrans based on a priority matrix. The California Transportation Commission adopts the Aeronautics Program from the projects listed in the CIP, therefore projects must be in the CIP to obtain State funding. The CIP is published every odd year, and the Aeronautics Program, based on the CIP, is adopted every even year.

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 1,002 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 625 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 2,471 feet long and 60 feet wide. An asphalt helipad (H1), 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 15 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 2,400 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 13 based aircraft, 2 fixed based operators and handles about 9,855 operations per year. There is a Firebaugh Airport Commission that meets regularly to discuss airport projects and priorities. The Firebaugh Airport is classified a General Aviation Airport in the NPIAS and a Community General Aviation 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 30/12 was recently extended to 3,630 feet long and is 75 feet wide. Chandler currently has 204 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.

Fresno Yosemite International Airport (FAT)

Fresno Yosemite International Airport (FAT) is Fresno's primary commercial air carrier airport facility and is the largest and busiest airport in the San Joaquin Valley. The airport is owned and operated by the City of Fresno. FAT is at an elevation of 336 feet and encompasses 1,700 acres of land located approximately five miles east of downtown Fresno. It has two runways, a principle runway (11L/29R) 9,539 feet long and 150 feet wide and a parallel general aviation runway (11R/29L) 8,008 feet long and 150 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.

FAT has 174 based aircraft, and aircraft operations total approximately 126,670. Enplanements in 2013 were 702,259, passenger count was 1,401,582 and air cargo tonnage was 11,863. Within the last two years direct flights to Honolulu began, San Diego service was reestablished, Frontier Airlines began service to Denver, Aeromexico added another international destination (Morelia, Mexico), and other airlines have upgraded their aircraft (added more seats into the market) in response to the region's sustained economic growth. International flights to Mexico began in 2006, have been very successful, and account for 9.6% of all passengers using FAT.
This joint civil-military public airport is the site of the 144th

Fighter Wing/California Air National Guard (CANG) base, which supports a west coast air superiority mission. The Army National Guard has an Aviation Classification Repair Activity Depot (AVCRAD) facility on site. The mission of this unit is to perform high-level maintenance and repair on Army aircraft. Its jurisdiction covers a 15-state region in the western United States. The U.S. Forest Service operates an Air Attack Base at the airport for fighting forest fires with aerial tankers. Additional services available at the airport include airfreight, avionics, cargo handling, charter, flight instruction, aircraft rental, aircraft sales, fueling and aerial surveying.

The terminal facility was recently modernized, which included an increase in capacity at baggage claim, a new security check point and a rehabilitated main ticketing lobby. FAT has also implemented a 100% shared use technology system for the airlines. This system allows for the maximum utilization of both ticket counter space and gates. FAT is one of three airports in the country to have this system implemented for 100% of its facility. The airport also features a giant sequoia forest treescape in the main lobby that is reflective of the regions proximity to the national parks. A consolidated rental car facility provides easy access to and from the baggage claim area. A 2.4 megawatt solar system, completed in March 2008, is located at FAT and provides 74% of the airport's annual electrical demand.

FAT's two 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. FAT is designated a Primary Commercial Service Hub Airport in the California Aviation System Plan.

Harris Ranch Airport

Harris Ranch is a privately owned and operated, public use airport near the Harris Inn and Restaurant. 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 General Aviation Airport in the California Aviation System Plan. Harris Ranch is not listed in the FAA NPIAS, making it more dependent on alternative funding sources.

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 66 based aircraft and two fixed based operator and handles about 33,000 operations per year. The Reedley Airport Commission meets regularly to discuss airport improvements and priorities. The Reedley Airport is owned and operated by the City of Reedley, and is classified a General Aviation Airport in the NPIAS and a Community General Aviation Airport in the California Aviation System Plan.

Mendota (William R. Johnston) 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 1,000 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.

Selma Aerodrome

The Selma Aerodrome 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 45 based aircraft and four fixed based operators and handles about 10,000 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 Airport

Sierra Sky Park was created in 1946 on 130 acres adjacent to the San Joaquin River, and is the first residential aviation community in the world. William and Doris Smilie are credited for creating this airport/neighborhood hybrid and in 1953 built the first of the 110 homes in the project. Residents can land, taxi down extra-wide avenues, and pull up and park in the driveway at home. 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 2,436 feet long and 50 feet wide. It has about 60 based aircraft and handles approximately 8,000 operations per year. This is a privately owned, public use airport. Sierra Sky Park is also not listed in the FAA National Plan of Integrated Airport Systems and is, therefore, more dependent on state or local funding sources. It is designated a Community General Aviation Airport in the California Aviation System Plan.

Within Fresno County, there is a total of approximately 577 based aircraft and the public use airports combined handle a total of about 225,925 operations per year. Approximately 1.4 million passengers flew commercially from FYI in 2013, and 11,863 tons of air cargo was accommodated. Both of these figures and also enplaned passengers and cargo are expected to increase substantially by the year 2030.

Accomplishments

Recent Planning Activities

In 2010, Fresno COG joined a statewide effort, led by San Joaquin COG, in the formation of the California Airport Land Use Consortium (Cal-ALUC).This group of both public and private sector professionals was formed as a collaborative effort to provide a forum for airport land use professionals to share in, and gain knowledge of the land use planning issues in and around airports in California. The first Symposium was in May of 2012, and there will be a Symposium in March of 2014.

The Fresno COG Policy Board approved submission for the CMAQ funding to implement a two year pilot Operating Support for Shuttle Service from Fresno to Yosemite and Sequoia-Kings Canyon National Parks. A study in 2011 provided analysis that resulted in substantial demand for transit service to these locations. The service plan provides direct connectivity to the National Parks, originating in Fresno, and stopping at key locations and transportation hubs, including Fresno Yosemite International Airport.

In 2012, the ALUC (Airport Land Use Commission) adopted and updated Airport Land Use Compatibility Plan for FAT to take into consideration the $40 million runway safety and improvement projects that were completed in 2013, and the 144th Fighter Wing's conversion from F-16 aircraft

to F-15 aircraft. This effort changed the review area and associated maps, representing the airspace protection surfaces, noise and safety contours (can be found at fresno.gov).

Coalinga Airport Master Plan

The City of Coalinga completed and adopted an Airport Master Plan in 2008 for the Coalinga Municipal Airport, which was approved by the ALUC. The Plan will accommodate the type and extent of aviation facilities needed at the Airport through the year 2025.

Firebaugh Airport Master Plan

The Airport does not have a master plan, but the Airport Layout Plan is under revision, initiated in 2012, anticipated to be approved by the FAA during the first quarter of 2014. A master plan would be an important tool to identify facility and safety improvements and priorities.

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. In October 2005 a Focused Master Plan Update for North Side Development was competed, which addressed how to accommodate future growth at the airport. In June 2010 an Airport Layout Plan Narrative Report was executed to reflect planning adjustments being considered for Fresno Chandler Executive Airport since completion of the 2005 Focused Master Plan Update for North Side Development.

Fresno Yosemite International Airport (FAT) Master Plan

FAT, in cooperation with the FAA, updated the airport master plan in 2006. Known as the January 2006 FAT Master Plan Update (AMP), the process included a total of six meetings with input from the public and several agencies, including the ALUC. Although not formally adopted, the AMP provides a 20 year planning window for FAT, including an FAA approved 20 year aviation demand forecast, and an FAA approved Airport Layout Plan (ALP). In 2012, FAT, in cooperation the FAA, updated the ALP based on a congressionally mandated Runway Safety Area (RSA) Program.

Mendota (William R. Johnston) Airport Master Plan

Although the Mendota Airport does not have a master plan, the airport layout plan was updated in 2007. Ideally an airport master plan is needed to address the deterioration occurring to the airport infrastructure. Continuing deferred maintenance caused by lack of funding will result in the eventual obsolescence of this community asset. It must be noted that efforts have been made by city staff to apply for funding identifying priority improvements to the airport.

Reedley Airport Master Plan

The City of Reedley is currently updating its ALP, which has an extensive draft report identifying needed improvements and priorities. The most recent Master Plan was adopted by the City of Reedley in 2008, and approved by the ALUC.

Selma Aerodrome Master Plan

It is not unusual for a privately owned public use airport to not have a master plan, as funding constraints and less focus on facility improvement planning do not promote the need. However, the City of Selma at one time had interest in supporting the airport and a master plan would help to identify priorities for this community asset. An airport layout plan update would help focus attention to preserving and improving this facility. Selma Aerodrome currently does not receive funding from local, state or federal sources to conduct planning or major improvement efforts.

Sierra Sky Park Airport Master Plan

As a privately owned public use airport, it is not unusual for this type of airport to be without a master plan. The airport layout plan has not been updated in several decades. The airport is unique in several ways. It is a small general aviation airport located within the city limits of Fresno in a fairly dense urban residential and commercial area near State Route 99 and on one of the busiest roadways in Fresno, Herndon Avenue. Maintenance and operation of the airport is funded and overseen by the homeowner's association of the Sierra Sky Park

community. Encroachment of surrounding land uses is of great concern, and attention to future planning is needed.

Airport Land Use Commission

Beginning in October 2008, the Fresno Council of 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. Fresno COG along with the Mendota Airport as the qualifying sponsor, applied for funding through the State Aeronautics program to develop a Fresno County Airports Compatibility Land Use Plan. Because of the FY 2012-13 decrease in revenue, the project did not receive funds. However, it is expected that funds will become available, and Fresno COG's effort to list the project in the 2013 Capital Improvement Plan has secured a place for the next funding cycle. The reason for this effort is that many of the Airport Land Use Compatibility Policy Plans, are very out of date. It is crucial to provide basic tools for review and identification of current status and future needs of the county's airports, to ensure orderly development in and around the airports. Caltrans Aeronautics has identified this kind of funding as a priority based on public safety and a desire to improve the standards under which public airports operate.

Coalinga Airport Completed Improvements

Perimeter fencing was updated in 2008 to a 6 foot height from the original 4 foot fencing. The last time that funding was available for capital improvements was in 2007, at which time the runway asphalt was improved via a slurry seal project.

Firebaugh Airport Completed Improvements

In 2012, the City of Firebaugh received $156,496 in funding to improve the pavement of the taxiways and tie-down aprons pavement. This is the first improvement project receiving funding in over 6 years.

Fresno Chandler Executive Airport Completed Improvements

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. In 2003, Chandler completed

a $3.9 million reconstruction of the main runway and ramp areas, the largest airfield construction project in its history. Runway 30/12 was recently extended to 3,630 feet, Taxiway A was rehabilitated and airfield drainage 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.

In 2004, the City of Fresno renamed the airport from Fresno Chandler Downtown Airport to Fresno Chandler Executive Airport.

Fresno Yosemite International Airport (FAT) Completed Improvements

The Fresno Yosemite International Airport Master Plan and subsequent joint environmental document (2011 EA/EIR) took into consideration the 20 year FAA approved aviation demand forecast, which was a key step in providing a basis for determining the aviation development and activity at the airport. The aviation demand forecast data and detailed distribution of operations can be found in the EA/EIR. The 2012 updated ALP is based on an FAA approved RSA study of alternatives and recommended plan, and is supported by a NEPA EA and a CEQA Initial Study (2012 EA/MND). A $30 million secondary runway lengthening, widening and strengthening was completed in 2012, resulting in lengthening and widening of the parallel runway from 7,205 to 8,008 feet long and 100 to 150 feet wide. In 2013 FAT completed a Runway Safety Area enhancement project that resulted in lengthening of the primary runway 29R/11L from 9,227 feet long to 9,539 feet long.

Harris Ranch Airport Completed Improvements

There have been no major improvements or projects at the Harris Ranch Airport other than regular maintenance such as painting faded runway markings, cleaning and levelling safety areas, and all other safety measures recommended during required Caltrans Aeronautics safety and permitting inspections to meet current design standards.

Mendota (William R. Johnston) Airport Completed Improvements

There have been no recent major improvements at the Mendota Airport. Although short term planning efforts by the city have been pursued, funding has been a major issue, as both the city budget and state and federal funding sources have not been available for much needed improvements. Although the runway was improved in 2007, because of deferred maintenance and safety issues

the taxiways, apron and runway lighting are in disrepair and the airport is permitted for day use only.

Reedley Airport Completed Improvements
Recent improvements at the Reedley airport include an apron overlay (slurry seal, design and construction) completed in 2012, and a beacon replacement, also in 2012.

Selma Aerodrome Completed Improvements
The Selma Aerodrome has not made any major improvements since it was built in 1963, and focuses on maintaining FAA (Federal Aviation Administration) FAR Part 77 safety requirements, even though it must do so with limited funding from its shrinking private operating revenues. This makes modernization projects out of reach without support from local sources such as the City of Selma.

Sierra Sky Park Completed Improvements
There have been no major improvements other than regular maintenance in compliance with Caltrans Aeronautics safety and permitting regulations and recommendations. This is carried out by the homeowners association of the Sierra Sky Park community.

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.

All eight General Aviation Airports in Fresno County were identified for facility enhancement need in the California Aviation System Plan (can be found at dot.ca.gov). Another need identified by many of the general aviation airports in the county is funding for airport master plans. While Coalinga and Reedley have been successful in securing 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 information contained in a master plan could help in re-opening the conversation that at one time was moving the City of Selma toward the acquisition of the airport. 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.

FAT's service area consists of six counties including Fresno, Kings, Madera, Mariposa, Merced and Tulare. State Department of Finance population figures indicate this six-county area had a total population on July 1, 2013 of 2,000,243 or 5.2 percent of the total California population of 38,204,597. The passenger usage of FAT has been steadily growing since 2010 and ridership reached an all-time airport record in 2013 with a total of 1,401,582 passengers. Airfares are stable due to the diversity of choices travelers have between ten airlines,

12 destinations, five of which are major gateway hubs. The airlines have responded to the sustained economic growth of the region by adding flights, destinations and available seats in the market. However, there is still leakage that occurs due to market forces generated by the automobile and alternative airports in Sacramento, the Bay Area and Los Angeles. Passengers within the service area of FAT who currently choose to fly out of these alternative airports or drive to their final destinations, will continue to respond as the airlines offer increased flight destinations, frequencies, and additional seats, all of which make other travel choices less convenient. In addition, ongoing education is necessary to convince residents within the six-county service area of the advantages of selecting FAT 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. Complementary service such as the proposed Fresno to Yosemite Transit Shuttle, with a strategic stop at the airport would dramatically improve options for travelers and increase interest in the city and the region.

The future of Airports, given the capital intensive nature of maintaining them makes it difficult to plan and prepare for. Air traffic system modernization technologies such as NextGen (Next Generation Air Transportation System http://www.faa.gov/nextgen) have safety and efficiency benefits for both commercial airports like FAT and general aviation public use airports in Fresno County. As access to these technologies and more importantly, funding becomes available, the Fresno region will join the nation's air transportation system's improvement to travel times, safety, fuel economy, environmental impact and economic contribution.

There is also an ongoing effort to quantify and promote the economic significance of FAT to Fresno and the entire San Joaquin Valley in order to better develop and sustain ongoing support. It is important that this marketing effort continue. Research on policy for long term planning of economic development and revenue generation strategies have consistently shown that airports provide a city, region and state with many co-benefits. Airports provide global connectivity for general travel and business and generate revenue from tourism and leisure at the local level. California is a top destination for foreign travel and export, ranking number 2 in both, and number 1 in domestic air travel.

Of increasing economic significance to FAT 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 FAT. Intermodal goods movement planning in the near future should, therefore, focus on increased air cargo/ distribution service. Longer term, increases associated with passenger demand for FAT may also result. These are economic opportunities that are pursued by the airport and those efforts should continue.

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 airport land use compatibility policy plans (ALUCPP or CLUP). Although funding was not available during the recent funding cycle, efforts to obtain of State Aeronautic funding for development of a countywide ALUCPP will

continue. 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.

Coalinga Airport Short-Range Improvement

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. 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.

Firebaugh Airport Short-Range Improvement

The City of Firebaugh's planned short-range improvement projects include installation of taxiway lighting, additional aircraft apron and hangars, and fuel island, pilot's lounge and security gates. As with other airports in the County, development of an Airport Master Plan remains a high priority.

Fresno Chandler Executive Airport Short-Range Improvement

Planned short-range improvement projects are to improve safety and security, and rehabilitate aircraft taxiways. Longer range improvement projects are to design and construct airport access road improvements, design and construct north airfield drainage improvements, and enhance the airport's Runway Safety Areas.

Fresno Yosemite International Airport (FAT) Short-Range Improvement

Planned short-range improvement projects at FAT include rehabilitation of the West Commercial Aviation Ramp, acquisition of a new ARFF vehicle and rehabilitation of Taxiways C, B3, B4, C4, and B7.

Harris Ranch Airport Short-Range Improvement

Harris Ranch operates as a private limited use airport that primarily serves the Harris Ranch Inn and Restaurant and therefore does not have any significant improvement projects planned. The close proximity to Interstate 5 makes the airport a good site for emergency aircraft services, which is the main reason for its public use designation. The airport does not rely on federal or state funding for operating or capital improvement revenue, but does keep its maintenance and safety standards compliant with FAA and Caltrans Aeronautics regulations and recommendations. Harris Ranch Airport provides an important public safety function for the surrounding rural community, and travelers and commuters in the region.

Mendota (William R. Johnston) Airport Short-Range Improvement

The need to bring the airport runway lighting, taxiways and apron up to standard is of major concern, and the airport is currently permitted for day use only. Planned short-range improvements include cap and seal of the

parking ramp, seal coat of the existing runway, widening the south 700 feet of the runway to the 60-foot width of the north end of the runway, reconstruction and extension of taxiways, apron expansion, provide hangars, improve access roads, major runway light replacement and electrical improvements. Development of an Airport Master Plan is also a high priority.

Reedley Airport Short-Range Improvement

An Airport Layout Plan (ALP) Update and associated environmental documentation to address California Environmental Quality Act (CEQA) requirements were recently completed by the City of Reedley for the Reedley Municipal Airport. Recommend short-term development projects (5 year) included improvements to airport and airfield drainage, grading of runway safety areas, fuel facility relocation, Southside transient parking apron area improvements, electrical vault replacement, and perimeter fencing replacement. Other recommended medium (10 year) to long-term (20 year) projects included land acquisition to maintain a buffer against incompatible land use encroachment around the airport and upgrades to the antiquated and deteriorating main hangar and terminal facilities.

Selma Aerodrome Short-Range Improvement

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, although the airport currently meets design standards in accordance with FAA (Federal Aviation Administration) FAR Part 77 safety requirements. These requirements were "grandfathered" to meet the original 1963 standards when the airport was completed. The airport maintains an excellent record of maintenance and safety measures to the approved standards, even though it operates as a private public use airport and does not receive funding from local, state or federal sources. This makes modernization projects challenging, and therefore improvements such as lengthening the runway, upgrading airport lighting, reconstructing the taxiways are not possible at this time. An Airport Master Plan would be instrumental in focusing attention to the need for funding of improvements and support from the City of Selma.

Sierra Sky Park Airport Short-Range Improvement

There are no short range improvements planned other than regular maintenance, in compliance with Caltrans Aeronautics safety and permitting regulations and recommendations. This is carried out by the homeowners association of the Sierra Sky Park community.

Long-range plans will focus on continued orderly growth of airports within the region and on enhancing air passenger and freight service. Fresno COG is working with FYI to focus more planning efforts on developing a Ground Access Improvement Program.

Ground Access Improvement Program-Fresno Yosemite International Airport (FAT)

The focus of a ground access improvement program is on Fresno Yosemite International Airport. FAT is the only primary air carrier airport in the Fresno COG planning region. This section identifies existing and anticipated access conditions that may impact FAT and affect the Airport's ability to serve current and future demand. Ground Access Capital Improvement projects and funding are discussed in this section.

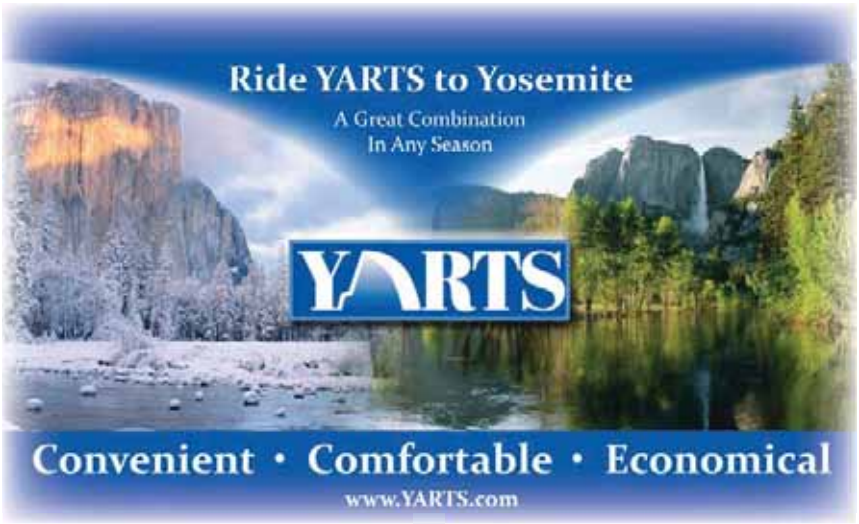
Highway Accessibility

Highway access to FAT and Chandler Executive Airport has greatly improved. State Routes 168 and 180 provide much better access to FAT and connect the airport with the Fresno highway system and beyond. Freeway 180 has been improved between Brawley Avenue west of Freeway 99, providing freeway access to Chandler Executive Airport; and east of Academy Avenue to the City of Sanger, improvements continue to connect to the Sequoia National Park entrance. Freeway 168 has been improved between Freeway 180 and Tollhouse Grade. The braided ramp project, partially operational during the latter part of 2013 and scheduled to be fully operational in 2014, will

improve the interchange system between 180, 168 and 41, providing safer and more efficient access to and from FAT.

Surface Streets

Major streets that provide access to FAT 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 FAT 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 FAT 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 FAT and has been improved to a four-lane boulevard street, including an attractive "gateway" treatment at McKinley Avenue.

Mass Transit Service

Urban Transit

FAT is directly served by Fresno Area Express. Like FAT, FAX is also a division of the City of Fresno's Department of Transportation. Currently, FAX Routes 39 and 26 provide interline 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.

Rural Transit

Access and connectivity throughout Fresno County is provided by the Fresno County Rural Transit Agency (FCRTA). Its Coalinga Transit inter-City services provides direct end to end service once a day, Monday through Friday, to FAT. Other rural inter-City routes provide service connection to FAX in Downtown Fresno at the three transfer locations in Courthouse Park. FAX provides scheduled fixed route and demand responsive Handy Ride services throughout the Fresno-Clovis Metropolitan Area including FAT. It's important to note that each transit service is one hundred percent accessible for the frail elderly and disabled passengers.

COG staff recognizes that there are limitations to the bus services provided, not only to Fresno Yosemite International Airport but system-wide 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.

The national park transit feasibility study conducted in 2011, showed significant demand for public transit to and from the key locations and transportation hubs throughout Fresno, including the airport; to Yosemite and Sequoia-Kings Canyon National Parks. Applications have been submitted for funding through CMAQ to implement pilot programs to provide transit service that currently does not exist

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 FAT by bus, or some other fixed-guideway transit system.

Taxis

Taxi service is available at FAT 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 FAT. 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 Airways Drive. 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 FAT.

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.

In November 2006, Fresno County voters approved a twenty-year extension of Measure C, the one-half cent sales tax increase for transportation purposes. At the time of the original expenditure plan for the extension of Measure C, the amount estimated available for airport projects at that time was $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. Since the implementation of the Measure C program, the current amount estimated available for airport projects is $14,474,820; an adjustment that reflects a reduction of $2.52 million in actual sales tax receipts originally anticipated for the 20 year period ending in 2027. These funds will be available to match state and federal funding for improvements at the two airports.

Unfinanced Needs

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 and privately owned public use airports throughout 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.

5.7 Non-Motorized Transportation

Overview

The Non-Motorized Transportation Element of the RTP is focused on regional, metropolitan, and community bikeway and pedestrian networks, including multi-use trails. Travel by bicycling and walking is a strong indicator of good land use and transportation planning. By placing complementary land uses in close proximity between residents or employees of an area, and by developing attractive, convenient pedestrian and bicycle environments, the number and percentage of trips made by bicycle or on foot should increase. In addition, this RTP recognizes the value of equestrian and hiking trail systems for recreational purposes, as enhancements to the multimodal transportation system, and for their contribution to an improved quality of life in Fresno County and, therefore, supports their continued development.

For many, bicycling and walking for transportation has several appealing aspects. Both have positive air quality, energy, economic and health impacts and can reduce automobile congestion. From an air quality perspective, every bicycle or walking trip that replaces an auto trip results in cleaner air. Bicycles do not consume expensive 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.

Pedestrian and bicycle access also affects the effectiveness and efficiency of transit service, as most transit trips involve walking or cycling at one or both ends. Commuters are more likely to take transit if they can easily walk or bike from their home or worksite to a transit stop or station. As a result walking and cycling infrastructure improvements are often an effective way to support transit use. This relationship between transit, bicycling, and pedestrian trips is important to the Fresno COG and to the communities within Fresno County. The Blueprint Planning Program was 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 2007/08 – 2026/27 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 included 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 and pedestrian transportation in Fresno County are as follows:

- **Planning** - The recognition and integration of bicycling and walking as valid and healthy transportation modes in transportation planning activities.
- **Physical Facilities** - Safe, convenient, and continuous routes for bicyclists and pedestrians of all types that interface with and complement a multimodal transportation system.
- **Safety and Education** - Improved bicycle and pedestrian 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, related facilities, and pedestrian facilities by maximizing funding opportunities.

Existing System Inventory

Pedestrian facilities are not typically regional in function. Rather, they are essentially site-specific and local, and hold particular importance in community design and redesign in working toward a more livable environment. Alternatively, bicycle facilities can be regional in function. The planned bikeways regional system is shown in Figures 5-15 and 5-16. 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

Figure 5-15: Bikeway System - Metro Area

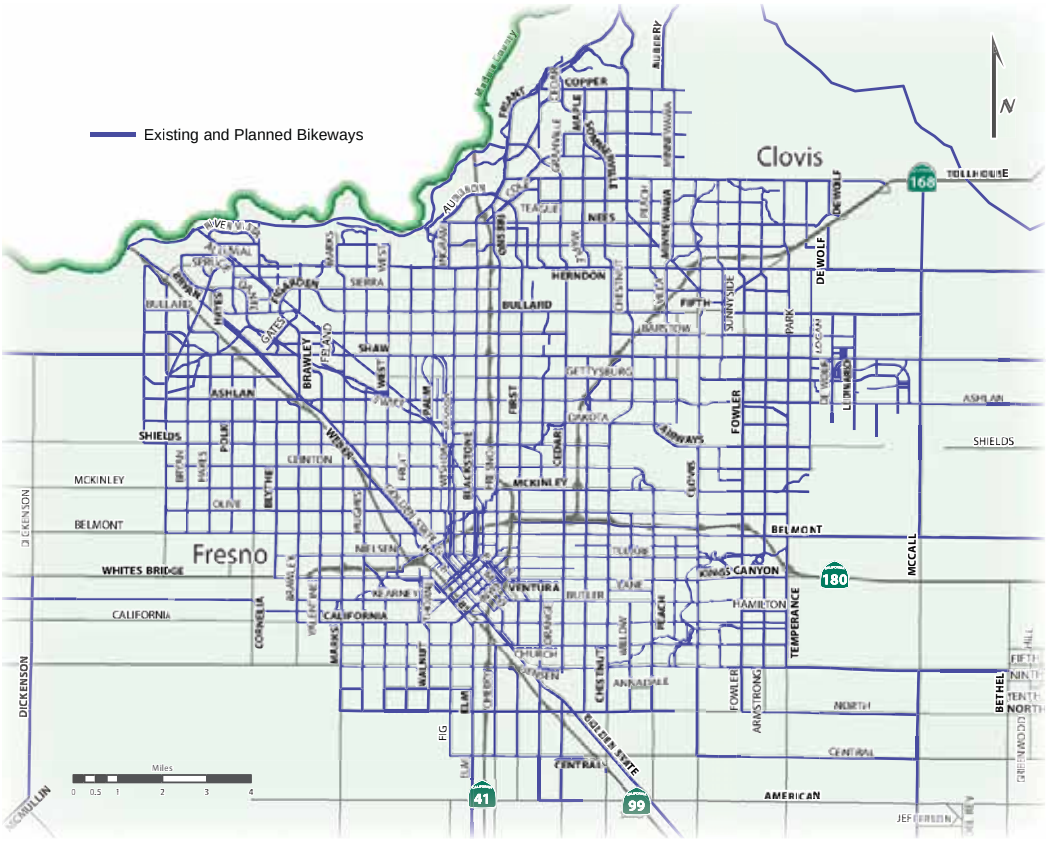
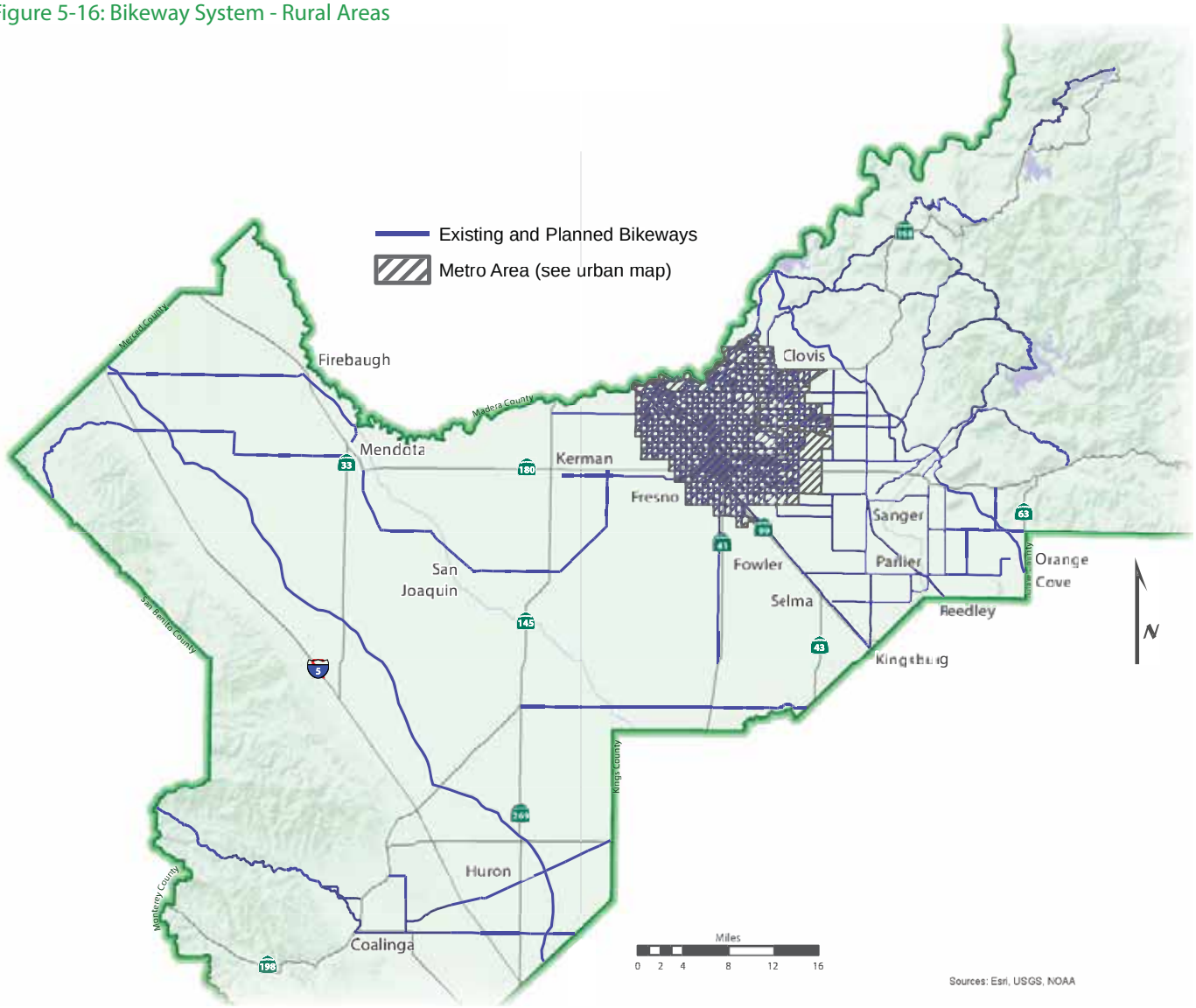


Figure 5-16: Bikeway System - Rural Areas



bikeways on an ongoing basis, particularly in conjunction with new development.

Accomplishments

City of Fresno street design standards for collector and arterial streets in newly developing areas require five feet per side for a bike lane. This standard has promoted the long-term development of a bikeway system in newer areas. Provision of this additional right-of-way in advance avoids 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. All of these communities have addressed bicycle transportation in their general plan circulation elements and within other local planning documents and planning policies. In addition, all but two of the cities outside of the metropolitan area have completed Bicycle Transportation Plans, thereby making them eligible to compete for Bicycle Transportation Account funding. The San Joaquin Valley Blueprint Integration Project was recently established to provide support to smaller Valley cities in integrating Blueprint Smart Growth principles into their general plans and

planning policies. As a result of this project, new or updated bicycle transportation plans were prepared for the cities of Firebaugh, Orange Cove, and Parlier.

In addition, 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 buses 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 2009, the City of Fresno contracted with the consulting firm Fehr and Peers to prepare a comprehensive Bicycle, Pedestrian, & Trails Master Plan. The Plan was adopted in October 2010. In September 2013, the County of Fresno adopted a revised Regional Bicycle and Recreational Trails Master Plan. The City of Clovis also adopted in May 2011 an update of its Bicycle Master Plan. All of this activity has provided a unique opportunity to develop a comprehensive and coordinated bicycle/trails system particularly within the Fresno-Clovis Metropolitan Area but also within 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.

Needs Assessment

While much of the basic work of planning for regional and metropolitan bikeway systems was completed in the

1970s and 1980s, it is necessary 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, the cities of Fresno and Clovis and the County of Fresno have recently developed comprehensive revisions to their Bicycle Master Plans/Bicycle Transportation Plans. Also, as with the metropolitan area jurisdictions, all but two of the mid-sized and smaller cities in Fresno County have prepared and adopted 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 that 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 Fresno Council of 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 2000 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.

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.

Bikeways and pedestrian facilities, including trails, have become increasingly important to the Fresno County region over the past several years largely because of air quality, economic development and quality of life (health) considerations. Consequently, Fresno COG has become more involved in integrating active transportation into the regional transportation planning processes. Recognizing walking and bicycling as healthy, accessible and sustainable forms of transportation, Fresno COG will embark on a new effort to develop a Regional Active Transportation Plan (ATP), which will integrate member agency complete Bicycle Master Plans combined with targeted pedestrian and safe routes to school planning efforts. The Regional Active Transportation Plan will guide efforts to improve bicycling and walking conditions at the local level throughout the Fresno County region and will serve as a blueprint for the future of walking and bicycling in the region. The Plan will provide a countywide understanding of existing conditions and countywide priority bicycle and pedestrian networks as well as existing conditions analysis and recommended network for the unincorporated areas in Fresno County and each of the Fresno COG member agencies. Developing an ATP will require coordination and collaboration with a variety of active transportation stakeholders and elected officials that will essentially form an Active Transportation Subcommittee. The Regional ATP will be the roadmap for developing pedestrian and bicycle infrastructure in the region, with an emphasis on promoting walking and bicycling as viable transportation options and fostering a practical, safe, and enjoyable environment that will encourage walking and bicycling for recreational and commuter trips with the goal to establish specific policies and programs.

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.

Long-Range Improvement Plan

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. The 20-year Measure C Extension Program estimates 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.

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.

Unfinanced Needs

The Pedestrian/Trails/Bicycle Facilities Program within the Measure C Extension has added significant new funding to the planning and development of these facilities. It can also be expected that Fresno COG member agencies will continue to seek funding under the Safe Routes to School Program and the Bicycle Transportation Account. However, there remain unfinanced needs. Were unlimited funding available, each local agency in the county would develop its planned bikeway, pedestrian and trail facilities through construction of additional pavement width, acquisition of additional right-of-way and development of separated paths, or striping and signing of existing rights-of-way, all of which is costly to implement. The Fresno COG will continue to encourage its member agencies to apply for new funding sources and utilize funding that is already available for completion of the planned system.

5.8 Rail

Overview

At the regional level, the Regional Transportation Plan can provide a general framework to assure coordination and interfacing of rail freight and passenger transportation with other transportation modes in an overall planning process. The federal Surface Transportation Board and the California Public Utilities Commission (PUC) have historically exercised strict control over railroad operations and are, along with the railroads themselves, key partners in this planning process.

The movement of inter-city freight by rail 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.

Passenger rail provided by the Amtrak San Joaquins is growing in importance, particularly given the consistently increasing ridership and the impending shift in governance from the state to a recently formed San Joaquin Joint Powers Authority. June 30, 2014 is the earliest that the administrative responsibility/ management of the San Joaquin intercity passenger rail service can be transferred to the SJJPA.

Figure 5-17: Rail Network - Metro Area

Existing System Inventory

The rail network in Fresno County consists of approximately 280 miles of operating main and branchline right-of-way (Figures 5-17 and 5-18). The Union Pacific Railroad (UP) and

Figure 5-18: Rail Network - Rural Areas

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 now controlled by Genesee & Wyoming Inc. 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 helps 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.

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.

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. The retention and expansion of this service is essential to the continuation of a balanced transportation system in Fresno County.

Accomplishments

Recent Planning Activities

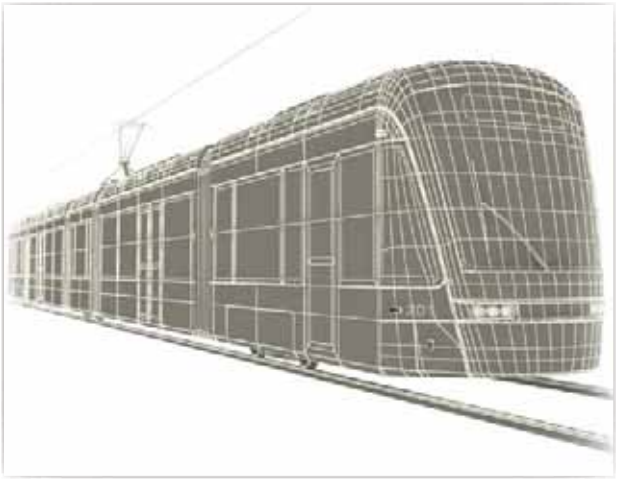
Consolidation Efforts

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 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.

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.

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. 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 did not include the cost of purchasing the portions of UP's right-of-way to be deeded to BNSF, the cost of compensating or relocating industries that will lose rail service if the BNSF corridor is completely abandoned, the cost of mitigation measures, and certain other costs.

Light Rail, Commuter Rail, and other Fixed Guideway Rail Systems



Although earlier studies indicate there is not 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 conceivable 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.

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

The 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. Additional round trips are proposed in the 2013 California State Rail Plan. 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.

The California High-Speed Rail Authority's 2012 Business Plan proposes that San Joaquin trains will use the first construction section from Madera to just north of Bakersfield of the Initial Operating Segment (IOS) from Merced to the San Fernando Valley. Additional studies are required to determine the appropriate number of San Joaquin trains that would use the first construction section of the IOS and the existing BNSF line during the interim period until high-speed rail begins to operate on the IOS, as well, once high-speed rail service is initiated. Service along the first construction section of the IOS is anticipated to begin in 2018 and service along the IOS is anticipated to begin in 2022.

San Joaquin Valley Rail Committee

The San Joaquin Valley Rail Committee, formerly named the Steering Committee of Caltrans' Rail Task Force, provides a forum for Valley rail concerns regarding service improvements to be voiced to Caltrans Division of Rail and to Amtrak. This committee has representatives appointed by Valley cities and counties and other non-Valley counties that are served by Amtrak's dedicated bus service. The Joint Exercise of Powers Agreement (JEPA) establishing the San Joaquin Joint Powers Authority proposes that the Rail Committee remain in existence and become the Steering Committee of the SJJPA for the purpose of advising the SJJPA. The Steering Committee will advise the SJJPA on technical issues associated with the improvements in passenger rail service and related facilities in the San Joaquin Rail Corridor, including stations and rights-

of-way, the coordination of public mass transit services and facilities, the coordination of passenger and freight services in the Corridor, and other technical matters.

Fresno Works Committee

The Fresno Works Committee was formed initially to guide the development of Fresno County's proposal for the high-speed rail heavy maintenance facility but now focuses on other aspects of high-speed rail as well. This executive level committee includes highly experienced individuals and appears well-established to remain effective.

High-Speed Rail Authority

The California High-Speed Rail Authority's purpose is to plan, design, fund and construct the high-speed rail system. The Authority produced a 2012 Business Plan that proposes the integration of high-speed rail into an expanded and improved statewide rail network. The Plan proposes to build an Initial Operating Section (IOS) by 2022 that will connect the Central Valley to the Los Angeles Basin via the San Fernando Valley. The Plan also provides for the integration, or blending, of the high-speed rail project by upgrading existing rail systems to provide near-term benefits to passengers, while connecting to, and laying the foundation for, the future high-speed rail system. 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.

Rail Abandonment

Abandonment of railroad branch lines within Fresno County is detrimental to users relying solely on rail freight service and can result 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. 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 further abandonment of segments of the San Joaquin Valley Railroad in Tulare County for 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 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

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 branchline 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 prioritized the different corridors for preservation and identified funding sources and strategies.

In addition to the Fresno County Rail Corridor Preservation/Acquisition and Transportation Alternatives Study, reference should be made to the following studies for detailed information on the different mainlines and branchlines existing in Fresno County, including their potential for rail transit.

- The 1990 Commuter and Inter-City Rail Right-of-Way Inventory and the 1992 update of that inventory.
- The 2004 Caltrans Rail Right-of-Way and Abandoned Rail Corridors Evaluation Study.
- The separate 2011 Business Plans for the San Joaquin Valley Railroad Westside and the San Joaquin Valley Eastside.
- The 2013 California State Rail Plan.

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 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 been completed during the past several 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 and related improvements for use as Fresno's Amtrak station, completed in early 2005; the

construction of an underpass at Weldon Avenue and the Burlington Northern Santa Fe; and, the implementation of Quiet Zones.

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.

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 new passenger rail service between Bakersfield and Los Angeles as a logical expansion of Valley train service.

Proposed Actions

Future Planning Activities

Rail planning will continue to consider the above needs with emphasis on constructing railroad grade separations, all issues related to high-speed rail including station area planning and efforts to secure the heavy maintenance facility for Fresno County, and the new regional governance structure for the Amtrak San Joaquin Corridor.

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. The amendment to the Measure C Rail Consolidation Program to utilize $25 million instead for the potential high-speed rail heavy maintenance facility along with the dissolution of Fresno Area Residents for Rail Consolidation (FARRC), an organization founded to advocate on behalf of rail consolidation, indicate the project is highly problematic.

The establishment of the San Joaquin Joint Powers Authority to replace the State as the governing authority for the Amtrak San Joaquins will require considerable attention. Next steps include selecting a managing agency, developing a business plan, and developing and negotiating an Interagency Transfer Agreement with the state.

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 needs to be monitored and options preserved.

Fresno COG member agencies will continue to petition the Public Utilities Commission for funding of grade separations, with priority given to public safety and improving the circulation system. The COG and member agencies will continue to investigate the establishment of "quiet zone communities" within Fresno County. 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.

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 proposals on the many aspects of high-speed rail, including the location of the heavy maintenance facility in Fresno County and the new passenger station located along the UP corridor in downtown Fresno, and the effective communication of those positions to the High-Speed Rail Authority. COG in conjunction with its member agencies will continue to work closely with the Authority and its staff and consultants during plan development and project implementation within Fresno County and the San Joaquin Valley

Local agencies, Amtrak, the newly established San Joaquin Joint Powers Authority, and state agencies will 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. While this project is highly problematic, the COG will continue to monitor potential opportunities.

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 may be programmed as funds are identified and become available.

Caltrans Recommendations for Amtrak

Notwithstanding the establishment of the San Joaquin Joint Powers Authority, the administrative responsibility/ management of the San Joaquin intercity passenger rail service will remain with the Caltrans Division of Rail until at least June 30, 2014. Caltrans will continue to 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 consistent ridership and revenue gains, an improved farebox return and improved

on-time performance.

Short-term actions include improvements to stations, parking facilities, and 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.

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.

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 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 new ***Transportation Alternatives Program (TAP)*** under Moving Ahead for Progress in the 21st Century (MAP-21) provides funding for projects that integrate transportation facilities into their surrounding communities. Preservation of abandoned railway corridors is eligible under the TAP.
- 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 ***MAP 21 Act*** will 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). However, funding for such crossing and separation projects is limited, providing for only one or two projects throughout the state annually. 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 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.
- ***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.
- ***State Proposition 1A,*** approved by the voters November 4, 2008, provides for $9 billion for high-speed rail and $950 million for capital projects on other passenger rail lines (including a minimum of $47.5 million for the Amtrak San Joaquin Corridor, to provide connectivity to the high-speed train system and for capacity enhancements and safety improvements.

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, the extension of Measure C includes $102.5 million for the rail consolidation/rail realignment project, although subsequent amendment redirects $25 million of this amount to the potential high-speed rail heavy maintenance facility. 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.

5.9 Specific Transportation Strategies and Management Systems

Overview

Motor vehicle use 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 Fresno 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 of the street and highway system and the reduction of congestion on streets and highways also contribute to improved air quality, as vehicles generally produce more air pollution in congested traffic and while idling.

In addition to the planning agencies, the California Air Resources Board and the San Joaquin Valley Air Pollution Control District contribute education, research, and regulatory efforts related to transportation strategies. Fresno COG and local agencies involved in transportation and land use planning work cooperatively with the San Joaquin Valley 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:

Transportation Control Measures

Regions that have been designated as non-attainment for the National Ambient Air Quality Standards (depending on their classification-or the severity of the air pollution) are required to demonstrate that they have included all reasonably available control measures (RACM) in the State Implementation Plans (SIPs). Transportation Control Measures (TCMs) are designed to reduce vehicle miles traveled, vehicle idling, and/or traffic congestion in order to reduce motor vehicle emissions. Transportation Control Measures focus on the reduction of motor vehicle emissions by reduction of single occupancy vehicle use, changing traffic flow, or reducing congestion. Typically, vehicle technology based, fuel-based, and maintenance-based measures which control the emissions from vehicles under fixed traffic conditions are not considered TCMs.

Section 108(f)(1) of 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.

Transportation Control Measures (TCMs) from applicable State Implementation Plans (SIPs) for the San Joaquin Valley region are updated during each Transportation Conformity Analysis. Since the San Joaquin Valley is a multi-pollutant non-attainment area, a number of SIPs govern TCMs. The applicable implementation plans are summarized below.

Applicable Implementation Plan for Carbon Monoxide

The 2004 Revision to the California State Implementation Plan for Carbon Monoxide was approved by EPA on November 30, 2005 (effective January 30, 2006). The Plan does not include TCMs for the San Joaquin Valley.

Applicable Implementation Plan for Ozone

The 2007 Ozone Plan (as revised in 2011) was approved by

EPA on March 1, 2012 (effective April 30, 2012). The Plan does not include TCMs for the San Joaquin Valley.

Applicable Implementation Plan for PM-10

The 2007 PM-10 Maintenance Plan was approved by EPA on November 12, 2008. No new local agency control measures were included in the Plan.

The Amended 2003 PM-10 Plan was approved by EPA on April 28, 2004 (effective June 25, 2004). A local government control measure assessment was completed for this plan. The analysis focused on transportation-related fugitive dust emissions, which are not TCMs by definition. The local government commitments are included in the Regional Transportation Planning Agency Commitments for Implementation Document, April 2003.

However, the Amended 2002 and 2005 Ozone Rate of Progress Plan contains commitments that 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.

Applicable Implementation Plan for PM 2.5

The 2008 PM2.5 Plan (as revised in 2011) was approved by EPA on November 9, 2011 (effective January 9, 2012). However, the Plan does not include TCMs for the San Joaquin Valley. The 2012 PM2.5 Plan was approved by the San Joaquin Valley Air Pollution Control District on December 20, 2012, and was further accepted by the California Air Resources Board on January 24, 2013. The Plan has been submitted to EPA and is pending approval. (Information was current at the time of this draft for the 2014 RTP).

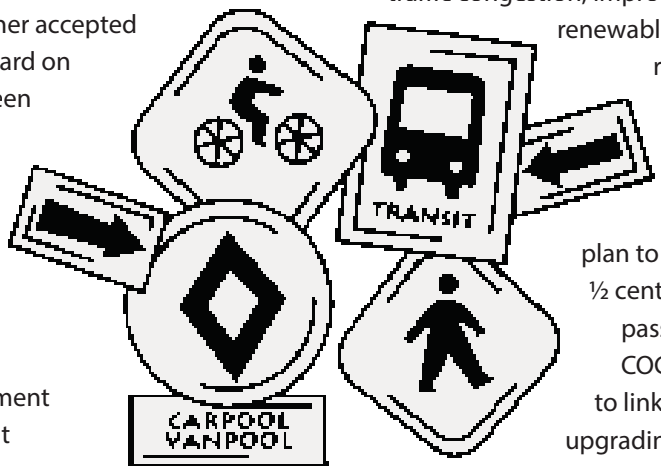
Transportation Demand Management (TDM)

Transportation Demand Management (TDM) refers to strategies aimed at providing alternatives to single occupancy vehicle use for travel choice. TDM specifically targets the work force, which generates the majority of peak hour traffic. Education is an essential feature of demand management, which attempts to persuade people to consider their transportation choices in an effort to reduce single occupancy vehicle usage. Transportation alternatives that provide a choice of transportation modes help reduce single occupancy vehicle usage. Transportation Demand Management strategies and alternative transportation modes include the following:

- Public transit
- Rideshare programs
- Carpooling
- Flexible work hours
- Vanpools
- Cycling or walking
- Telecommuting
- Mixed use land development

Similar to Transportation Control Measures, Fresno County, the cities, private businesses, and governmental offices implement some of these programs. Fresno COG sponsors, through the use of Measure C funding, a variety of transportation programs including carpool and vanpool subsidies, Rideshare programs and reduced senior fares for Taxi rides.

Fresno County has been aggressively working towards expanding the use of carpools within the region. An increase in carpool usage is highly beneficial to the region in various ways. It can have dramatic impacts for reducing traffic congestion, improving air quality, conserving non-renewable energy sources, and conserving road and highway infrastructure. For these reasons, community leaders felt it necessary to include funding for a Carpool Incentive Program within the plan to reauthorize the Measure C ½ cent sales tax that was ultimately passed by voters in 2006. Fresno COG has also taken the opportunity to link potential carpoolers together by upgrading the Valleyrides.com website to



allow residents the ability to find potential ridematches using more sophisticated technologies.

The Measure C Carpool Incentive Program began July 1, 2009. Participants who carpool or vanpool can submit carpool logs through the valleyrides.com website. Each log is entered into a monthly drawing for cash prizes. Each eligible log also qualifies participants for the annual Grand Prize Drawings that are held each year in July.

Program eligibility rules are as follows:

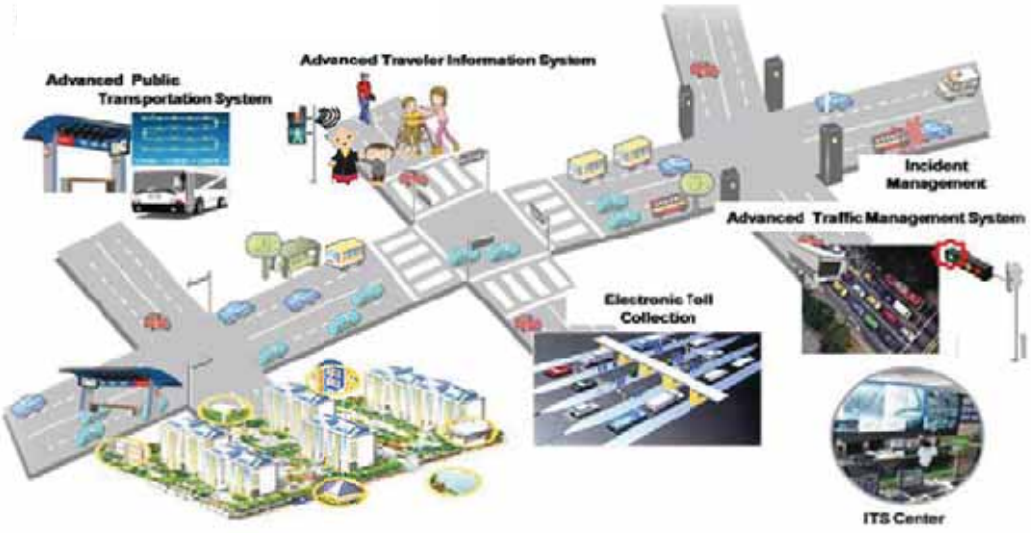
- Participants must travel in a carpool at least twice per week with at least one other person to work or school.
- Participants must be at least 18 years of age and have a valid driver's License.
- Participants must commute to or from Fresno County

Given that Measure C passed in 2006 for a 20-year timespan, the goal is to continue to market and expand the Measure C Carpool Incentive Program through at least 2026 in order to encourage carpooling as an alternative to driving in single-occupancy vehicles, thereby contributing to the reduction of traffic congestion and improving air quality. Plans will also include funding strategies for the program for 2026 and beyond.

Providing residents the opportunity connect with potential carpool partners has also been a key element of the overall ridesharing plan. Valleyrides.com is a website that comprises all relevant ridesharing information for Fresno County. Most recently, the website has undergone extensive upgrades from the design of the website itself, to the programming technology used to match carpoolers with each other. The previous technology in use was quite antiquated. Up until recently, more advanced technology was quite expensive to establish. However, advances in technology have allowed for the acquisition of a higher-tech website at more reasonable costs. Residents can now visit the website and get more accurate results when being matched with other prospective carpoolers. The goal is to continue to upgrade and advance the capabilities of the valleyrides.com website into the future in order to provide the best possible ridesharing resource for residents.

Transportation System Management (TSM)

Transportation System Management (TSM) is a program 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 existing roadways, reducing congestion and improving circulation. These strategies fall within



the responsibility of member agencies and Caltrans and include, but are not limited to 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.

Land Use Strategies

Research done by the San Joaquin Valley Air Pollution Control District and the California 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 motor vehicles. Within California, and the San Joaquin Valley in particular, design of residential neighborhoods still assumes reliance upon the automobile for the majority of trips. Land use decisions made to the year 2040 will have an important impact upon future air quality. Alternative transportation modes must be available in order for residents to have a choice instead of reliance on single occupancy vehicles.

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 economically viable, and improve the quality of life for 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 neighborhoods with mixed-use configurations providing a range of housing and job types
- Clustered activity centers- nodes, urban villages, or suburban activity centers
- Integrated street patterns which allow travel choices to neighborhood destinations

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. In addition, Fresno COG will incorporate the first Sustainable Communities Strategy in this 2014 RTP process.

Existing Requirements

Transportation conformity is the regulatory link between the Federal Clean Air Act and transportation planning. 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 forth in the transportation conformity regulation [40 CFR 93 Subpart A]. The regulation requires that the RTP and TIP be demonstrated to conform to the State Implementation Plan (SIP) before approval by the MPO, or acceptance by the U.S. Department of Transportation. Conformity to a SIP means that transportation plans, programs and projects 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 a transportation conformity requirement. Fresno COG's conformity process is discussed in more detail in the Air Quality Conformity Analysis for the 2014 Regional Transportation Plan. The transportation conformity regulations also require following formal interagency consultation processes. Fresno COG along with the other seven Valley Metropolitan Planning Organizations (MPOs) are parties in a Memorandum of Understanding (MOU) with the San Joaquin Valley Air Pollution Control District (SJVAPCD) to ensure a coordinated transportation/air quality planning approach and to jointly develop and implement local control measures in each State Implementation Plan. These coordinated and cooperative efforts were further strengthened in September 9, 2009 with the signing of an updated Memorandum of Understanding (MOU) to enhance the Valley's coordinated transportation/air quality planning activities

The regulation of sources of emissions, while effective, is not the only means to reduce pollution from transportation sources. Public information and education campaigns certainly play a role in promoting the

behavior changes necessary to reduce vehicle miles traveled. Under the current Surface Transportation Reauthorization Act, MAP-21, 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, the Fresno COG Policy Board, and the Regional Policy Council in hopes of educating not only transportation professionals, but also informing the interested public.

Accomplishments

The foregoing is descriptive of transportation strategies which are aimed at reducing congestion, improving transportation system operational efficiencies, reducing vehicle miles traveled, and providing alternative travel choices enables the work commuter to evaluate the choice of travel mode and to reduce dependence on single occupancy vehicle (SOV) use. 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. Since the last 2011 RTP the Fresno COG network model and the eight MPO models have all been upgraded to a much higher standard. They are both more advanced and have more in common with one another than before. The standardization of modeling practice in the Valley will make collaboration and sharing of information among the MPOs more effective. Collaboration and information sharing in turn will allow for greater compatibility between models in neighboring jurisdictions, and greater understanding of how to meet common modeling challenges. For more detail on transportation modeling please see the section COG Regional Travel Demand Forecast Model earlier in this chapter.

The San Joaquin Valley Air Pollution Control District continues in its path of ongoing adoption of new rules, strategies, and requirements with local agencies and local businesses. The Air District adopted Rule 9410 Employer Based Trip Reduction (eTRIP) that businesses with over 100 eligible employees participate in varying approaches to reduce SOV vehicle trips. Fresno COG is an Air District Healthy Air Living Business Partner. A 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. Transportation Demand Management has seen improvements and new accomplishments with the July 1, 2013 launch of an all new Valleyrides.com website, which provides information on rideshare matching, carpooling, vanpooling and bicycle resources. Fresno COG also facilitated an App for mobile users (both Android and IPhone) to locate rideshare information. Change may be slow, but it is being accomplished through widespread collaborative participation.

Needs Assessment

Fresno COG works with the San Joaquin Valley Air Pollution Control District on the development of the local control measure section of each State Implementation Plan. The needs assessment is part of every State Implementation Plan (SIP). The SIP identifies where emissions can be reduced in order to meet the attainment deadlines. Fresno COG continues to review and improve the programs that impact air quality, such as the Congestion Mitigation and Air Quality (CMAQ) Improvement program. All of the San Joaquin Valley Metropolitan Planning Organizations 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 2012 CMAQ funding cycle, (reported as part of the 2013 FTIP) Fresno COG awarded approximately 52% of the available funding to cost-effective projects. Fresno COG's commitment to reducing motor vehicle emissions remains strong.

Proposed Actions

Short-Range Plan

Actions required and taken between now and 2018 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, further implementation of bus rapid transit, HOV lanes, and other multimodal corridor alternatives.

Unfinanced Needs

Unfinanced transportation needs, documented in other modal sections of the RTP, address 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
- Increased densities along corridors
- Personal rapid transit systems
- Alternative fueled vehicles and infrastructure improvement needed to support implementation of the new technology
- Additional park and ride facilities
- Completion of all planned bikeway facilities
- Signal synchronization throughout the metropolitan area
- Other creative uses of developing technology

MAP-21 Congestion Management Process

MAP-21 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:

4. Methods to monitor and evaluate the performance of the multimodal transportation system
5. Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion
6. Establishment of a coordinated program for data collection
7. Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies
8. Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy

9. 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 2014 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 2014 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.

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

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.

5.10 Air Quality

Overview

As discussed in Appendix B, Valleywide Information, the San Joaquin Valley faces the serious environmental problem of poor air quality during the majority of the year. Air quality is a self-defining term: the quality of the air that we breathe. National Ambient Air Quality Standards (NAAQS) are established for criteria air pollutants in order to protect human health and welfare. Criteria pollutants are pollutants proven to be able to harm your health and the environment, and cause property damage. Of the six criteria pollutants, particle pollution and ground-level ozone are the most widespread health threats. EPA calls these pollutants "criteria" air pollutants because it regulates them by developing human health-based and/or environmentally-based criteria (science-based guidelines) for setting permissible levels. 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 Air Basin 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). EPA has established ozone standards based on 1-hour averaging periods, and for 8-hour averaging periods. The 1-hour Ozone National Ambient Air Quality Standard was revoked by EPA on June 15, 2005 and replaced with the more stringent 8-hour standard. Due to a series of legal challenges to EPA's actions, the San Joaquin Valley Air Pollution Control District was required to address these challenges and has adopted the 2013 Plan for the Revoked 1-hour Ozone Standard.

Particulate Matter

The other significant pollutant in the San Joaquin Valley is particulate matter (PM). Particulate matter is a mixture of solid particles and liquid droplets in the air. The size of PM

is directly related to potential health problems, the smaller the particles are more detrimental to health. EPA has set federal standards for PM10 (PM that is 10 microns or less in diameter) and PM2.5 (PM that is 2.5 microns or less in diameter). The chemical composition of PM is also a factor in the type and severity of health impacts. In addition to directly-emitted particles, PM can form in the atmosphere through photochemical reactions of precursors. These particles can include basic elements such as carbon and metals, or can be complex mixtures such as diesel exhaust and soil.

Much of the ambient particulate matter is formed from atmospheric reactions of NOx (nitrogen oxides). NOx is also a precursor for ozone. Mobile sources are the major contributor to NOx.

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 produces 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. The impact of residential wood burning is being reduced due to innovative regulations by the San Joaquin Valley Air Pollution Control District. 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: the diameter/cross-section of a human hair is anywhere from about 50 to 100 microns.)

The 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 further 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, affecting four of the eight Valley counties in the San Joaquin Valley Air Basin, 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. On April 26, 1996 ARB approved the Carbon Monoxide Redesignation Request and Maintenance Plan, EPA approved and redesignated on June 1, 1998; on October 22, 1998 ARB revised the SIP to incorporate the effects of ARB action to remove the wintertime oxygen requirement for gasoline in certain areas. On July 22, 2004 ARB approved the update to the SIP showing the standard will be maintained through 2018.

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 Metropolitan Planning Organizations (MPOs) and the San Joaquin Valley Air Pollution Control District (SJVAPCD) 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 SJVAPCD 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, (the associated reduction of vehicle miles traveled and fuel use), they prove to be effective strategies 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.

Existing and Air Quality Planning

Transportation and Air Quality Planning

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 in 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 to produce 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: Moving Ahead for Progress in the 21st Century, (MAP-21), delegates major planning decisions to the states and MPOs. They also reinforce the goals of the Federal Clean Air Act by making air pollution a central concern of transportation planning and spending decisions.

ISTEA created, and TEA-21, SAFETEA-LU, and Moving Ahead for Progress in the 21st Century, (MAP-21) continue the Congestion Mitigation and Air Quality (CMAQ) Improvement 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 are required 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 Air Pollution Control District are responsible for implementing most federal Clean Air Act requirements, the Regional Planning Agencies (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 under certain circumstances. 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 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 Plans (SIPs)

Federal clean air laws require areas with unhealthy levels of criteria air pollutants (designated as non-attainment) 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.

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 June 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 used for the conformity analysis in the transportation conformity determination for this RTP. On October 22, 1998 ARB revised the SIP to incorporate the effects of ARB action to remove the wintertime oxygen requirement for gasoline in certain areas. On July 22, 2004 ARB approved the update to the SIP showing the standard will be maintained through 2018.

2004 Extreme Ozone Attainment Demonstration Plan (1-hour Ozone)

The San Joaquin Valley Air Pollution Control District (SJVAPCD) adopted this plan in October 2004 to address EPA's 1-hour ozone standard. However since EPA revoked this standard in 2005, EPA did not act on this plan until 2010, when a court decision required EPA action. EPA's 2010 action approved the plan, but subsequent litigation led to a court finding that EPA had not properly considered new information available since the District

adopted the Plan in 2004. EPA thus withdrew its plan approval in November 2012, and the District and ARB withdrew the plan from consideration. The SJVAPCD is working on the 2013 Plan for the Revoked 1-hour Ozone Standard and intends to adopt in September 2013, with an anticipated Fall 2013 adoption by ARB.(information is current at the time of this draft for the 2014 RTP).

2007 Ozone Plan (8-hour Ozone)

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. EPA approved the Plan and conformity budgets (as revised in 2011) on March 1, 2012, effective April 30, 2012.

2007 PM 10 Maintenance Plan and Request for Redesignation

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 attained 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 (Annual)

The District approved the 2008 PM2.5 Plan on April 30, 2008. This plan addresses EPA's annual PM2.5 standard of 15 µg/m^3, established by EPA in 1997. 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 EPA approved the Plan (as revised in 2011) on November 8, 2011 which contains the motor vehicle emission budgets for PM2.5 and NOx.

2012 PM2.5 Plan (24-hour)

The SJVAPCD adopted the 2012 PM2.5 Plan in December 2012, and was approved by ARB January 2013 and was submitted to EPA on March 3, 2013. EPA approval is pending at the time of this draft for the 2014 RTP. This plan addresses EPA's 24-hour PM2.5 standard of 35 µg/m^3, which was established by EPA in 2006.

In addition to federal requirements, the State of California Air Resources Board requires local air districts to show progress toward meeting the California Clean Air Act (CCAA) air standards. The California Clean Air Act Triennial Progress Report and Plan Review demonstrates local air districts' reasonable progress to attain the more stringent California air pollution standards.

Accomplishments

The major accomplishments made toward improving local air quality since adoption of the 2011 RTP include the following:

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 Valley MPO's, was revised and adopted by all eight RPAs on September 21, 2006.

These coordinated and cooperative efforts were further strengthened in September 9, 2009 with the signing

of the Memorandum of Understanding (MOU) adding the San Joaquin Valley Air Pollution Control District to enhance the Valley's coordinated transportation/air quality planning activities. Interagency consultation is generally conducted through the San Joaquin Valley Regional Planning Agency's Director's Association Interagency Consultation Group (IAC) This was formerly called the San Joaquin Valley Model Coordinating Committee (MCC). The MCC was formally revised in 2009 incorporating quarterly workshops, MPO staff conference calls, and interagency conference calls. The IAC has been established by the Regional Planning Agency's Director's Association (all eight Valley COGs) 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 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 (Districts 6, 10 and headquarters) are all members of the committee. Since the last 2011 RTP process this committee has coordinated the unified approach among all the agencies to successfully adopt a new State Implementation Plan-the 2012 PM2.5 Plan, completed three separate Transportation Conformity Determinations, has played a major role in the coordination of work on the 2014 RTP between and among the eight counties in the San Joaquin Valley Air Basin which include the first Sustainable Communities Strategy for each of the eight counties, and has provided input to the Statewide Transportation Conformity Working Group.

Valley-wide 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 Air Pollution Control District's State Implementation Plans. The Valley RPAs continue to work in concert with SJVAPCD providing updates and information.

Transportation Modeling for Air Quality Conformity-Model Steering Committee

The Valley Regional Planning Agencies have developed a coordinated effort for transportation modeling for air quality conformity purposes. The objective of the Model Steering Committee 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 Transportation 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. Since the last 2011 RTP the Fresno COG model and the eight MPO models have all been upgraded to a much higher standard. They

are both more advanced and have more in common with one another than before. The standardization of modeling practice in the Valley will make collaboration and sharing of information among the MPOs more effective. Collaboration and information sharing in turn will allow for greater compatibility between models in neighboring jurisdictions, and greater understanding of how to meet common modeling challenges. For more detail on transportation modeling please see the section COG Regional Travel Demand Forecast Model earlier in this chapter.

Traffic Flow Improvements

Fresno COG member agencies identify facilities, which require traffic flow improvements. When 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 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. Incentives are available to communters in order to encourage them to leave their single-occupancy vehicle in exchange for a multiple-occupancy carpool or vanpool. These incentives are funded locally, through the Measure C sales tax initiative.

Plug-in Electric Vehicle Coordinating Council

On November 20, 2012 Fresno COG was invited to participate in the San Joaquin Valley Regional Plug-in Electric Vehicle Coordinating Council (PEVCC). The San Joaquin Valley Air Pollution Control District received a grant from the California Energy Commission to develop a comprehensive regional plan to support Plug-In Electric Vehicle (PEV) readiness. The monthly meetings are continuing and will work to identify barriers to PEV readiness and provide solutions to those barriers.

Needs Assessment

Management of the transportation system is becoming an increasingly important need in Fresno County. Current air quality issues are driving this need and maximizing the utilization of existing facilities is also important. Funding for developing new capacity-increasing projects is limited; even the construction of Measure C (local sales tax measure) 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 meeting air quality standards in order to serve the needs of a growing and diverse population.

Previous efforts have been regional or generalized in terms of analysis and recommendations. This focus will likely shift to more specific local corridor analyses. This is especially true with regard to federal legislation that requires consideration of alternate transportation modes, the cost/effectiveness of such modes, and analysis of 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. The implementation of improvements based on prior studies, which were detailed earlier in this chapter, continues. The studies include the 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.

Proposed Actions

Short-Range Improvement Plan

Air Quality Measures

The Short-Range Improvement Plan provides actions that will reduce air emissions between 2014 and 2018. 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 San Joaquin Valley Air Pollution Control District (SJVAPCD) in providing coordinated transportation/air quality planning.
- Fresno COG and the SJVAPCD will continue to cooperate/ consult in activities aimed at achieving both federal and California air quality standards
- Identified Transportation Demand Measures and and Transportation Control Measures shall be considered during SIP development 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 local agencies' 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 the well-developed programs to incentivize participation.
- Fresno COG will continue to support the efforts of the SJVAPCD 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 replace aging fleets with alternative fueled buses.
- 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.
- Fresno COG, in cooperation with Caltrans, works to promote the development of park-and-ride lots and parking management strategies where appropriate.
- Fresno COG, Caltrans, cities, and the county support utilization of alternate fuel strategies to reduce the impacts of petroleum fuels. The introduction of alternative fuel technology into the consumer market can have a significant impact on reducing petroleum based fuel consumption.

Short-Range Improvement Plan

Long-range actions are those that will be implemented to 2040-the horizon year of this RTP. The policies of the 2014 RTP work to improve air quality in the region. They build upon the effectiveness and successes of the short-range programs, upon both federal and California 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 toward the use of new and alternate transportation systems and fuels, alternative means of commuting to work, as well as land use changes over time. 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 regional rail facilities. The long-range strategies will continue to implement 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. Fresno COG places much importance on increasing the efficiency and maintenance of existing facilities. Intelligent Transportation Systems will play a larger role in incorporating innovative services to make "smarter" use of transportation networks in long term integrated planning processes.

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. Fresno COG continues with our successful Rideshare/vanpool/carpool incentives and implementation procedures. 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.

5.11 Environmental Mitigation

Introduction

This section documents how the 2014 RTP and 2014 RTP PEIR comply with the MAP-21environmental requirements as set forth in the Final Rule for federal planning requirements published in the Federal Register on February 14, 2007. Title 23 of the U.S. Code 134(i)(2)(B) states:

- 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.
- 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 MAP-21 Final Rule:

- CFR §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.

- FR §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;

- Final Rule CFR §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 §21000.

2014 RTP Program Environmental Impact Report

Following the provisions and requirements of CEQA, Fresno COG has prepared a programmatic environmental impact report for the 2014 RTP that describes strategy-level mitigation measures which could avoid or minimize significant adverse impact of implementing the 2014 RTP. In doing so, the 2014 RTP PEIR 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 2014 RTP PEIR, Fresno COG followed standard CEQA requirements for public outreach and agency consultation. This consultation included the: Notice of Preparation of the PEIR, Notice of Completion of the Draft PEIR, Draft Final PEIR, 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 55-day comment period for the Draft PEIR are documented in the Final 2014 RTP PEIR. The PEIR is attached as Appendix D.

MAP-21 Compliance

CEQA requires the identification of potential environmental impacts due to the implementation of the 2014 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 MAP-21 statute and regulation as included in the Final Rule. The discussions contained within the PEIR 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 MAP-21 is on identifying, "activities that have the greatest potential to restore and maintain the environmental functions affected by the plan (MAP-21 §134(i)(2)(B))" [emphasis added]. Therefore, the CEQA analysis contained in the 2014 RTP PEIR accomplishes the intent and spirit of the environmental mitigation discussion required in MAP-21.

Addressing Analysis and Mitigation of Greenhouse Gas Emissions

CEQA generally requires public agencies to review the environmental impacts of proposed projects, and, if those impacts may be significant, to consider feasible alternatives and mitigation measures that would substantially reduce significant adverse environmental effects. Section 21083 of the Public Resources Code requires the adoption of guidelines to provide public agencies and members of the public with guidance about the procedures and criteria for implementing CEQA. The guidelines required by section 21083 of the Public Resources Code are promulgated in the California Code of Regulations, title 14, sections 15000 - 15387 (the Guidelines, or State CEQA Guidelines).

Due to the passage of SB 97, in 2009, the California Natural Resources Agency adopted certain amendments and additions to certain guidelines implementing the California Environmental Quality Act (Public Resources Code section 21000 et seq.). The specific amendments implement the State Legislature's directive in Public Resources Code section 21083.05, which directed the Resource Agency to "certify and adopt guidelines prepared and developed by the Office of Planning and Research…for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions". (Pub. Resources Code, § 21083.05(a) - (b). The Fresno COG 2014 RTP PEIR is compliant with the amended regulation regarding the analysis of GHG emissions, as stated in the aforementioned Code.