Vision. Choices. Mobility.

2014 Regional Transportation Plan and Sustainable Communities Strategy

Fresno Council of Governments

Through 2040

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The Fresno Region

Heart of the San Joaquin Valley

Fresno County is located in the heart of California within the Central San Joaquin Valley. It is the tenth most populous county in California and the sixth largest in size. Agriculture is the primary industry making it the number one agricultural county in the nation.

Fresno County was formed in 1856 from parts of Mariposa, Merced and Tulare counties. Originally much larger than it is today, parts of the county's territory were given to Mono County in 1861 and to Madera County in 1893. The original county seat was along the San Joaquin River in the foothill community of Millerton, but was moved to the rapidly growing city of Fresno on the newly built Southern Pacific Railroad line after a flood destroyed much of the town. Today the city of Fresno is the fifth largest city in California. Fresno County now has 15 incorporated cities and many other towns and smaller communities.

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.

Major watercourses are the San Joaquin River, Kings River, Delta-Mendota Canal, Big Creek, Friant Kern Canal, Helm Canal and Madera Canal. Fresno County is bordered on the west by the Coast Range and on the east by the Sierra Nevada, with four National protected areas residing in part within Fresno County. State 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.

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 also served by several state highways: Routes 33, 41, 168, 180, 99, and Interstate 5.

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.

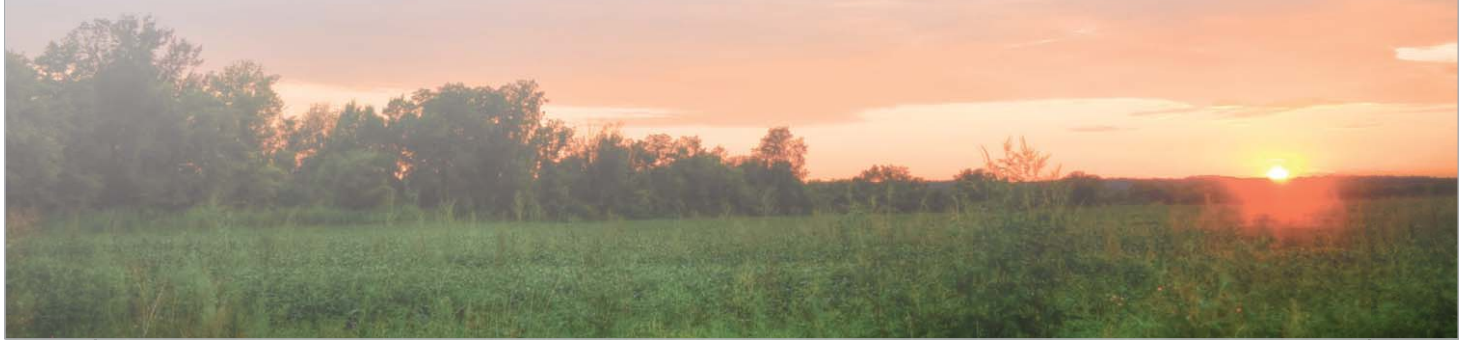
Fresno-Yosemite International Airport provides a hub airport service to its service area of six counties, while Fresno is also served by Amtrak, which has experienced increasing ridership. Existing rail lines also offer potential for an expanding share of commodity movement.

The distances between local destinations have encouraged automobile usage, yet there is a large rural and urban population within Fresno County in need of public transit service. The systems that are in place are in need of increased, stable financing as well.

The climate and terrain within the Fresno County region are compatible with bicycle use and walking for short commutes and recreational trips. Most transit services provide easily accessible bike racks or other storage to make multi-modal travel easily accessible.

Regional Transportation Planning

Regional Transportation Plans address the mobility needed to keep our region moving and our communities connected. Fresno COG's 2014 Regional Transportation



Plan (RTP) charts the long-range vision of Regional Transportation through the year 2040. As we address new requirements for reducing greenhouse gas emissions it has been and will remain our goal to plan in partnership with our communities throughout the region, providing transportation choices that encourage and cultivate thriving economies and cultural richness. This RTP identifies existing and future transportation related needs, while considering all modes of travel, analyzing alternative solutions, and identifying what can be completed with anticipated available funding for the 1,100 projects and multiple programs included within it. It contains of a variety of different elements or chapters, augmented by additional documentation contained the Appendices.

People, Choices, Community

Through an extensive outreach effort spanning a two year period of time, we presented ideas, solicited comments, and considered concerns communicated to us in a wide variety of ways. We spoke with community, government and business representatives at public workshops, 18 in all, and during many standing committee meetings. We received feedback through surveying, online communications, workshop comment forms, in face to face meetings and via mail and email.

Metropolitan Planning Organizations

MPOs are federally mandated and federally funded transportation policy-making organizations in the United States that are made up of representatives from local government and governmental transportation authorities. Congress created MPOs in order to ensure that existing and future expenditures of governmental funds for transportation projects and programs are based on a continuing, cooperative, and comprehensive ("3 C") planning process. In other words, the federal government wished to see federal transportation funds spent in a manner that has a basis in metropolitan region-wide plans developed through intergovernmental collaboration, rational analysis, and consensus-based decision making.

Fresno Council of Governments - A region of diverse partners, building a progressive future with one voice

Fresno COG was formalized in 1969 through a Joint Powers Agreement between the incorporated cities in Fresno County and the County of Fresno. As the Metropolitan Planning Organization for Fresno County, we address issues of mutual concern to the county and the cities in the Fresno County region, while satisfying Federal and State transportation planning and programming mandates.

Fresno COG is a consensus builder, developing acceptable programs and solutions to issues that do not respect political boundaries. We undertake comprehensive regional planning with an emphasis on transportation, facilitating collaboration of governments, interested parties, and residents in the planning process.

Clovis, California - Country sunset

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Glossary *of common acronyms and definitions*

ACRONYM	TERM	DEFINITION
AASHTO	American Association of State Highway and Transportation Officials	AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico. Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system.
AB 32	Assembly Bill 32	Signed into law on September 26, 2006, it requires that the state's global warming emissions be reduced to 1990 levels by 2020. This reduction will be accomplished through an enforceable statewide cap on global warming emissions that will be phased in starting in 2012. In order to effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels.
Active Transportation		A mode of transportation that includes walking, running, biking, skateboarding, and other self-propelled forms of transportation
ADA	Americans with Disabilities Act of 1990	Guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. It prescribes federal transportation requirements for transportation providers.
ADT	Average Daily Traffic	Total daily volume of vehicle traffic of a highway or road
AIA	Airport Influence Area	The area around an airport that includes the overflight, noise and safety zones that the Airport Land Use Commission uses to determine compatibility of land uses surrounding the airport.
ALP	Airport Layout Plan	A graphic representation of the current conditions and the future long-term planned development for an airport that airports must keep up to date in order to receive federal assistance.
ALUC	Airport Land Use Commission	The Commission assists local agencies in ensuring orderly development around airports and discouraging incompatible land uses, including limiting the public's exposure to excessive noise and health and safety hazards.
ALUCPP	Airport Land Use Compatibility Policy Plan	Required by the State Aeronautics Act for all public use airports. Also known as a CLUP - Compatilibiltiy Land Use Plan - a policy planning tool that details the safety and noise compatibility criteria for development around airports, and is developed and used by Airport Land Use Commissions to conduct reviews to determine compatiblity of proposed land uses on and around airports.
AMTRAK	National Railroad Passenger Corporation	Publicly funded railroad service operated and managed as a for-profit corporation
APCD	Air Pollution Control District	The Fresno area is under the auspices of the San Joaquin Valley Air Pollution Control District (SJVAPCD) which works with state and federal air quality agencies to attain health air in the San Joaquin Valley Air Basin.
ARB	Air Resources Board (also referred to as CARB, California Air Resources Board)	This is the state level air quality agency which works with local and federal air quality agencies to attain healthier air in California.
AVA	Abandoned Vehicle Abatement	A means to remove abandoned vehicles that create a public nuisance and a health or safety hazard
Base Year		The year 2008, used in the RTP performance analysis as a reference point for current conditions.
BNSF		Burlington Northern and Santa Fe Railway Company
BRT	Bus Rapid Transit	Bus transit service that seeks to reduce travel time through measures such as traffic signal priority, automatic vehicle location, dedicated bus lanes, limited stop service, and faster fare collection policies.
BTA	Bicycle Transportation Account	Annual program providing state funds for city and county projects that improve safety and convenience for bicycle commuters.

ACRONYM	TERM	DEFINITION
CAA	Clean Air Act (Federal)	The Clean Air Act (CAA) is the comprehensive federal law that regulates air emissions from stationary and mobile sources.
CAAP	California Aid to Airports Program	Provides grants to public agencies — and, in some cases, to private owners and entities -- for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems
CALCOG	California Association of Councils of Government	Association made up of the 35 Councils of Government in California
Caltrans	California Department of Transportation	State of California government agency whose mission is to maintain, repair and improve roads and highways throughout the State
Caltrans Headquarters	Caltrans Headquarters	Sacramento division of Caltrans that oversees state activities and Local Assistance
Caltrans Local Assistance	Caltrans Local Assistance	Division of Caltrans that assists Local and Regional Agencies by ensuring specific program requirements are met, project applications are processed, and projects are delivered in accordance with Federal and State requirements
CARB	California Air Resources Board	See definition for ARB on previous page
CASP	California Aviation System Plan	The means by which continuous aviation system planning is conducted by the State
CCAA	California Clean Air Act	The Clean Air Act (CAA) is the comprehensive state law that regulates air emissions from stationary and mobile sources.
CCR	California Code of Regulations	The official compilation and publication of the regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act (APA)
CEQA	California Environmental Quality Act	State law providing certain environmental protections that apply to all transportation projects funded with state funds.
CIP	Capital Improvement Program	7-year program to maintain or improve traffic LOS & transit performance and to mitigate impacts identified by the CMP
CMAQ	Congestion Mitigation and Air Quality	Federal funding account designated for projects that improve air quality and redcuce congestion.
CMP	Congestion Management Program	Established by Proposition 111 in 1990, requires each county to develop and adopt a CMP that includes highway and roadway system monitoring, multimodal system performance analysis, transportation demand management program, land-use analysis program, and local conformance.
CNG	Compressed Natural Gas	Is an alternative fuel for use in combustion-can reduce some criteria air pollutants.
CO	Carbon Monoxide	A colorless, odorless, poisonous gas formed when carbon in fuels is not burned completely. It is a byproduct of highway vehicle exhaust, which contributes about 60 percent of all CO emissions nationwide.
COG	Council of Governments	A governmental agency formed by joint powers agreement by all the member governments within a given region. Specific powers vary by agency, but usually involve transportation issues.
Corridor		In planning, a broad geographical band that follows a general directional flow or connects major sources of trips. It may contain a number of streets and highways, as well as transit lines and routes.
CTC	California Transportation Commission	A board appointed by the governor to oversee and administer state and federal transportation funds and provide oversight on project delivery.
CTSA	Consolidated Transportation Service Agency	Designated under auspices of the Social Services Transportation Improvement Act to achieve the intended transportation coordination goals of that Act

ACRONYM	TERM	DEFINITION
EIR	Environmental Impact Report	An informational document, required under CEQA, which will inform public agency decision-makers and the public generally of the significant environmental effects of a project, possible ways to minimize significant effects, and reasonable alternatives to the project.
EIS	Environmental Impact Statement	National Environmental Policy Act (NEPA) requirement for assessing the environmental impacts of federal actions that may have a significant impact on the human environment
EJ	Environmental Justice	Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.
EPA	Environmental Protection Agency (Federal)	This is the federal level agency which works with local and state air quality agencies to protect the environment to provide healthy living conditions and welfare for the nation.
EPSP	Expedited Project Selection Procedures	Process used to design and construct a project prior to the programmed year shown in the FTIP by moving the funds forward to the current year.
FAA	Federal Aviation Administration	Federal agency responsible for issuing and enforcing safety regulations and minimum standards, managing air space and air traffic, and building and maintaining air navigation facilities.
FAX	Fresno Area Express	Transit system serving the Fresno Metropolitan Area
FCMA	Fresno-Clovis Metropolitan Area	The geographical area representing the combined respective spheres of influence of the cities of Clovis and Fresno.
FCRTA	Fresno County Rural Transit Agency	Transit Agency serving the rural areas of Fresno County
FCTA	Fresno County Transportation Authority	The Fresno County Transportation Authority (FCTA) is the entity created by legislation to administer the Measure C Program(s) and ensure the revenue is received and distributed appropriately.
FFY	Federal Fiscal Year	October 1 through September 30
FHWA	Federal Highway Administration	Federal agency responsible for administering the Federal-Aid Highway Program, which provides federal financial assistance to the states to construct and improve the National Highway System, urban and rural roads, and bridges.
FRA	Federal Railroad Administration	Federal agency created to promulgate and enforce rail safety regulations, administer railroad assistance programs, conduct research and development in support of improved railroad safety and national rail transportation policy, and consolidate government support of rail transportation activities.
FSP	Freeway Service Patrol	The CHP, Caltrans and local transportation agencies joined forces to provide emergency roadside services during commute periods. The goal of the program is to remove impediments to traffic to expedite the flow of traffic.
FSTIP	Federal Statewide Transportation Improvement Program	Caltrans four year planning document that is updated every two years (made up of all MPO's in California FTIPs)
FTA	Federal Transit Administration	The federal agency responsible for administering federal transit funds and assisting in the planning and establishment of areawide urban mass transportation systems. As opposed to FHWA funding, most FTA funds are allocated directly to local agencies, rather than to Caltrans.
FTIP	Federal Transportation Improvement Program	A three-year list of all transportation projects proposed for federal transportation funding within the planning area of an MPO.
FY	Fiscal Year	July 1 through June 30
GHG	Greenhouse Gases	Components of the atmosphere that contribute to the greenhouse effect. The principal greenhouse gases that enter the atmosphere because of human activities are carbon dioxide, methane, nitrous oxide, and fluorinated gases.

ACRONYM	TERM	DEFINITION
GIS	Geographic Information Systems	Powerful mapping software that links information about where things are with information about what things are like. GIS allows users to examine relationships between features distributed unevenly over space, seeking patterns that may not be apparent without using advanced techniques of query, selection, analysis, and display.
HOV	High Occupancy Vehicle	Generally vehicles with more than one person, depending on the usage could mean many riders.
HPMS	Highway Performance Monitoring System	A federally mandated program designed by FHWA to assess the performance of the nation's highway system.
HSR	High Speed Rail	Intercity passenger rail service that is reasonably expected to reach speeds of at least 110 mile per hour.
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991	Federal transportation planning and policy law (1991-1998)
ITIP	Interregional Transportation Improvement Plan	The portion of the STIP that includes projects selected by Caltrans (25 percent of STIP funds).
JPA	Joint Powers Agency	Two or more agencies that enter into a cooperative agreement to jointly wield powers that are common to them. JPAs are a vehicle for the cooperative use of existing governmental powers to finance and provide infrastructure and/or services in a cost-efficient manner.
LAFCO	Local Agency Formation Commission	LAFCos review proposals for the formation of new local governmental agencies and for changes in the organization of existing agencies.
LOS	Level of Service	A qualitative measurement of traffic flow. Is measured on a scale from A to F in which A signifies the least congested (free flow) while F signifies most congested.
LTF	Local Transportation Fund	Monies distributed to regional transportation planning agencies by the State of California. The annual allocation is the local share of revenues from ¼ cent of the state sales tax rate. COG receives this money and distributes it to the local jurisdictions based on population. The money must first be used to fill any unmet transit needs, and then can be used for local road and street expenses. A small portion of the money is also reserved for pedestrian/bikeway and planning expenditures. Is part of the Transportation Development Act fund.
MAP-21	Moving Ahead for Progress in the 21st Century Act	Federal transportation planning and policy law (2012-Present).
MPO	Metropolitan Planning Organization	Federally mandated transportation policy-making organization made up of representatives from local government (required in any urbanized area with a population greater than 50,000).
OWP	Overall Work Program	A list of the tasks that the Council of Governments expects to perform over a given year. The program is used as a management tool.
PAC	Policy Advisory Committee	Fresno COG's standing committee comprised of member agency City Managers.
PPP	Public Participation Plan	Fresno COG's guiding document to fulfilling federal public outreach requirements.
PL-Funds	Metropolitan Planning Funds	Made available to each Metropolitan Planning Organization (MPO) designated for an urbanized area with a population of more than 50,000 individuals and responsible for carrying out the 3-C (continuing, cooperative and comprehensive) metropolitan planning process.
PM 2.5	Particulate matter smaller than 2.5 microns	Very small specks of particulate matter found to be harmful to human health and welfare. The smaller the partial, the more dangerous it is to human health.
PM10	Particulate matter smaller than 10 microns	Tiny specks of particulate matter found to be harmful to human health and welfare.
PSR	Project Study Report	Defines and justifies the project's scope, cost, and schedule. Prepared for state highway projects and projects not on the State Highway System.

ACRONYM	TERM	DEFINITION
PTIS	Public Transportation Infrastructure Study	An effort to identify strategies for transportation investments and land use policies that would result in measurable reductions in vehicle miles travelled (VMT) and improve mobility choices for greater Fresno County residents.
PUC	Public Utilities Code/ Commission	Regulates privately owned telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation companies.
RFP	Request for Proposals	A document used to solicit bids for the preparation of a plan of completion of a project.
ROG	Reactive Organic Gases	Organic compounds assumed to be reactive at urban/regional scales. Those organic compounds that are regulated because they lead to ozone formation.
RSTP	Regional Surface Transportation Program	Federal funding account commonly used for maintenance or capacity increasing road projects.
RTIP	Regional Transportation Improvement Program	A seven year listing of proposed highway, transit and airport projects that implement the Regional Transportation Plan. Projects are listed in priority order with costs and funding sources identified. COG and other regional transportation planning agencies must prepare this document and submit it to the California Transportation Commission by December 1st of every odd year. Projects must be listed in the RTIP in order to be considered for funding in the State Transportation Improvement Program (STIP).
RTMF	Regional Transportation Mitigation Fee	A fee program intended to ensure that future development contributes to its fair share towards the cost of infrastructure to mitigate the cumulative, indirect regional transportation impacts of new growth in a manner consistent with the provisions of the State of California Mitigation Fee Act.
RTP	Regional Transportation Plan	Metroplitan planning organization (MPO) 25 year transportation planning document that is updated every four years.
RTPA	Regional Transportation Planning Agency	Federally mandated transportation policy-making organization made up of representatives from local government (required in any rural or local area with a population less than than 50,000).
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users	Signed into law by President Bush on August 10, 2005, it authorized the federal surface transportation programs for highways, highway safety, and transit for the 5-year period of 2005–2009.
SB 375	Senate Bill 375	Established to implement the state's greenhouse gas (GHG) emission-reduction goals, as set forth by AB 32, in the sector of cars and light trucks. This mandate requires the California Air Resources Board to determine per capita GHG emission-reduction targets for each metropolitan planning organization (MPO) in the state at two points in the future—2020 and 2035. In turn, each MPO must prepare a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its GHG reduction target through integrated land use, housing, and transportation planning.
SCS	Sustainable Communities Strategy	A plan to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning.
SHOPP	State Highway Operation and Protection Plan	Four year program of projects that have the purpose of collision reduction, bridge and roadway preservation, mobility enhancement and preservation of other transportation facilities
SIP	State Implementation Plan	The planning document prepared to show how the State will attain the national ambient air quality standards.
SJVAPCD	San Joaquin Valley Air Pollution Control District	The Fresno area is under the auspices of the San Joaquin Valley Air Pollution Control District (SJVAPCD) which works with state and federal air quality agencies to attain health air in the San Joaquin Valley Air Basin.
SOV	Single Occupant Vehicle	Privately operated vehicle that contains only one driver or occupant.

ACRONYM	TERM	DEFINITION
SSTAC	Social Service Transportation Advisory Council	Committee that reviews transit issues with emphasis on the annual identification of transit needs within Fresno County.
STA	State Transit Assistance	State funding program for mass transit operations and capital projects. Current law requires that STA receive 50 percent of PTA revenues.
STIP	Statewide Transportation Improvement Program	Caltrans four year planning document that is updated every two years.
STP	Surface Transportation Program	Provides flexible funding that may be used by states and localities for projects on any federal-aid highway, bridge projects on any public road, transit capital projects, and intracity and intercity bus terminals and facilities. A portion of funds reserved for rural areas may be spent on rural minor collectors.
TAC	Technical Advisory Committee	A committee that provides ideas and feedback on plans or programs.
TAZ	Traffic Analysis Zones	Zone system used in travel demand forecasting.
TCM	Transportation Control Measure	A project or program that is designed to reduce emissions or concentrations of air pollutants from transportation sources. TCMs are referenced in the State Implementation Plan (SIP) for the applicable air basin and have priority for programming and implementation ahead of non-TCMs.
TDA	Transportation Development Act	State law enacted in 1971 that provided a 0.25 percent sales tax on all retail sales in each county for transit, bicycle, and pedestrian purposes. In non-urban areas, funds may be used for streets and roads under certain conditions.
TDM	Transportation Demand Management	Strategies that result in more efficient use of transportation resources, such as ridesharing, telecommuting, park-and-ride programs, pedestrian improvements, and alternative work schedules.
TEA-21	Transportation Equity Act for the 21st Century	Federal transportation planning and policy law (1998-2005).
TOD	Transit Oriented Development	A planning strategy that explicitly links land-use and transportation by focusing mixed housing, employment, and commercial growth around bus and rail stations (usually within ½ mile). TODs can reduce the number and length of vehicle trips by encouraging more bicycle/pedestrian and transit use and can support transit investments by creating the density around stations to boost ridership.
TSM	Transportation Systems Management	The Transportation Systems Management (TSM) approach to congestion mitigation seeks to identify improvements to enhance the capacity of existing system of an operational nature. Through better management and operation of existing transportation facilities, these techniques are designed to improve traffic flow, air quality, and movement of vehicles and goods, as well as enhance system accessibility and safety.
TTC	Transportation Technical Committee	The Transportation Technical Committee (TTC) serves as a standing committee that reviews materials and issues monthly before forwarding them to the Policy Advisory Committee. Membership includes member agency staff and representatives from a wide variety of transportation and community interest groups.
VMT	Vehicle Miles of Travel	On highways, a measurement of the total miles traveled by all vehicles in the area for a specified time period. It is calculated by the number of vehicles times the miles traveled in a given area or on a given highway during the time period. In transit, the number of vehicle miles operated on a given route or line or network during a specified time period.
VOC	Volatile Organic Compound	Organic gases emitted from a variety of sources, including motor vehicles, chemical plants, refineries, factories, consumer, and commercial products, and other industrial sources. Ozone, the main component of smog, is formed from the reaction of VOCs and NOx in the presence of heat and sunlight.

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Coalinga, California *Oil derricks in the sunset*

Building the RTP:

Putting the Pieces Together

Regional Transportation Plan (RTP):
A comprehensive assessment
of all forms of transportation
available in Fresno County
and of needs for travel
and goods movement
projected through the year 2040

1.1 Building the RTP

The 2014 Regional Transportation Plan (RTP) is a comprehensive assessment of all forms of transportation available in Fresno County and of the needs for travel and goods movement through the year 2040. Fresno COG's first RTP was adopted in 1975. Updated editions are required every four years and are refinements of the original and subsequent plans, making this plan the eighteenth edition. Federal and State legislation mandate that these long-range transportation plans cover a period of at least 20 years into the future.

The 2014 RTP update was accomplished within the framework of the Fresno Council of Governments (Fresno COG), which is the Regional Transportation Planning Agency (RTPA) and Metropolitan Planning Organization (MPO) for the Fresno County area. This process of intergovernmental cooperation, coordination and long-range planning which has involved the fifteen cities, Fresno County, staff from related local public agencies, the Air District, Caltrans and other state agencies, federal agencies, and the public.

Sustainable Communities Strategy

The 2014 version of the Fresno County Regional Transportation Plan is the first to contain a Sustainable Communities Strategy (SCS) as required by California Senate Bill 375. Enacted in 2008, SB 375 requires that each Metropolitan Planning Organization include an SCS that provides an integrated land use and transportation plan for meeting greenhouse gas emission reduction targets set forth by the California Air Resources Board (CARB).

Federal directives - funding

The 2014 version of the RTP is also a reflection of both the federal directives embodied in MAP-21 (2012 Moving Ahead for Progress in the 21st Century Act) and the Clean Air Act Amendments of 1991. These acts require that Regional Transportation Plans include only those projects which can actually be delivered with funds expected to be available, and that those projects will help attain and maintain air quality standards. MAP-21 funds surface transportation programs at over $105 billion for fiscal years 2013 and 2014 and is the first long-term highway authorization enacted since 2005.

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

Air Quality Planning

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

Computer modeling

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

Multi-county coordination

Fresno COG is the Regional Transportation Planning Agency (RTPA) for the Fresno County region, a designation

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

1.2 Environmental Impact Reporting

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

Environmental Impact Report

For the past decade, each Regional Transportation Plan and its Environmental Impact Report has focused on changing issues of the time. The 1994 RTP was based on extensive supportive technical studies and public review and comment. A program level Environmental Impact Report was prepared, presented for public review, and adopted by the COG Policy Board. Subsequent plan updates have built upon that foundation, with environmental assessments recommending the use of the negative declaration as to environmental impacts, implying that no new significant changes to prior plans were included. This position was taken as:

1) land use agencies had continued to plan within established growth areas

2) the area continued to pursue the implementation of a basic freeway system planned for over thirty years

3) no new major regional transportation facilities were proposed which might have needed evaluation.

It was also understood that a separate environmental document was required at the project or corridor level, as a major facility moved closer to implementation.

Conditions changed with the 2007 Regional Transportation Plan. The long desired metropolitan and rural freeway system has been and is now under construction due to the 1986 passage of a local sales tax - Measure C and the 2006 extension of the plan that is providing additional funds for the next 20 years. Also, in November 2006, voters approved statewide transportation bonds that will provide funding for a number of transportation projects. As such, the 2007 RTP was accompanied by a new Environmental Impact Report, building on the analysis of the 2006 Measure C Extension initiative.

For the 2011 Revision of the RTP, a Subsequent Environmental Impact Report was prepared. Fresno COG recognized that 2011 RTP improvement projects or the timing of those projects had changed since certification of the previous RTP EIR in May 2007. As a result of these changes, Fresno COG made updates and changes to the previous 2007 RTP in lieu of preparing a completely new EIR to address RTP project changes, as well as greenhouse gas/global warming (climate change) issues.

The Program EIR for the 2014 RTP will evaluate the environmental effects of the sustainable communities

strategy, a newly required element of the RTP. In addition, the EIR will address cumulative and growth inducing impacts and other issues required by CEQA.

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

1.3 Scope of the Plan

The RTP is organized into four separate elements: Policy Element, Action Element, Financial Element and the Sustainable Communities Strategy.

The **Policy Element** provides a general overview of the RTP and the Fresno County region, documents certain trends and assumptions made within the plan, and describes the regional planning process. It also sets forth the Fresno COG's transportation goals, objectives and policies which are expanded for more specific short- and long-term policies appropriate for each transportation mode.

The **Action Element** introduces the multimodal system and then separates the various transportation modes. Plan accomplishments are discussed in the following manner:

- existing system is described
- recent planning activities are noted
- improvements made in the past two years are listed
- transportation needs and issues are identified

Proposed short-term and long-term actions for both planning and actual program and project improvements are described. Finally, revenue sources are identified and conclusions are made as to the future adequacy of these revenues.

The **Financial Element** identifies the current and anticipated revenue sources as well as the financing techniques available for the region's planned transportation investments, ongoing operations, and maintenance. It also lists the 1,100 financially-constrained RTP projects, along with the programs for which funding has been identified or is reasonably expected to be available within the RTP planning horizon. A comprehensive list of member agency identified candidate transportation projects is included in Appendix M.

The **Sustainable Communities Strategy** is a new component of the 2014 RTP. Mandated by California Senate Bill 375, the SCS is a plan integrating land use and transportation to meet Fresno County's greenhouse gas emission reduction targets set by California Air Resources Board.

1.4 The Region

Fresno County is located in the heart of California. See Figure 1-1. Along the western boundary of Fresno County are the arid foothills of the Coastal Range. The western and central areas of the county are part of the fertile San Joaquin Valley where almost all of the agricultural

Figure 1-1: Fresno-Heart of California

production takes place. In the east, one again encounters foothills and the Sierra Nevada Range. Most of this area is either part of the National Forest or National Park Service. There are eight neighboring counties, which include: Kings, Tulare, Inyo, Mono, Madera, Merced, San Benito, and Monterey.

Fresno County is the second largest county in the San Joaquin Valley, encompassing approximately 6,000 square miles. As the nation's number one farm county, Fresno County's gross value of agricultural products was $6.9 billion in 2011 and $6.6 billion in 2012. The estimated population as of January 1, 2013 was 952,200 placing Fresno as the tenth most populous county of the 58 counties in California. There are fifteen incorporated cities and the county contains a federally recognized urbanized area, known as the Fresno-Clovis Metropolitan Area (FCMA), with a population of about 679,800. The City of Fresno is now the fifth largest city in the state, with a population of 508,500.

Figure 1-2: Population Growth Rate Since 1970

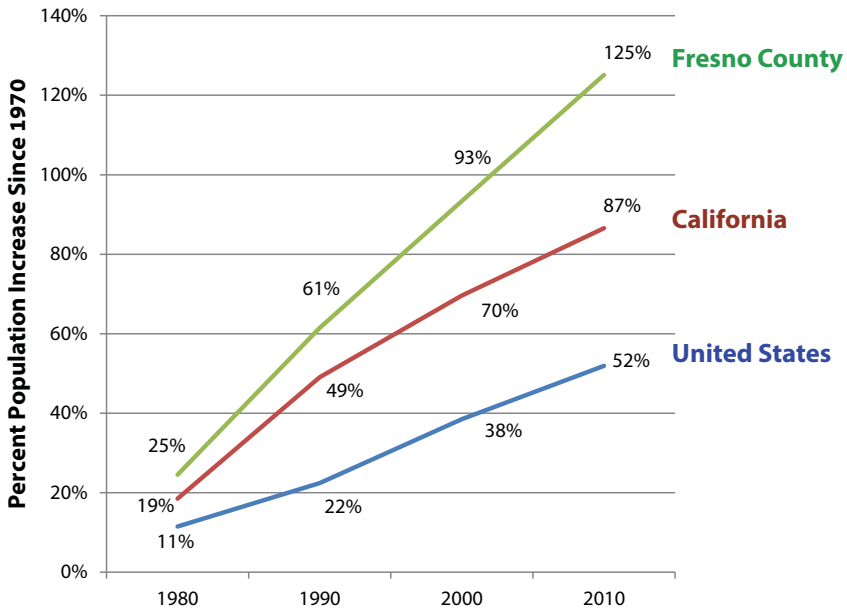


Table 1-1 lists the population shares for each jurisdiction in Fresno County in 1970 and 2013. As shown, the city of Fresno contains over half (53%) of the County's population. Clovis captures 11% of the population. The remaining 14 jurisdictions each capture 3% or less of the County population.

As indicated in the Figure 1-2 above, the population growth rate of Fresno County has outpaced that of California and the United States. During the 40-year period from 1970-2010, Fresno County's population increased by 125% compared to 87% and 52% for the state and nation.

As shown in the Figure 1-3 and Table 1-2, agriculture accounts for 12.3% of Fresno County's jobs. In comparison, only 2.5% of the State and 2.0% of the Nation's jobs are in agriculture. Other major employers in the County are education, health and social services (22.0%) and retail (10.2%).

Table 1-1: Population shares of county

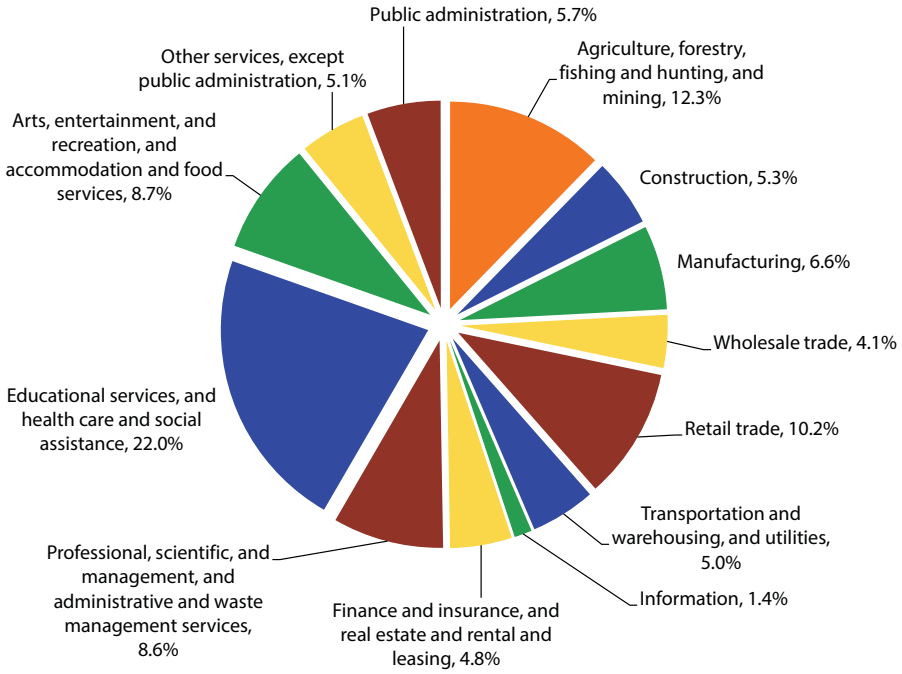
Jurisdiction	1970 Population	Percent Share of County	2013 Population	Percent Share of County
Clovis	13,856	3.4%	99,983	10.5%
Coalinga	6,161	1.5%	16,729	1.8%
Firebaugh	2,517	0.6%	7,777	0.8%
Fowler	2,239	0.5%	5,801	0.6%
Fresno	165,972	40.2%	508,453	53.4%
Huron	1,525	0.4%	6,790	0.7%
Kerman	2,667	0.6%	14,225	1.5%
Kingsburg	3,843	0.9%	11,590	1.2%
Mendota	2,705	0.7%	11,178	1.2%
Orange Cove	3,392	0.8%	9,353	1.0%
Parlier	1,993	0.5%	14,873	1.6%
Reedley	8,131	2.0%	24,965	2.6%
Sanger	10,088	2.4%	24,703	2.6%
San Joaquin	1,506	0.4%	4,029	0.4%
Selma	7,459	1.8%	23,799	2.5%
Unincorporated Fresno County	179,275	43.4%	167,918	17.6%
Totals	413,329	100.0%	952,166	100.0%

Sources: 2000 and 2010 U.S. Census; 2013 California State Department of Finance

Fresno County ranks as the top agricultural-producing county in California. In 2011, the County produced $6.9 billion in agricultural projects, 22% over that of the second-ranking county which was Tulare at $5.6 billion.

In fact, Fresno County has been the top agricultural-producing county in the United States for since 1954 except for the year 2001 when Tulare surpassed its production by a small margin.

Figure 1-3: Employment by Industry



Fresno County has been plagued with high unemployment. As indicated in Figure 1-4, the County's 2012 unemployment rate was 15.7% in contrast to 11.4% and 9.4% for the State and Nation.

Education levels for Fresno County residents lag behind those of California and the United States. (See Figure 1-5) Only 18.6% of persons 25 years of age and older in Fresno County have a college degree compared with 30.9% and 29.1%. Sixteen and a half percent of the residents have less then a 9th grade education in contrast to 10.1% for the State and 5.8% for the Nation.

With high unemployment and low educational attainment, Fresno County is plagued with a low median household income. As Figure 1-6 indicates, Fresno County's median household income of $41,600 is far below the State and Nation's incomes of $58,300 and $51,400.

Despite the economic challenges, Fresno County has received far less federal assistance than other regions in California and the United States. The bar graph in Figure 1-7 indicates that in 2010, the per capita federal government expenditures for the county averaged $6.40 per person while California and the United

Table 1-2: Employment by Industry

Industry	Fresno County		California		United States	
Agriculture, forestry, fishing, hunting, mining	44,230	12.3%	412,318	2.5%	2,830,729	2.0%
Construction	19,007	5.3%	983,602	5.9%	8,802,312	6.2%
Manufacturing	23,627	6.6%	1,660,819	9.9%	14,988,864	10.5%
Wholesale trade	14,741	4.1%	503,594	3.0%	3,785,841	2.6%
Retail trade	36,811	10.2%	1,892,209	11.3%	16,639,780	11.6%
Transportation, warehousing, utilities	18,128	5.0%	769,009	4.6%	7,020,960	4.9%
Finance, insurance, real estate, rental, leasing	17,317	4.8%	1,058,597	6.3%	9,414,894	6.6%
Professional, scientific, management, administrative, waste management services	30,986	8.6%	2,140,616	12.8%	15,591,744	10.9%
Educational services, health care, social assistance	79,229	22.0%	3,518,296	21.0%	33,113,097	23.2%
Arts, entertainment, food, recreation, accommodation	31,443	8.7%	1,701,284	10.1%	13,697,912	9.6%
Other services	18,380	5.1%	916,873	5.5%	7,118,937	5.0%
Public administration	20,620	5.7%	745,722	4.4%	6,941,135	4.9%

Figure 1-4: Unemployment Rate

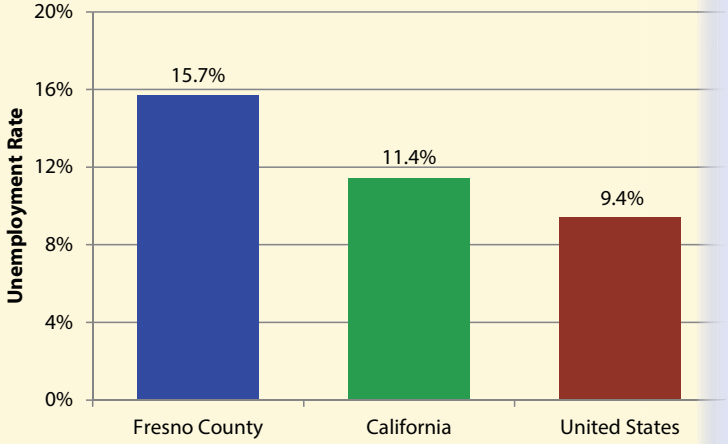


Figure 1-5: Educational Attainment

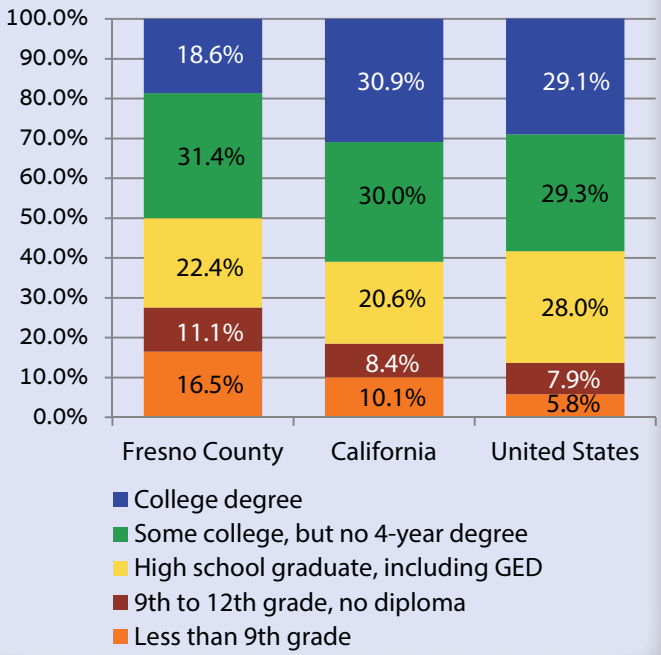
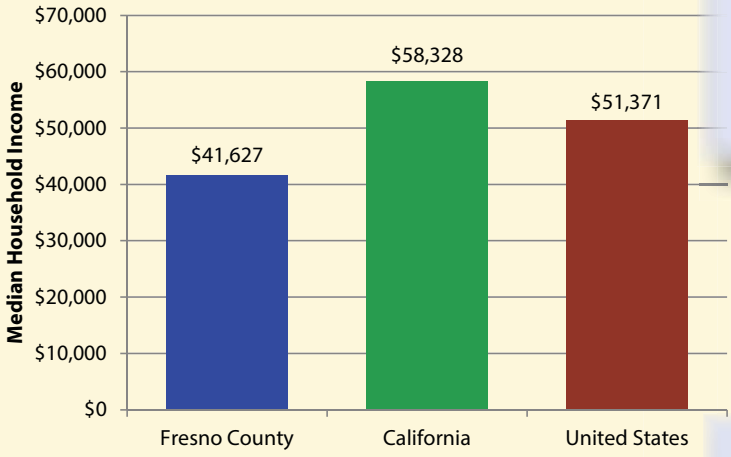


Figure 1-6: Median Household Income



States averaged 40% and 66% more per person. Fresno County has a younger population than California as a whole and the United States. According to the 2010 U.S. Census, 41.5% of County residents were under the age of 25 years compared to 35.5% for

Figure 1-7: Per Capita Federal Government Expenditures

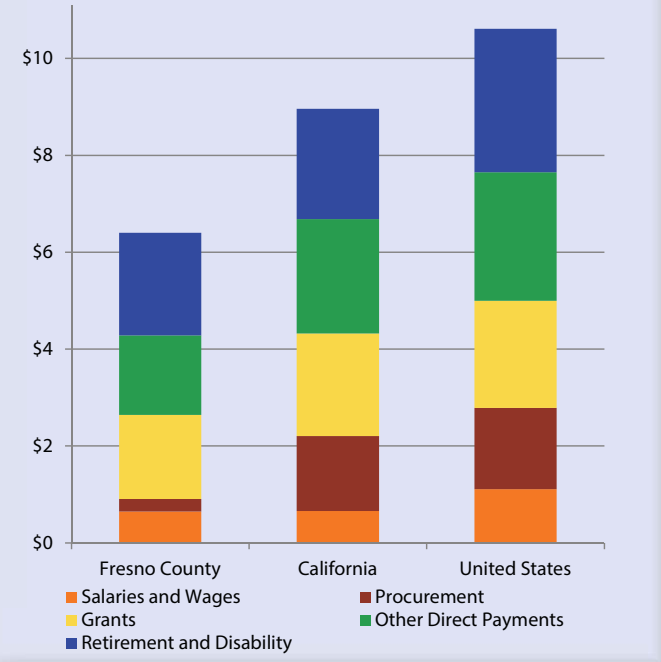
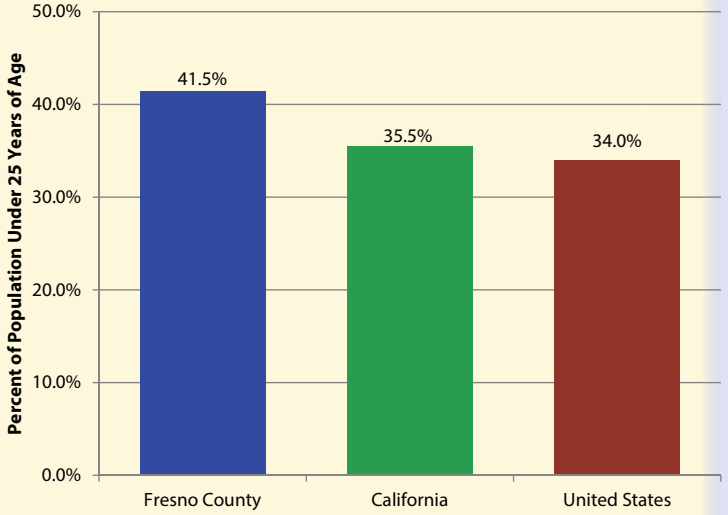
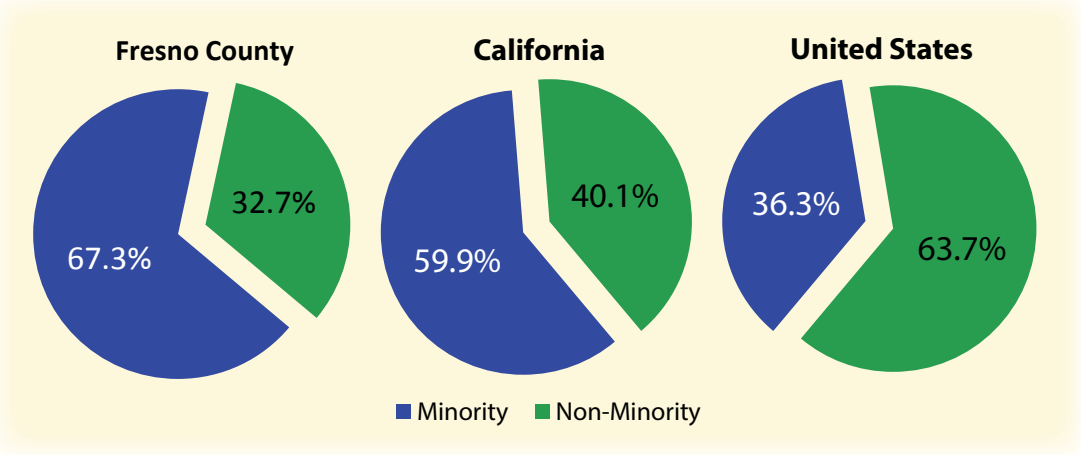


Figure 1-8: Population Under 25 years of age



California and 34.0% for the United States. (Figure 1-8) The residents of Fresno County are more ethnically diverse than that of California and the United States. In 2010, 67.3% of the County's inhabitants were minority (non-white) compared to 59.9% for the State of California and 36.3% for the Nation as shown in Figure 1-9 below.

Figure 1-9: Percent of Minority Population



1.5 Regional Growth Policies

The 2014 RTP supports three broad overarching focus points:

- Preservation of existing facilities and services
- Sound financial management leveraging of existing funding
- Balancing Transportation needs with land use

These focus points, and the goals, objectives and policies by transportation mode are detailed in the Policy Element of this document.

In addition, the RTP was developed to support regional land use element development policies that were first established in 1980, and to be consistent with the general plans of each of the cities and the county. These development policies are as follows:

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

1.6 Regional Planning Assumptions and Forecasts

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

Overview

Changes in population, housing, and employment

alter travel demand and travel patterns that affect transportation facilities. By anticipating the magnitude and distribution of growth and change within the region, today's decisions can be made to capitalize on the positive aspects of anticipated growth while minimizing the adverse consequences.

Political/Planning Assumptions

- The establishment of development policies which are directed toward the long-term beneficial use of the region's resources and the protection of the public health, safety and welfare will become more critical as population growth pressures increase.
- Protection of productive and potentially productive agricultural land from urban encroachment will continue to be a significant goal in an effort to maintain the region's agriculture based economy.
- Fresno County will continue its policy of encouraging urban development in existing cities and communities, and limiting urban growth in areas of prime agricultural land. This will be implemented through referral for annexation.
- The goals of the Local Agency Formation Commission will continue to support logical boundaries for the delivery of urban services.
- The need for the achievement of clean air goals and resource conservation will continue to influence federal, state, and local policy decisions.
- Development alternatives that maximize energy conservation and promote clean air will continue to be valued by society.
- Recent State legislation related to climate change will continue to influence planning policy at the local and regional levels.

Forecasts

The forecasts used for the Fresno COG Regional Transportation Plan/Sustainable Communities Strategy were from the San Joaquin Valley Demographic Forecasts: 2010 to 2050 prepared by The Planning Center, March 2012. The forecast was part of a San Joaquin Valley demographic study commissioned by the eight metropolitan planning organizations (MPOs) of the valley, in an effort to obtain recently-prepared projections. The latest State of California Department of Finance (DOF) projection at the time was released in July 2007 and did not take into account the 2007-2008 recession and the subsequent slow economic recovery, thus prompting the need for an updated forecast. In January 2013, the Department of Finance released their latest projection for Fresno County, which differed from The Planning Center forecasts by less than two percent for every year between now and the forecast horizon year of 2050, which helped confirm the validity of the Planning Center forecast for use in the RTP/SCS.

Planning Center Study

The Planning Center Study *San Joaquin Valley Demographic Forecasts: 2010 to 2050* is contained in the Sustainable Communities Strategy Appendix J.

This study includes three primary forecasts of population, households and housing units. Other projections developed by The Planning Center, e.g., age distribution, average household size, household income, household type, race/ethnicity, are derived from the three primary forecasts. The Planning Center forecasts are based on several different projections including household trend, total housing unit trend, housing construction trend, employment trend, cohort-component model, population trend, average household size trend, and household income trend. The least-squares linear curve forms the basis for all projections because the forecasts are long-term and curve-fitting techniques (e.g., parabolic curve, logistic curve) do not provide reasonable long-term results.

Three measures evaluate the adequacy of each projection:

1. mean absolute percentage error (MAPE)
2. F-test
3. t-test

Based on the forecast by The Planning Center shown in Table 1-3, countywide population will grow to an estimated 1,373,700 persons by the year 2040. This assumes an average annual growth rate of 1.8% between 2010 and 2040. In the past, County population has increased at rates of 2.4% a year from 1970 to 1990, and 1.7% a year from 1990 to 2010. During the next three decades (2010-2040) 443,229, or 48%, more people are expected to reside in Fresno County.

Table 1-3: Fresno County Population, Housing and Employment Forecasts

Year	Population	Housing Units	Employment
2005	872,569	294,156	335,159
2008	912,521	310,579	345,816
2020	1,082,097	363,142	363,581
2035	1,300,597	434,519	427,727
2040	1,373,679	458,330	449,111

Fresno County's share of California's population is expected to steadily increase. From 1970 to 2010, the County share of the State's population grew from 2.1% to 2.5%. By 2040, that share will increase to 2.9%

Table 1-4: Population of Fresno County and California

Date	Fresno County	California	Fresno County Share of California Population
1970	413,053	19,053,100	2.2%
1980	514,621	23,667,900	2.2%
1990	667,490	29,760,000	2.2%
2000	799,407	33,871,648	2.4%
2005	866,058	35,869,173	2.4%
2010	930,450	37,253,956	2.5%
2015	1,010,080	38,801,063	2.6%
2020	1,082,097	40,643,643	2.7%
2025	1,154,741	42,451,760	2.7%
2030	1,227,649	44,279,354	2.8%
2035	1,300,597	46,083,482	2.8%
2040	1,373,679	47,690,186	2.9%

Employment Forecast

The Fresno County employment level will increase during the period, 2010-2040 despite the recession that began in 2007. However the unemployment rate will continue to be higher than the California average.

Fresno County's unemployment rate has been consistently higher than that of the state. Since 1990, the unemployment rate in Fresno County has fluctuated between 8.0% and 16.9% with no clear upward or downward trend. At the same time, California's rate has been considerably lower, ranging from 4.9% to 12.4% during the 1990-2012 period.

Much of Fresno County's future employment level and unemployment rates will depend on the agricultural industry, since agriculture plays such a major role in the county's economy. Since 1954, Fresno County has led all U.S. counties in the value of agricultural products for each year except one (2001). Agricultural levels effect agricultural employment as well as employment in traditionally non-agricultural sectors such as wholesale trade; manufacturing; services; and finance, insurance and real estate. Future agricultural activities in the county could be affected by:

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

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

Employment was forecast by The Planning Center using the at-place employment data by sector from the State of California Employment Development Department. The model constructs a least-squares line for each economic

sector and sums the results to generate a projection for total employment in the County. The least-squares line for total employment in Fresno County produces a MAPE of 2.21% and a standard error of .85%.

The resulting employment forecast is included in the Table 1-3 Fresno County Population, Housing and Employment Forecasts.

Household Forecast

The household forecast was dependent on the expected increase in household size. According to the San Joaquin Valley Demographic Forecasts: 2010 to 2050 prepared by The Planning Center, household sizes in the San Joaquin Valley are projected to increase steadily—from approx. 3.1298 persons per household in 2008 to approx. 3.3515 in 2035. Thus, some of the expected total growth in household population for Fresno County will manifest not in new development but rather in existing housing units, as each household on average will contain more people.

The resulting household forecast is included in the Table 1-3 Fresno County Population, Housing and Employment Forecasts previously presented.

Land Use Planning

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

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

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

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

The cities of Fresno and Clovis are working to update their general plans and expect completion in 2014 or 2015.

While local land use issues continue to evolve, it can be safely stated that the metropolitan area is facing population increases that will require regional coordination and agreement as to the direction of growth. It is also expected that federal and state air quality requirements may ultimately have an effect upon land use planning in this non-attainment area. In addition, the state's passage of AB 32 and SB 375 to address climate change will have a further impact on future land use decisions at the local level.

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

We are updating the Regional Transportation Plan at a point when many issues dealing with growth are unresolved. Those local agencies involved are in general agreement that, barring unforeseen changes, the area will experience population growth during the planning period. As described, there is less agreement regarding where that growth will occur within the metropolitan area. We are using available maps and information provided by those agencies actively involved in land use planning.

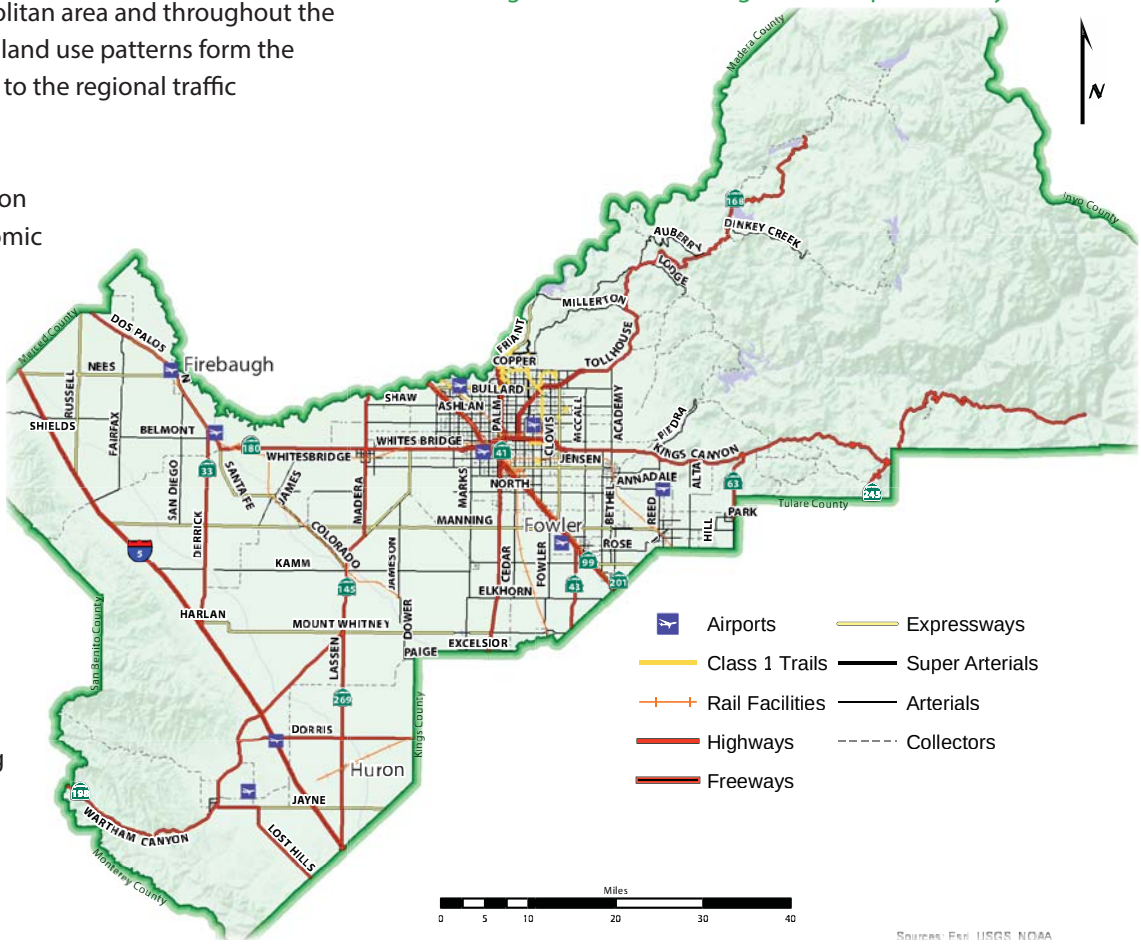
Given federal and state requirements, the Fresno COG is using the best available information to describe growth scenarios in the metropolitan area and throughout the county. These projected land use patterns form the database, which is input to the regional traffic model.

By using future population growth and socio-economic information, The Fresno COG regional traffic model can project the traffic on the regional transportation system as it would exist at a given future time. This information is essential to the transportation planning process. However, as the RTP covers sixteen land use jurisdictions, it is unlikely that all planning documents will ever be newly updated at the same time. The fact that we are required to update this document every four years allows it to adapt successfully to changing plans, regulations, and conditions over time.

1.8 Regional Planning Process

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

Figure 1-10: Fresno Regional Transportation System



Current Practices

Fresno COG is a federally designated MPO and a state-designated RTPA for Fresno County. These designations formally establish the Fresno COG's role in transportation planning.

The Fresno COG Policy Board is composed of mayors from the fifteen incorporated cities in Fresno County and the Chairman of the Fresno County Board of Supervisors. A Memorandum of Understanding between the Fresno COG and Caltrans also provides for an Areawide Transportation Policy Committee, which consists of the existing Board and a Caltrans representative.

Two committees serve as basic support to the Board:

1. the Policy Advisory Committee (PAC) is composed of city managers, the county administrator and Caltrans
2. the Transportation Technical Committee (TTC) is composed of technical staff from member agencies, other interested agencies, public members, and Caltrans.

Several subcommittees also exist to evaluate and forward recommendations to the TTC on specific regionally significant issues and projects.

Public participation is encouraged at every stage of the planning process and all meetings are open to the public. Public hearings are held for formal adoption of major planning documents. Fresno COG's efforts toward citizen involvement center on public information, education, and citizen participation in an advisory and decision-making process. Efforts include the dissemination of pamphlets, the Fresno COG website, annual reports, emails, newsletters, speeches, and public hearings. From time to time, citizen workshops and conferences are held jointly and coordinated with public and quasi-public agencies.

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

Currently, citizens are represented on the following Fresno COG committees:

- **Transportation Technical Committee**
- **Social Services Transportation Advisory Council**
- **RTP Roundtable Committee**
- **Environmental Justice Task Force**
- **Measure C Oversight Committee**
- **Greenprint Steering Committee**
- **Association for the Beautification of Highway 99**

Reports from these committees ensure that all committee members' viewpoints are reviewed by the Policy Advisory Committee and the Fresno COG Policy Board. Citizens are encouraged to participate in whatever capacity may be appropriate to their cause.

Measure C

The passage in 1986 of the original Measure C, a local sales tax, introduced a new agency into the transportation planning process, the Fresno County Transportation Authority. Authority staff has been seated on the TTC and works closely with the Fresno COG and Caltrans to implement a highway improvement program which is reasonable and deliverable. A 20-year extension of Measure C was approved in 2006. It is a multi-modal transportation program with almost 25% of the expected Measure funds directed to public transit services; roughly

30% directed to capacity-enhancing street and highway improvements; and, just under 35% directed to local street and highway maintenance, ADA improvements, and pedestrian, trail, and bicycle facilities.

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

1.9 Making the Transition to Interactive Regional Planning

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

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

- **Transportation** - Fresno COG, Caltrans, the County, the cities, the Transportation Authority, Madera County agencies, and the Tribal Governments
- **Air Quality** - SJVAPCD, the cities, the County, and the Tribal Governments
- **Land Use** - Fresno County, Clovis, Fresno, the 13 cities outside the FCMA, Madera County, and the Tribal Governments

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

This orientation has been modified to some extent with the initiation of the San Joaquin Valley Blueprint planning process in 2006. The Valley COGs, with support from Caltrans and the Air District, have embarked upon a comprehensive and regional approach for developing a long range vision for the Valley. This vision addresses urban and rural form; mobility and connectivity; economic development; environment, open space and resources; as well as affordable housing. On April 1, 2009, The San Joaquin Valley Regional Policy Council adopted a Valleywide preferred Blueprint growth scenario along with 12 Smart Growth Principles to guide development. The Blueprint will provide policy makers in local jurisdictions with the tools to implement planning concepts at the local level while it continues to acknowledge local land use authority.

In 2006 the eight Valley COGs established another joint venture MOU called the "San Joaquin Valley Regional Policy Council". The Council includes two elected officials

from each of the eight counties' Councils of Government. The purpose is to establish a Policy Council of elected officials and to develop a process and framework for establishing formal San Joaquin Valley positions on issues where Valleywide consensus exists.

Fresno Council of Government's Transportation Forum

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

Improved Analytical Tools

The Fresno Council of Governments, along with the seven other Metropolitan Planning Organizations (MPOs) in the San Joaquin Valley, was awarded a $2.5 million Proposition 84 grant by the Strategic Growth Council to collectively improve the MPOs' transportation modeling capabilities. In April 2010, the San Joaquin Valley Model Improvement Program (MIP) was implemented. A three-county model for the three northern-most counties (San Joaquin, Stanislaus and Merced), and individual models for the remaining five counties were developed which enhanced the models' sensitivity to smart growth strategies, integrated the 4D elasticities, and improved interregional travel estimates. These improvements over the previous transportation models made them compliant with SB 375 and give the MPOs the ability to analyze whether a land use/transportation scenario can meet the greenhouse gas reduction targets set by the California Air Resources Board. In addition, the Fresno Council of Governments began using a land use scenario planning tool called Envision Tomorrow. Through this tool several alternative land use/transportation scenarios were developed and analyzed. The resulting land uses from each scenario were then input into the transportation model to calculate travel data.

Intergovernmental Cooperation on Land Use, Transportation, Air Quality Planning

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

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

Approaches that could assist include the following four items:

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

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

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

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

San Joaquin Valley Regional Blueprint Planning Process

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

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

The following process components underlie all work during the course of the Blueprint for 2035 and beyond:

- **Thinking Regionally** – Understanding that opportunities and challenges are not bound by jurisdictional boundaries, the Blueprint has engaged Valley MPOs, elected officials, business representatives, industry, interest and community groups and the public-at-large to develop a vision that recognizes this interdependency.

- **Effective Partnering** – Recognizing the need for the region to compete globally, the SJ Valley Regional Blueprint has worked to develop effective and strategic partnerships to advance the regional economy and protect regional resources.

- **Inclusive Participation** – Acknowledging the importance of participation from the diverse constituency of the region, the San Joaquin Valley Regional Blueprint strives to include representation of

race, ethnicity, gender, geography, and profession to help ensure success

- **Consensus Building** – Working toward a common San Joaquin Valley Regional Blueprint Vision has provided opportunities for constructive conversations and debate to facilitate the melding of multiple needs into a comprehensive regional vision.

- **Information Integration** – By assembling and assimilating unrelated datasets into a comprehensive and integrated decision-making tool, the San Joaquin Valley Regional Blueprint was able to develop scenario planning comparisons to assure that resource choices that will determine the future of the Valley are made with the best available regional information.

Throughout the process, multiple strategies have been employed to further the development of each component and each component was utilized to support underlying values and principles. While these values and principles will need to be developed and affirmed by the region, the following are the basic elements that were used throughout the Blueprint planning process and will continue to influence implementation:

- **Broad public outreach and engagement**
- **Integration of multiple planning tools**
- **Infrastructure plans to support quality of life**
- **Efficient land use patterns to accommodate agriculture, industry, business, housing, & resources**
- **Utilization of technology to optimize regional decision-making & civic engagement**
- **Optimization of new partnerships**
- **Commitment to implementation through consensus**
- **Recognition that "failure to plan is planning to fail"**

With the adoption of the San Joaquin Valley Blueprint preferred growth scenario and Smart Growth Principles by the Regional Policy Council on April 1, 2009, the Blueprint planning process has advanced to the Blueprint Roadmap. The Blueprint Roadmap includes a summary document, implementation plan and toolkit to assist local jurisdictions with integrating the Blueprint principles into their local planning processes.

1.10 MAP-21

MAP-21, Moving Ahead for Progress in the 21st Century Act was passed by Congress on June 29, 2012, and signed by President Barack Obama on July 6 (P.L. 112-141). It is the most recent federal transportation bill, having been preceded by the 2005 SAFETEA-LU (Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users); 1998 TEA-21 (Transportation Equity Act for the 21st Century); and 1991 ISTEA (Intermodal Surface Transportation Equity Act).

The program is authorized through Fiscal Year 2014 with most provisions effective October 1, 2012. The $105 billion, two-year bill does not significantly alter total funding from the previous authorization SAFETEA-LU; however, it does extend the Highway Trust Fund (HTF) taxes and ensures 2 years of solvency for the HTF, as well as substantial programmatic consolidations, continuation of the moratorium of no earmarks, and includes many other significant reforms. The Congressional Budget Office estimates that enacting MAP-21 will reduce the federal budget deficit over the 2012-2022 period by $16.3 billion.

Several major non-transportation provisions were attached to the bill: A one-year extension of federal student loan rates through June 30, 2013; a five-year reauthorization of the national flood insurance program through 2017; and a one-year extension to the Secure Rural Schools Act, which compensates rural counties for loss of revenue caused by reduced timber harvest on federal lands.

MAP-21 creates a streamlined and performance-based surface transportation program and builds on many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

Key provisions of MAP-21 are:

- Program Consolidation by two-thirds.
- Environmental streamlining such as reforming the environmental review process and improving the categorical exclusions. This is an improvement to the review process because there is now a four-year review deadline enforced with financial penalties, (in 2011 the average review took 8.1 years.)

- Funding for bicycle and pedestrian transportation is reduced and consolidated into a broader program called "Transportation Alternatives." Half of this funding will go to metropolitan planning organizations and the other half will go to states, which may choose to use the funds for other purposes. Bicycle and pedestrian advocates were highly critical of this change, anticipating a 60-70% drop in funding.
- A national freight policy will be developed.

MAP-21 funding measures

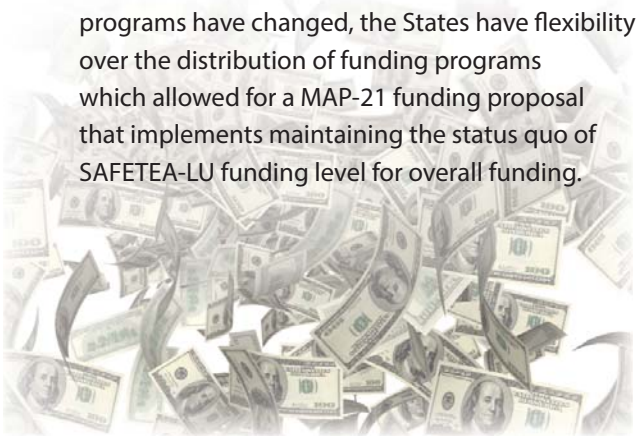
MAP-21 is funded without increasing transportation user fees such as the federal gas tax which was last increased in 1993. Instead, funds were generated through the following measures:

- Repeal a requirement that the Department of Transportation reimburse the difference in cost between shipping foreign food aid on a U.S -flag ship and a foreign-flag ship
- Raise additional revenues by increasing the ability of businesses with excess assets in their pension funds to use them for retiree health and life insurance benefits, and by defining businesses that make roll-your-own machines available for consumer use as tobacco manufacturers
- Change the interest rate that pension plans use to measure their liabilities, increase pension premium rates for both variable and flat rate premium paid to the pension benefit guaranty Corporation and establish a cap on the variable rate premium
- Allow eligible federal employees to enter into a phased retirement, during which they continue to work part-time while drawing a partial salary and a partial civil service annuity

There are some issues with Map-21 such as not addressing the concern of the declining balance in the Federal Highway Trust Fund. Instead it funds the two year program with ten years of "savings" and "consolidation" of other federal programs.

There are now six core formula programs:

1. National Highway Performance Program (NHPP)
2. Surface Transportation Program (STP)
3. Congestion Mitigation and Air Quality Improvement Program (CMAQ)
4. Highway Safety Improvement Program (HSIP)
5. Railway-Highway Crossings (set-aside from HSIP)
6. Metropolitan Planning along with two new formula programs:
   - Construction of Ferry Boats and Ferry Terminal Facilities
   - Transportation Alternatives (TA). Though the programs have changed, the States have flexibility over the distribution of funding programs which allowed for a MAP-21 funding proposal that implements maintaining the status quo of SAFETEA-LU funding level for overall funding.



The MAP-21 metropolitan planning process

The MAP-21 metropolitan planning process includes performance-based planning that continues the "3C" process and establishes a performance-based approach to transportation decision making. Metropolitan planning organizations (MPOs) are required to establish and use a performance-based approach to transportation decision making and development of transportation plans.

Each MPO will establish performance targets that address the MAP-21 surface transportation performance measures (see: National Goals and Performance Management Measures). The performance targets selected by an MPO will be coordinated with the relevant State to ensure consistency to the maximum extent practicable.

Performance targets selected by an MPO will be coordinated with public transportation providers, to the maximum extent practicable, to ensure consistency with sections 5326(c) and 5329(d) of title 49.

MPOs are required to integrate the goals, objectives, measures and targets of other state level performance based plans, as well as the transit plans into the metropolitan transportation planning process.

The MPOs will establish performance targets no later than 180 days after the date that the relevant State or public transportation provider establishes performance targets. Within 2 years of enactment of MAP-21, the structure of all MPOs will be required to include officials of public agencies that administer or operate public transportation systems.

Long Range Transportation Plan (Plan)

The Plan will include a description of the performance measures and performance targets used in assessing the performance of the transportation system. The Plan will also include a system performance report and subsequent updates evaluating the condition and performance of the transportation system with respect to the established performance targets.

MPOs have the option of developing multiple scenarios for consideration during the development of the Plan.

Significant continuing provisions in the Long Range Transportation Plan include the following:

- The minimum population required for an MPO remains at more than 50,000; Transportation Management Areas (TMAs) are those areas with a population greater than 200,000.
- The Plan must be prepared and updated every 4 years (or more frequently if the MPO elects to do so) in nonattainment areas and areas that were nonattainment and are now under a maintenance plan. In other areas, the Plan will be prepared and updated on a 5 year cycle (or more frequently if the MPO elects to do so).
- The TIP must be approved by the MPO and Governor.
- It covers a minimum 20-year planning horizon with air quality conformity and fiscal constraint.
- Public involvement remains a hallmark of the metropolitan planning process.
- A congestion management system is required in TMAs and the planning process in TMAs must be certified by the Secretary.

Transportation Improvement Program (TIP)

The TIP will include, to the maximum extent practicable, a description of the anticipated effect of the TIP toward achieving the performance targets established in the Plan and linking investment.

Chapter 2

Fresno, California Skyline at night

Public Participation:

Working Together for a Better Plan

From outreach planning to implementation of our strategies, this chapter outlines the comprehensive, inclusive public participation conducted by Fresno COG

2.1 Public Partipation

The Fresno Council of Governments developed and implemented a comprehensive, inclusive, public outreach program that spanned a two-year period covering early Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS) planning through the final adoption of Fresno COG's 2014 Regional Transportation Plan.

Fresno COG staff gathered data and feedback from a large variety of sources for the Policy Board and other advisory committees to utilize as decision making tools during the development of the Regional Transportation Plan, and when selecting a Preferred Sustainable Communities Strategy. From planning to implementation this chapter outlines the public participation conducted by Fresno COG.

Fresno COG's Public Participation Plan

We began the RTP Public Participation Process by updating the Fresno COG Public Participation Plan (PPP) which was adopted by the Fresno COG Policy Board in March 2012. The PPP provides direction for all public participation activities conducted by Fresno COG. It contains the public participation requirements, procedures, strategies and techniques used by Fresno COG standing committees and staff for public outreach and participation. The approved PPP states that a separate outreach strategy would be developed for the Regional Transportation Plan Update that specifically details the strategies used to enlist public participation, and states how members of the public may participate in each step of the RTP process. In compliance with this commitment, two additional public outreach strategies, one for the Fresno County region and another on behalf of the entire San Joaquin Valley, were developed.

2014 Fresno COG Regional Transportation Plan Public Outreach Strategy

Fresno COG's RTP Public Outreach Strategy established a process and outlined specific activities for communicating with the public throughout the RTP development process. The goals, strategies and methods outlined in the Public Outreach Strategy guided Fresno COG's efforts to build awareness of Fresno COG and the Regional Transportation Plan with particular emphasis on the Sustainable Communities Strategy. The Outreach Strategy specifically outlined tactics to reach out to nontraditional as well as traditional audiences to include them in the transportation planning process. It was designed to help ensure that environmental justice issues were addressed and that interested members of the public had ample opportunity to understand and provide meaningful input while the RTP was in its early stages and throughout the planning process.

The Regional Transportation Plan Public Outreach Strategy was developed with input from the general public, Fresno COG's Regional Transportation Plan Roundtable, Transportation Technical Committee, Policy Advisory Committee and Policy Board, and it was adopted in September 2012. The strategies outlined in the document include all of the following items addressed in this chapter, with additional documentation and information available in Appendix H and on Fresno COG's website, www.fresnocog.org.

Valleywide SCS Public Outreach Strategy

The San Joaquin Valley consists of eight distinct counties with shared issues and opportunities related to air and

water quality, affordable housing, natural resources and agricultural lands, transportation systems and public health. Each county has its own Metropolitan Planning Organization (MPO) similiar to Fresno COG that frequently work together on regional planning issues. Each MPO is updating their Regional Transportation Plan (RTP), which includes a Sustainable Communities Strategy (SCS). In support of these efforts, each MPO is conducting public outreach to meet legislative requirements and to develop effective, implementable plans.

While each county had its own timeline, public participation plan and set of resources and priorities for the RTP/SCS, the eight MPOs elected to collaborate to develop and implement a Valleywide Public Outreach Strategy. In recognition of their shared interests and collaboration, the they received a Proposition 84 grant for funding assistance with SCS modeling and public outreach.

The purpose of this Valleywide SCS Outreach Strategy was to provide project identity and consistent messaging for the SCS, while supporting individual county outreach efforts. This Valleywide strategy described the approach, target audiences, methods and priorities for Valleywide SCS Outreach.

Valleywide Outreach Roles and Responsibilities

The eight San Joaquin Valley MPOs collaborated on the development of the Valleywide Outreach Strategy and advised the consulting team on the project identity, tools and resources to be developed in the course of the project. The Fresno Council of Governments served as the contract manager and coordinated communications between the eight MPOs and the consultant team. The consultant team worked collaboratively with the MPOs to identify specific project priorities and deliverables.

The consultant developed elements of the outreach strategy that were applicable across the eight-county region. This included a project identity (or brand) and key messages. The consultant team also developed templates and tools that were customized and applied locally as needed by each MPO. The MPOs were responsible for adapting and tailoring the tools and templates for use in their local communities and for local outreach. The consultant provided periodic, ongoing consultation and strategic advice.

The Valleywide Outreach Strategy built upon and leveraged past and current outreach work. The strategy

Figure 2-1: Valley-Visions.org, the Valleywide Planning Agencies SCS landing page

considered the MPO timelines for SCS plans so that outreach could be successfully completed during critical points in the process and influence decision-making as appropriate. It was released for public review by the general public, the San Joaquin Valley Metropolitan Planning Organization staff, the San Joaquin Valley Regional Planning Agencies' Directors, Fresno COG's Transportation Plan Roundtable, Transportation Technical Committee, Policy Advisory Committee, Fresno COG Policy Board, and was adopted in September 2012.

2.2 Valleywide SCS Outreach Tools

The following tools and templates were created through the Valleywide Outreach Process:

- Valleywide ***Valley Visions*** logo, tagline and letterhead
- Valleywide media lists for press releases
- Spanish, English and Hmong FAQs and Fact Sheets posted to Valley MPO websites and handed out at all workshops, meetings and presentations regarding the SCS
- ***Valley Visions*** Key Messages for committee and board members
- SCS Workshop Flyer templates to help in publicizing SCS workshops Valleywide
- ***Valley-Visions.org*** landing page for connection to all of the Valley COG's websites
- A 3-minute SCS Video in English, Spanish and Hmong posted to YouTube and linked to the ***Valley-Visions.org*** landing page and Fresno COG's website
- Valleywide SCS Public Outreach eight county budget and media plan
- Hosted a training workshop for Valley elected officials, MPO Directors and staff who may have needed assistance speaking to the public and the media about Sustainable Community Strategies during workshops and meetings
- Implemented Valleywide media plan with online banner advertisements, radio spots and newspapers advertisements.

Fresno COG was able to use the video and materials at 10 RTP/SCS Community Outreach workshops held in May 2013, and at six additional workshops held in August and September 2013. They were shown at all Fresno COG committees that provided guidance during the 2014 RTP update process. The videos will continue to be hosted on YouTube with links from the Fresno COG website. Many of the customized materials are posted to Fresno COG's website.

2.3 Fresno COG Public Participation Implementation

The Regional Transportation Plan (RTP) update process was formally "kicked-off" in June 2012 with a workshop hosted by Fresno COG titled Sustainable Communities, Social Equity and Environmental Justice. Jonathan London, from the UC Davis Center for Regional Change presented a free, interactive workshop at the Fresno Council of Governments, that introduced participants to a range of methods for integrating social equity issues and values into regional planning on issues such as transportation, land use, housing, environmental protection, public health, and youth development.

The goal of the workshop was for participants to a gain new understanding of how they might use promising practices on social equity on their own work in the San Joaquin Valley, including during the development of the regional Sustainable Communities Strategy. Over 80 people attended the workshop either in person on online using "Go To Meeting" online attendance. For many attendees this was their first interaction with Fresno COG and the regional transportation planning process. See Appendix H to view the workshop materials.

Fresno COG's Regional Transportation Plan (RTP) Roundtable

The purpose of the RTP Roundtable was to support the Fresno COG staff and COG standing committees in their development and preparation of the 2014 Regional

Table 2-1: RTP Roundtable Committee Listing

Agency or sector representing	Representative
City of Clovis	Bryan Araki
City of Coalinga	Sean Brewer
City of Firebaugh	Ken McDonald
City of Fowler	David Peters
City of Fresno	Bruce Rudd
City of Huron	Gerald Forde
City of Kerman	Luis Patlan
City of Kingsburg	David Peters
City of Mendota	Bryce Atkins
City of Orange Cove	Gary Horn
City of Parlier	Shun Patlan
City of Reedley	Joel Glick
City of San Joaquin	Cruz Ramos
City of Sanger	Steve Brandt
City of Selma	Roseann Galvan
County of Fresno	Mohammad Khorsand
San Joaquin Valley Air District	Tom Jordan
LAFCo	David Fey, Chair
Caltrans	Paul Marquez
Public Transportation	Jim Schaad
Valley Blueprint Planners, Chair	John Wright
Agriculture	Ryan Jacobsen
Building/Development	Mike Prandini
Environmental Advocate	Elizabeth Jonnasson
Environmental Justice	Rey Leon
Bicycle/Pedestrian advocate	Nicholas Paladino
Banking, finance or real estate	Michael Michaud
Health Advocate	Don H. Gaede, MD
Affordable Housing	Sara Hedgpeth-Harris
Goods Movement	Tim Fortier
Broad-based business	Robert Wood
Tribal Governments	Elizabeth Kipp, Tribal Chairperson (BSR)
Public-At-Large	Tom Gaffery
Public-At-Large	Janet Salcedo
Public-At-Large	Dennis Manning

Transportation Plan and Sustainable Communities Strategy. It was therefore vital to the success of the process that the RTP Roundtable consider issues that support development of the 2014 RTP/SCS and provide comments and community-based consensus that support the final decision on the RTP by the Fresno Council of Governments' Policy Board. There were 35 seats on the Roundtable – 16 seats held by member agency staff, 16 seats open to a variety of stakeholder groups and 3 "at large" seats.

The RTP Roundtable members participated in 12 monthly meetings between the months of August 2012 and November 2013, guiding development of the RTP/SCS and acting in an advisory capacity to Fresno COG's Policy Board. Minutes and agenda packets from all of the RTP Roundtable meetings are available on Fresno COG's website.

SCS performance Indicator focus groups

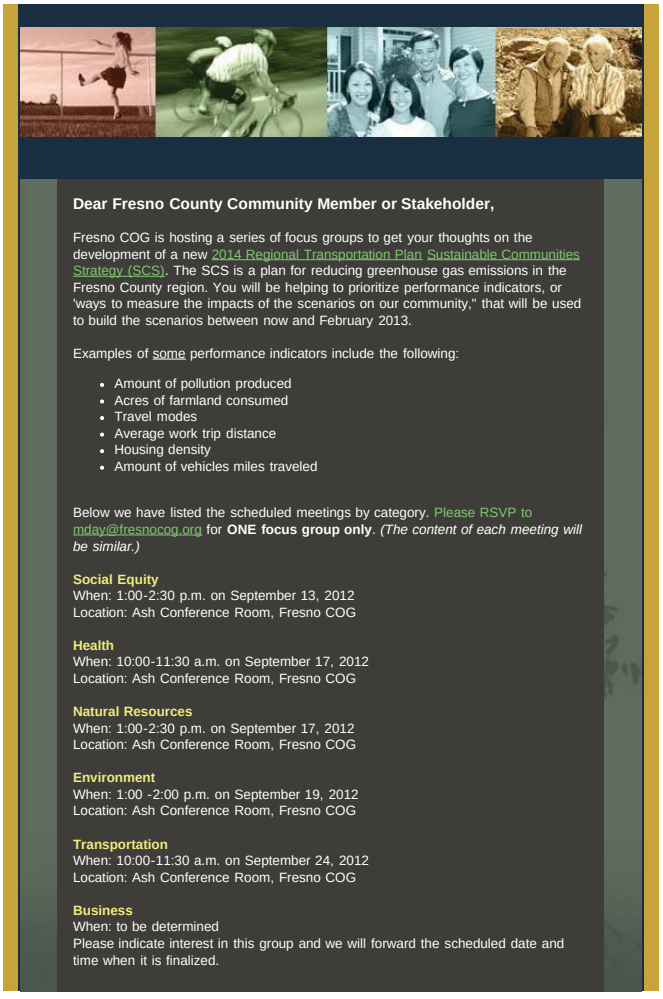
In order to prioritize a list of 40 indicators/performance measures to be used in analyzing the Sustainable Communities Strategy scenarios and the Preferred Sustainable Communities Strategy once developed, six focus group meetings were held in September 2012 to solicit input from the public and area stakeholders. The groups were topically organized and open to the general public, though staff did seek input from many agencies and stakeholders in accordance with the overall direction of California Transportation Commission's Regional Transportation Plan Guidelines.

The six focus group topics included Social Equity, Health, Natural Resources, Environment, Transportation and Business. The Regional Transportation Roundtable committee members were also asked to prioritize the indicators and their selections were included in the final tally. Fifty-four ballots were received in all.

The top 10 performance indicators selected as a result of the focus groups and Roundtable polling were as follows:

- Criteria pollutant emission
- Transit oriented development
- Vehicle miles traveled
- Greenhouse gas emission reduction
- Land consumption
- Compact development
- Residential density
- Important Farmland
- Housing by types
- Active transportation and public transit

These top indicators were used to evaluate and report the impact of all four Sustainable Communities Strategy scenarios to the Board, committees and the public during the months of August through November 2013. Please see Chapter 5 for more information on the indicator usage and



Dear Fresno County Community Member or Stakeholder,

Fresno COG is hosting a series of focus groups to get your thoughts on the development of a new 2014 Regional Transportation Plan Sustainable Communities Strategy (SCS). The SCS is a plan for reducing greenhouse gas emissions in the Fresno County region. You will be helping to prioritize performance indicators, or 'ways to measure the impacts of the scenarios on our community," that will be used to build the scenarios between now and February 2013.

Examples of some performance indicators include the following:

- Amount of pollution produced
- Acres of farmland consumed
- Travel modes
- Average work trip distance
- Housing density
- Amount of vehicles miles traveled

Below we have listed the scheduled meetings by category. Please RSVP to mday@fresnocog.org for **ONE focus group only**. *(The content of each meeting will be similar.)*

Social Equity
When: 1:00-2:30 p.m. on September 13, 2012
Location: Ash Conference Room, Fresno COG

Health
When: 10:00-11:30 a.m. on September 17, 2012
Location: Ash Conference Room, Fresno COG

Natural Resources
When: 1:00-2:30 p.m. on September 17, 2012
Location: Ash Conference Room, Fresno COG

Environment
When: 1:00 -2:00 p.m. on September 19, 2012
Location: Ash Conference Room, Fresno COG

Transportation
When: 10:00-11:30 a.m. on September 24, 2012
Location: Ash Conference Room, Fresno COG

Business
When: to be determined
Please indicate interest in this group and we will forward the scheduled date and time when it is finalized.

results. See Appendix H for the Focus Group Indicator Ballot and other materials.

During the focus group meetings Fresno COG staff also solicited suggestions from attendees regarding additional indicators not on Fresno COG's existing list. Staff also asked participants to express what they hoped would be achieved through participation in the Sustainable Communities Strategy development process. All answers were collected and considered.

Assessing Public Opinion Via Professional Polling

In the Fall of 2012 Fresno COG commissioned AIS Market Research, a qualified consultant with substantial experience in designing and conducting "scientific" surveys, to conduct a partial stratified sample survey

of participants who were reflective of Fresno county's demographics, including the homeless and non-English speaking populations from the urban and rural areas. The consultant was responsible for preparing a detailed list of findings that assessed whether or not values and priorities of the Fresno County community identified during the Blueprint Planning Process public outreach efforts still held true, as well as assessing whether the transportation priorities defined during Measure C survey development were still high priorities for our communities. Survey findings fed directly into Regional Transportation Plan development, including the drafting of Fresno COG's Sustainable Communities Strategy.

A total of 802 respondents completed the survey/ interview with 124 people of them interviewed in-person. Attempts were made to have the study's stratified samples match the Fresno County residents' age, educational level, and ethnicity profiles. AIS Market Research also strived to have at least 25 completed interviews from residents in any one of each sixteen representative geographical areas of Fresno County (the 15 cities plus a collective of unincorporated areas within Fresno County).

The study found ten transportation areas with the highest perceived spending priorities, namely (in ranked order).

Table 2-2: Survey findings for community Transportation Spending Priorities

Rank	Transportation Spending Priority
1	Repair potholes on city streets and/or rural roads
2	Improve transportation for the disabled
3	Improve transportation for the elderly
4	Resurface city streets and/or rural roads
5	Resurface highways and/or ramps
6	Reduce traffic congestion on highways and/or ramps
7	Repair/maintain sidewalks pedestrian walkways, and trails
8	Reduce traffic congestion on streets/roads
9	Expand local bus service routes
10	Improve/increase local bus service

The second part of the survey pertaining to assessing community values found the top 10 answers were as follows (in ranked order in Table 2-3 below).

Table 2-3: Fresno COG survey results of Community Values

Rank	Transportation Spending Priority
1	Having a vibrant economy
2	Improving public safety
3	Nurturing a healthy community (via minimizing the threat of diseases, and environmental contamination / pollution of food, water, and air)
4	Providing educational choices and opportunities for all demographic and cultural groups
5	Fostering respect for other individuals and/or groups from different social class, ethnicities, lifestyles, religions, and cultures
6	Offering transportation choices including affordable public transit
7	Offering adequate housing choices for all demographic and cultural groups
8	Cultivating a positive image of the San Joaquin Valley
9	Promoting cultural richness via activities and awareness for various cultural, ethnic, religious, and lifestyle groups
10	Having aesthetically pleasant landscapes and buildings

The results of the survey were presented during public meetings to Fresno COG's Environmental Justice Taskforce, RTP Roundtable, Transportation Technical Committee, Policy Advisory Committee and Policy Board and they were published on the Fresno COG website.

2.4 Environmental Justice Taskforce

For help in defining Fresno County's Environmental Justice (EJ) communities, Fresno COG formed the Environmental Justice Taskforce. Fresno COG sought interested parties from public, private and non-profit sectors who represented Environmental Justice Communities (low income, minorities, seniors and the disabled) to sit on the EJ Taskforce. No experience or understanding of transportation planning was required. Serving on the Fresno COG EJ Taskforce were representatives from the following organizations, as well as representatives of a variety of minority groups and seniors:

- Valley Latino Environmental Advancement Project
- Fresno Madera Medical Society
- Housing Alliance of Fresno
- Fresno Metro Ministry
- California Rural Legal Assistance
- Sierra Club
- Fresno Area Express Paratransit Specialist
- CalTrans District 6 Environmental Justice Liaison

The EJ Taskforce met five times from September 2012 until the RTP draft was released for review and comment, with four EJ Taskforce meetings focused primarily on defining the EJ communities within Fresno County. For detailed information on the Environmental Justice Process and Reporting please see RTP Chapter 3: Environmental Justice Report.

2.5 Community workshops

SCS Community Workshop: The making of Scenario A

Our first Sustainable Communities Strategy community workshop became the birthplace of Sustainable Communities Strategy (SCS) Scenario A. Held November 7, 2012, it was attended by approximately 150 people from around Fresno County. At the workshop participants

were surveyed via real-time voting technology using "clickers". They were asked general demographic questions to substantiate where they lived, who they represented, their age, ethnicity and such. Then they were asked to rank transportation spending priorities and issues of importance related to the development of Sustainable Communities Strategies.

Once the surveying was completed, attendees participated in a hands-on mapping exercise, placing colored chips on maps of the Fresno County region, creating visual representations of their own land use and transportation choices. Presentation and mapping materials were available in English and Spanish, and Spanish and Hmong interpreters worked with participants who requested their services. Participants then presented their area map designs to other workshop attendees. See Appendix H for workshop flyers and other workshop materials.

Fresno COG's Mini-Grant Outreach Program: Community organizations partner for 10 more workshops

Fresno COG provided seven $3,000 Mini-Grants to community-based organizations and agencies with existing community contacts, to solicit public input into key activities associated with the preparation of the 2014 Regional Transportation Plan (RTP) and the Sustainable Communities Strategy Scenarios. This program helped ensure that interested members of the public had ample opportunity to understand and provide meaningful input on these plans early in the regional planning process. The seven agencies that received Mini-Grants were:

- Fresno Housing Authority
- Central California Regional Obesity Prevention Program
- Fresno Interdenominational Refugee Ministries
- Office of Community and Economic Development at CSU, Fresno
- San Joaquin Valley Rural Development Center at CSU, Fresno
- San Joaquin Valley Latino Environmental Advancement Project (Valley LEAP)
- Fresno County Library System

These seven agencies hosted 10 community workshops throughout the Fresno County Region during May and June of 2013, providing free transportation, child care and dinner. The community workshops gave residents an opportunity to hear more about Fresno COG and the Regional Transportation Plan and the Sustainable Community Strategy development process.

Demographic data was requested via clicker technology from each participant, then opinions were solicited on SCS related questions designed to measure participants' needs and their understanding of land use and transportation.

Workshops were organized by the Mini-Grant recipients, with primary presentations given by Fresno COG staff in English. Each workshop had interpreters on hand to answer questions and interpret presentations. Translated materials were available at the workshops in five different languages: English, Spanish, Hmong, Punjabi and Laotian, and in many cases the presentations were displayed and delivered in more than one language. The Valley Visions SCS video was shown at workshops in English, Spanish and Hmong as needed. The combined workshop attendance totaled 250 people.

Summaries of the demographic and other preference selections, the comments received from individuals that attended workshops and participated online were submitted to the RTP Roundtable, TTC, PAC and Policy Board for review and consideration. The clicker technology polling conducted at the workshops and online was in no way scientific in nature, and did not cover the exact demographics of the county, though representation from a variety of demographic groups was inclusive. Workshops materials, survey results and Mini-Grant reports are included in Appendix H.

Mini-Grant agencies worked hand-in-hand with Fresno COG staff to clarify the content, wording and graphics of the presentations, ensuring maximum possible comprehension by workshop attendees. Presentation materials were also available in all five languages on the Fresno COG website at www.fresnocog.org/rtp from May through July 2013. The "clicker exercise" conducted at the workshops was available in three languages on the same webpage for interested community members that were unable to attend one of the workshops. Fresno COG staff also made identical presentations to community and service groups during the months of June and July 2013 as requested.

Figure 2-2: Workshop listing with dates, times, languages and accommodations

ValleyVisions
People. Choices. Community.

Community Workshops being held around Fresno County

Fresno Council of Governments

Thursday, May 16, 2013
Dinner and Workshop: 5:00 - 8:00 p.m.
John Palacios Community Center
16846 4th Street
Huron, CA
Spanish translation language provided
Hosted by Valley LEAP

Friday, May 17, 2013
4:00 p.m. – 6:00 p.m.
Parc Grove Commons
2674 E. Clinton Avenue
Fresno CA 93703
Spanish translation language provided
Hosted by Fresno Housing Authority

Monday, May 20, 2013
6:00 p.m. – 8 :00 p.m.
Yosemite Village, 709 W. California Avenue
Fresno, CA 93706
Spanish translation provided
Hosted by Office of Community and Economic Development at Fresno State, Fresno Housing Authority and Central California Regional Obesity Prevention Program

Monday, May 20, 2013
6:00 p.m. – 7:30 p.m.
Fowler Branch Library
306 S. 7th Street
Fowler, CA
Spanish and Punjabi translation available
Childcare and light refreshments provided
Hosted by Central California Regional Obesity Prevention Program

Wednesday, May 22, 2013
Lunch & Workshop: 11:00 a.m. -1:00 p.m.
1940 N. Fresno Street
Fresno, CA 93703
Hmong translation provided
Hosted by the Office of Community and Economic Development at Fresno State and Fresno Interdenominational Refugee Ministries, Inc.

Wednesday, May 22, 2013
5:00 p.m. - 7:00 p.m.
Wedgewood Commons
2415 Fifth Street
Sanger, CA 95831
Spanish and Punjabi translation provided
Hosted by Fresno Housing Authority and Central California Regional Obesity Prevention Program

Thursday, May 23, 2013
Dinner and Workshop: 6:00 – 8:00 p.m.
745 Tulare Street
Parlier, CA 93648
Spanish translation provided
Hosted by San Joaquin Valley Rural Development Center

Thursday, May 23, 2013
6:00 p.m. – 7:30 p.m.
Kings Canyon Middle School
5117 East Tulare
Fresno, CA 93727
Spanish and Hmong translation available
Childcare and light refreshments provided
Hosted by Central California Regional Obesity Prevention Program

Tuesday, May 28, 2013
Dinner and Workshop: 6:00 p.m. - 8:00 p.m.
Family Education Center
1610 Allardt Dr.,
Firebaugh, CA 93622
Spanish translation provided
Hosted by Fresno Housing Authority and San Joaquin Valley Rural Development Center

Wednesday, May 29, 2013
Refreshments and Workshop: 6:00 to 7:30 p.m.
Woodward Park Regional Library
944 E. Perrin
Fresno CA 93720
Translation services available
Hosted by Fresno County Public Library

SCS Scenario selection workshops

In response to the SB 375's workshop requirement, Fresno COG then worked with three of the mini-grant groups and countless other community partners to host six workshops and one video conference presentation of the Sustainable Communities Strategy Scenarios during the months of August and September 2013. The workshops were held in Fresno, Kingsburg, Kerman, Huron and Clovis for the general public, with free transportation, child care and dinner provided. The sixth workshop was cohosted by the American Lung Association for medical professionals and health organizations at UCSF Fresno. A video conference of the presentation was requested by the City of San Joaquin with their preferred scenario selections submitted via hard copy.

Fresno COG staff also developed online video versions of the presentation in English and Spanish that were accessible through the COG website at www.fresnocog.org and the Fresno County Library website. Anyone interested person could go online to view the presentation and then click into the link provided to select their preferred scenario and submit comments. The online presentation and survey were available to the public for participation through September 18, 2013.

During each of the workshops Sustainable Communities Strategies A, B & C were presented and explained using graphic comparison charts of the 10 prioritized indicators identified by the focus groups in August 2012. Demographic data was requested via clicker technology from each participant. At the completion of the presentation, following a question and answer session, participants were asked to select their own, personally preferred scenario and to submit any comments they had regarding the scenarios. Summaries of the demographic and scenario preference selections, and the comments received from 302 individuals that attended workshops, and 46 people online were submitted to the RTP Roundtable, TTC, PAC and Policy Board for review and consideration. The clicker technology polling conducted at the workshops and online were in no way scientific in nature, and did not cover the exact demographics of the county, though representation from a variety of demographic groups was inclusive. The data and comments collected reflect the opinions of those who participated in the workshops based upon the data and information presented to them.

All of the workshops were publicized through a variety of means, including posters and flyers distributed through transit agencies and community organization partners and mini-grant recipient groups. Many e-mail blasts were sent out to government agencies, businesses, community partners and the public. Fresno COG's website comprehensively displayed current information, drafts, meeting materials, updates and topics were posted to Fresno COG's Facebook page from time to time. The Fresno County Library's website also contained links and information about the RTP/SCS effort with links to participate and get more information about the process. They also posted information on their Facebook and Twitter pages.

Fresno COG purchased newspaper and online advertisements to publicize the SCS workshops, (Table 2-4), while the Valleywide Public Outreach media effort ran concurrently (Table 2-5).

Table 2-4: Fresno COG print advertising

Print Ads were placed in the following newspapers:	
Firebaugh-Mendota Journal	Parlier Post
Fowler Ensign	Reedley Exponent
Fresno Bee	San Joaquin/Tranquility
Kerman News	Sanger Herald
Kingsburg	Selma Enterprise
Orange Cove and Mountain Times	Vida En El Valle

Table 2-5: Valleywide SCS Outreach--media

Valleywide SCS Outreach-- August-September 2013	
Online ads	
Google Adwords--Search Advertising Campaign	
Google Ad Network--pay per click banner advertising	
Facebook logo with link and text	
Online newspapers--banner ads	
Bakersfield.com	Mantecabulletin.com
Porterville Reporter	Lodinews.com
Modestobee.com	Turlockjournal.com
Stocktonrecord.com	Mercedsunstar.com
Fresnobee.com	Vida En El Valley.com
Pandora radio ads--audio and online banners	

2.6 Public Outreach and a fourth scenario

During the development of a fourth scenario, the process and the scenario itself were vetted before four standing committees and were available online on the Fresno COG website for over two months. Staff also met with member agency representatives at the local agencies and public presentations were given before many of their city councils, and the Fresno County Board of Supervisors. Those presentations allowed Fresno COG staff to share the scenario indicator results and information, and answer questions regarding the RTP/SCS.

Additional Public Participation

- During the entire process Fresno COG's website had dedicated pages for SB375, RTP, SCS, Public Participation, the RTP Financial Element, calendar listings, agendas, data, links, presentations, results, videos, minutes, committee processes and various other listings.
- Staff made additional presentations to community and business groups, chambers, and service groups as requested regarding the RTP/SCS.
- Fresno COG regularly included information about Regional Transportation Plan and Sustainable Communities Strategy development in Fresno COG's e-newsletter "Coming Up at Fresno COG" from May 2012 on, and will continue until the adoption of the RTP document. Up to 4,600 individuals are included in the email lists used to disseminate the e-newsletter.
- Fresno COG hosted or attended many meetings with School District personnel, stakeholders, public members and local agencies to clarify issues, share information and listen to needs and concerns. This includes speaking to Fresno COG's standing committees regarding the RTP/SCS.

2.7 Public Comment

Fresno COG promoted methods by which the public could submit comments and/or access information at their convenience:

- Workshop or meeting attendance open comments
- Workshop comment forms
- Fresno COG's website pages host contact information for all staff members
- By emailing Fresno COG's Public Information Officer or RTP staff
- By phone at 559-233-4148
- By Fax at 559-233-9645
- Via U.S. mail

Fresno Council of Governments

Fresno Council of Governments - Consejo de Gobiernos de Fresno

Regional Transportation Plan - Planes Regionales de Transportación

Community Workshop - Taller Comunitario

Comment Form - Formulario Para Comentarios

Date/Fecha: _____

Name/Nombre: _____

Telephone/Teléfono: _____

Organization or business/Empresa o organización: _____

E-Mail/Correo electrónico: _____

Address/Domicilio: _____

City/Ciudad: _____ Zip code/Código postal: _____

Yes, I would like to be added to the Fresno COG notification list:
E-Mail ☐ U.S. Mail ☐

Si, me gustaria que se agregue mi nombre a la lista de planes regionales de transportación:
Correo electronico ☐ Correo ☐

_____

Comments/ Comentarios:

2.8 Consultation

The United States Department of Transportation defines consultation as: "one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken." Some areas of consultation could include transportation, land use, employment, economic development, housing, community development and environmental issues.

Existing federal regulations require Metropolitan Planning Organizations (MPOs) to consult with resource agencies, State and local agencies responsible for land use management, environmental protection, conservation, historic preservation and Native American Tribal Governments concerning the development of the Regional Transportation Plan. MPOs must seek input/ comments from resource agencies early in the planning process to prevent project delays at a later time. In other words, consulting with resource agencies early in the planning process may lead to better coordination, minimal litigation, possible project cost savings and an upfront understanding of resource agency issues. Table 2-6 is a list of resource agencies that Fresno COG contacted for early consultation during the development of the RTP. (See Appendix H for consultation documentation.)

Table 2-6: Table of agencies Fresno COG consulted during RTP development

Federal Agencies:	
Centers for Disease Control and Prevention, National Center for Environmental Health	U.S. Department of Homeland Security, Federal Emergency Management Agency
Federal Highway Administration	U.S. Department of the Interior, Office of Environmental Policy and Compliance
Federal Railroad Administration, Office of Policy and Plans	U.S. Department of Transportation
Federal Railroad Administration, Office of Environmental Policy and Compliance	U.S. Environmental Protection Agency, REGION IX
Federal Transit Administration	U.S. Environmental Protection Agency, Office of Air Quality Planning
Naval Air Warfare Center Weapons Division	U.S. Environmental Protection Agency, Federal Activities Office, CMD-2
U.S. Army Corps of Engineers Sacramento and San Francisco Districts	U.S. Fish and Wildlife Service
U.S. Department of Agriculture	U.S. Geological Survey, Office of Environmental Affairs

Table 2-6 continued: Table of Agencies Fresno COG Consulted with during RTP development

Federal Agencies continued:	
U.S. Department of Agriculture, Forest Service, and Natural Resources Conservation Service	U.S. National Park Service, Pacific Great Basin System Support and Pacific West Region
U.S. Department of Energy	
State Agencies:	
California Air Resources Board	California Public Utilities Commission
California Environmental Protection Agency	California Transportation Commission
California Department of Conservation, Farmland Mapping and Monitoring Program	California Water Institute
California Department of Forestry	California Department of Water Resources
California Department of Health Services	Caltrans - Headquarters, Districts 6 & 10, Division of Aeronautics Division of Rail
California Department of Housing and Community Development	Governor's Office of Planning and Research
California Department of Water Resources	State Department of Fish and Wildlife Environmental Services Division
California High Speed Rail Authority	State Office of Historic Preservation, Archaeological Inventory
California Highway Patrol	Strategic Growth Council
Tribal Governments:	
Cold Springs Rancheria of Mono Indians	Dunlap Band of Mono Historical Preservation Soc
Dumna Wo-Wah Tribal Government	Wuksache Indian Tribe/Eshom Valley Band
Santa Rosa Rancheria	Kings River Choinumni Farm Tribe
Big Sandy Rancheria	North Fork Rancherian Tribal Office
Table Mountain Rancheria	Sierra Nevada Native American Coalition
Tule River Indian Reservation	Choinumni Tribe
Regional Agencies:	
Association of Monterey Bay Area Governments	Sacramento Area Council of Governments
CalVans	San Diego Association of Governments
Inyo County Planning Department	San Joaquin Council of Governments
Kern Council of Governments	San Joaquin Valley Air Pollution Control District
Kings County Association of Governments	San Luis Obispo Council of Governments
Local Agency Formation Commission	Southern California Association of Governments
Madera County Transportation Commission	Stanislaus Council of Governments
Merced Association of Governments	Tulare County Association of Governments
Metropolitan Transportation Commission	Valleyrides
Monterey County Planning Department	
Local Agency Elected Officials, City Managers and Planning Staff:	
City of Clovis	City of Fresno
City of Coalinga	City of Huron
City of Firebaugh	City of Mendota
City of Fowler	City of Kerman

Table 2-6 continued: Table of Agencies Fresno COG Consulted with during RTP development

Local Agency Elected Officials, City Managers and Planning Staff:	
City of Kingsburg	City of San Joaquin
City of Orange Cove	City of Sanger
City of Parlier	City of Selma
City of Reedley	County of Fresno
Rail:	
Union Pacific Railroad	BNSF Corporation
High Speed Rail Authority	San Joaquin Valley Railroad
Aviation:	
Association of California Airports	New Coalinga Municipal Airport
California Airport Land Use Consortium	Reedley Municipal Airport
Firebaugh Airport	Selma Airport
Fresno Chandler Executive Airport	Sierra Sky Park Airport
Fresno Yosemite International Airport	William R. Johnston Municipal Airport
Harris Ranch Airport	
Schools and School Districts:	
Alvina Elementary	Mendota Unified
Big Creek Elementary	Monroe Elementary
Burrel Elementary	Orange Center Elementary
Caruthers Unified	Pacific Union Elementary
Central Unified	Parlier Unified
Clay Elementary	Pine Ridge Elementary
Clovis Unified	Raisin City Elementary
Coalinga-Huron Unified	Riverdale Unified
Firebaugh-Las Deltas Unified	Sanger Unified
Fowler Unified	Selma Unified
Fresno Unified	Sierra Unified
Golden Plains Unified	Washington Colony Elementary
Kerman Unified	Washington Unified
Kings Canyon Unified	West Park Elementary
Kingsburg Elementary	Westside Elementary
Kingsburg High School	California State University Fresno
Laton Unified	
Other Agencies and Organizations:	
American Farmland Trust	Mead & Hunt
Aries Consultant	Pacific Gas and Electric
California Native Plant Society	Placer Land Trust
California Trucking Association	Provost & Pritchard Engineering
California Wildlife Federation	Ricondo & Associates
C&S Companies	Sierra Club Tehipite Chapter
Gouveia Engineering	Sierra Research Consulting Firm

Chapter 3

Environmental Justice Report:

Ensuring Meaningful Involvement for All People

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

3.1 Fresno COG's Planning Approach to Environmental Justice

Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

Meaningful involvement means that:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health
- The public's contribution can influence the regulatory agency's decision
- Their concerns will be considered in the decision making process
- The decision makers seek out and facilitate the involvement of those potentially affected

Background

An Environmental Justice (EJ) Analysis of the RTP is needed to assure that Fresno COG conforms to federal environmental justice principles, policies, and regulations including Title VI of the Civil Rights Act of 1964. Title VI states that "No person…shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." Title VI establishes the need for transportation agencies to disclose to the public the benefits and burdens of proposed projects on minority populations. The understanding of civil rights has expanded to include gender, religion, and disability. Title VI was further amended in 1987 to extend non-discrimination requirements for recipients of federal aid to all of their programs and activities, not just those funded with federal funds.

A 1994 Presidential Order (Executive Order 12898) directed every federal agency to make Environmental Justice part of its mission by identifying and addressing the effects of all programs, policies, and activities on underrepresented groups and low-income populations. Reinforcing Title VI, this Presidential Order ensures that every federally funded project nationwide considers the human environment when undertaking the planning and decision-making process. The Presidential memorandum accompanying E.O. 12898 identified Title VI as one of several federal laws that should be applied "to prevent minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects."

To implement and ensure compliance with these statutes, federal and state agencies have issued a series of orders, regulations and guidance on environmental justice. In 1994, President Clinton issued Executive Order 12898 on "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations." In 1997, the Department of Transportation followed up with an Order on Environmental Justice designed to implement the Executive Order. In December 1998, the Federal Highway Administration (FHWA) issued its own environmental justice order. As a federally designated metropolitan transportation planning organization (MPO), Fresno COG is required to comply with the rules and policies set forth by FHWA. Fresno COG's three main principles underlying environmental justice are:

- To avoid, minimize, or mitigate disproportionately high and adverse human health or environmental

effects, including social and economic effects, on minority and low-income populations.

- Ensure full and fair participation by all potentially affected communities in the transportation decision making process.
- Prevent denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income groups.

Additionally, Title VI not only bars intentional discrimination, but also unjustified disparate impact discrimination. Disparate impacts result from policies and practices that are neutral on their face (i.e., there is no evidence of intentional discrimination), but have the effect of discrimination on protected groups.

The Environmental Justice Equity Analysis is intended to measure both the benefits and burdens associated with the transportation investment alternatives included in the 2040 Regional Transportation Plan, and to make sure that the environmental justice communities living within Fresno County share equitably in the benefits of the Plan's investments without bearing a disproportionate share of the burdens.

3.2 Demographic Profile

Our EJ analysis starts with understanding the demographics of our community. Fresno County has high percentages of both minority and low-income populations.

Figure 3-1: Ethnic profile of Fresno County

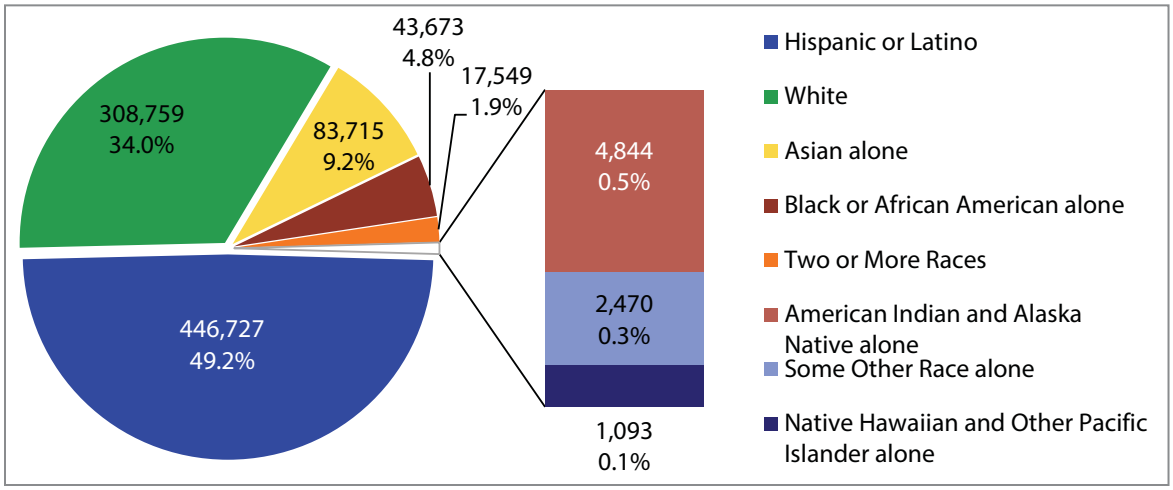


Figure 3-2: Population for whom poverty status was determined according to the American Community Survey 2006-2010

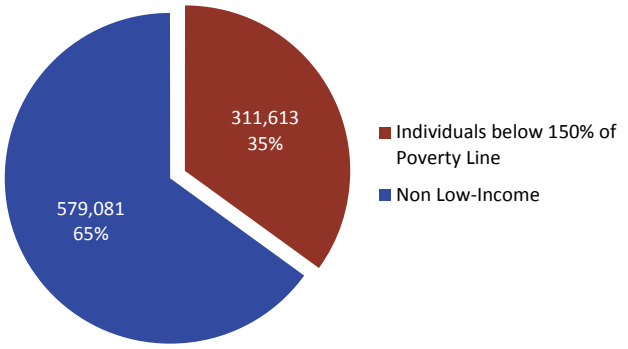


Table 3-1: Income Comparison

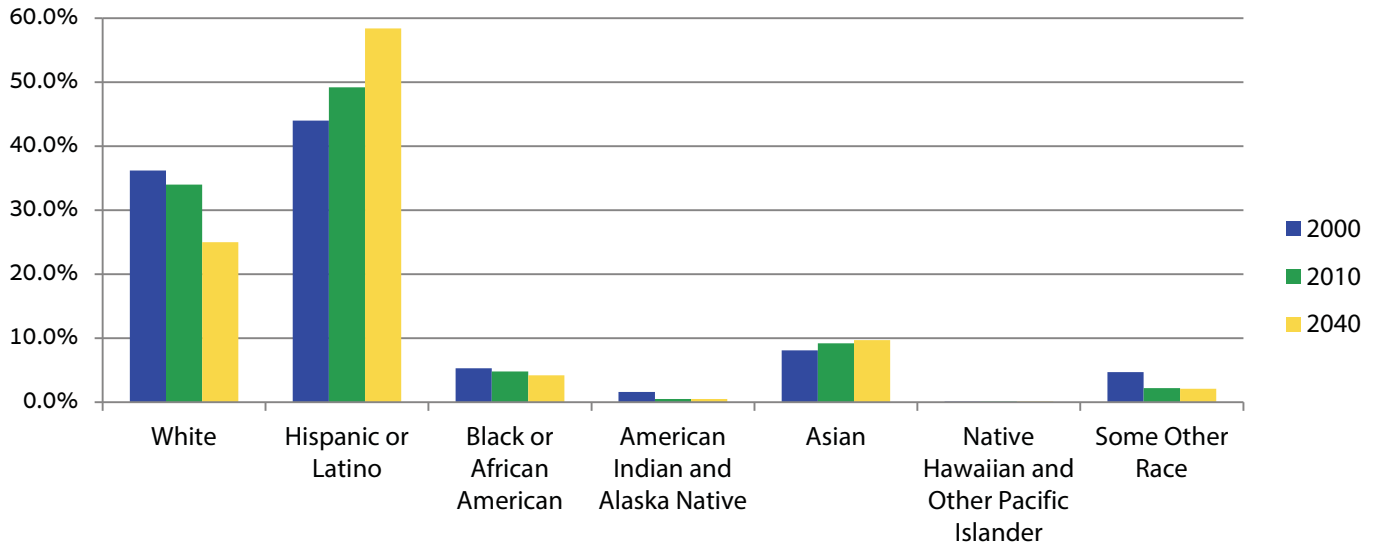
Comparison*	Income 150% of the Poverty Line	Minority Population
Fresno County	35.0%	66.0%
California	23.6%	58.8%
United States	22.9%	35.3%
*American Community Survey 2006-2010		

Furthermore, historical trends and projections show that Fresno County's Hispanic population is growing as the White population's share of the total is shrinking. (See Figure 3-3).

Fresno COG's Environmental Justice Outreach – *Public Involvement Process*

As part of the RTP effort, Fresno COG has increased public outreach activities to ensure all populations have the opportunity to provide input into the planning process. Please refer to RTP Chapter 2: Public Participation for information on this effort.

Figure 3-3: Demographic changes from 2000 to 2040



3.3 Equity Analysis -

Defining population groups

Minority

Fresno COG uses the U.S. Census Bureau's definitions of racial and ethnic populations to determine minority status. Minority persons are those who identify as Black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Other Pacific Islander, some other race or multiple races, or Hispanic/Latino of any race. The Non-Environmental Justice population includes those persons who identify as white and not Hispanic or Latino. The largest ethnic group in our region is Hispanic (49.2%), followed by White (34.0%).

Low Income

Defining "low-income" populations is less straightforward than the minority definition. Federal guidance suggests the use of the poverty threshold as utilized by the U.S. Census as an appropriate measure of low-income populations. As of the 2010 5-year American Community Survey, approximately 22.5% of Fresno County's population was living below the poverty line.

Defining Environmental Justice Communities within Fresno County

In order to determine whether Environmental Justice communities are sharing both the benefits and burdens associated with the projects in the Plan, it was necessary to determine where these communities are located within Fresno County. Demographic data from U.S. Census American Community Survey 2006-2010 Summary Tables was used to develop a database with estimated socioeconomic and travel characteristics. This database was used to map the Environmental Justice communities within Traffic Analysis Zones (TAZ). A TAZ is an area similar in size to a neighborhood or census block group. TAZs can range in size from approximately ½ miles square within a metropolitan area to much larger areas in low-density outlying areas of the countryside. There are roughly 2,000 TAZs within Fresno County.

To evaluate equity, Fresno COG's travel forecasting software was utilized to produce estimates of travel characteristics of Environmental Justice communities compared to Non-Environmental Justice communities across the county. In order to determine whether EJ populations would be affected by a proposed program, project, or activity, it was necessary to define the parameters of an EJ community and then determine where they were located. The existing guidance from the federal government suggests that a minority population may be present if the minority population of the affected area is "meaningfully greater" than the minority population percentage in the general population.

Environmental Justice Taskforce

For help in defining Fresno County's EJ communities, Fresno COG formed the Environmental Justice Taskforce. Fresno COG advertised for interested parties who represent Environmental Justice Communities to sit on the EJ Task Force. Those communities include those with low incomes, minorities, seniors and the disabled, representing public, private or non-profit sectors. No experience or understanding of transportation plans was required. Serving on the Fresno COG EJ Taskforce were members from:

- Valley Latino Environmental Advancement Project
- Fresno Madera Medical Society
- Housing Alliance of Fresno
- Fresno Metro Ministry
- California Rural Legal Assistance
- Sierra Club
- Fresno Area Express Paratransit Specialist
- CalTrans District 6 Environmental Justice Liaison

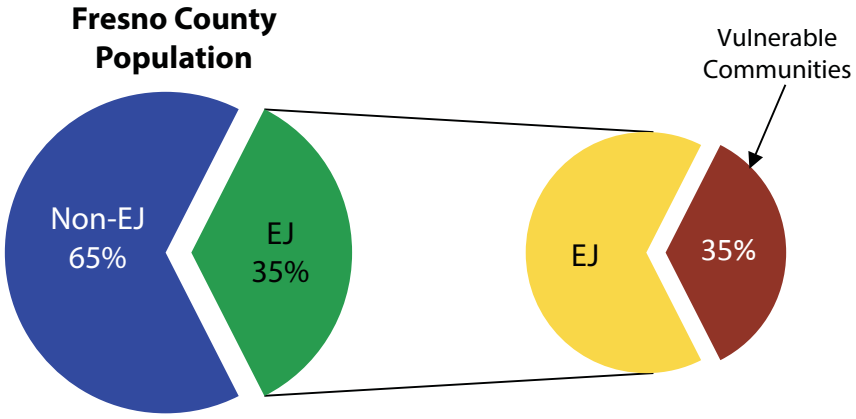
FCOG held four EJ Taskforce meetings that focused on defining the EJ communities within Fresno County. The following is a summary of the main topics discussed at the meetings:

- Regional Transportation Plan: purpose and goals
- Fresno COG's Environmental Justice analysis
- Federal definition of Environmental Justice populations
  - Minority
  - Low Income
- Possibility of expanding the definition of Environmental Justice populations to include the following "Vulnerable Communities":
  - Elderly
  - No Vehicle Availability
  - Single Parent Household
  - Housing Cost Burden: >30% household income spent on housing
  - Educational Attainment: over 25 years old without a high school diploma
  - Linguistic Isolation: no one in household speaks
  - English "very well"
- The demographics of Fresno County (focused on race & income levels)
- Voting on the parameters of the Environmental Justice populations

At the end of the fourth meeting, the EJ Taskforce defined the Environmental Justice communities for Fresno COG's EJ analysis as:

- A total of 35% of Fresno County's population
- The Low Income threshold was set as households earning at or below 150% of the federal poverty level
- 65% of the EJ Community would consist of Minority and Low-Income populations
- 35% of the EJ Community would consist of communities that met the threshold of at least two of the "Vulnerable Communities" criteria

Figure 3-4: Defined EJ Communities percentage



Environmental Justice Area Characteristics

Upon review of Fresno COGs definition of the EJ communities, the Federal Highway Administration (FHWA) requested Fresno COG include only the Minority and Low-Income thresholds and not the Vulnerable Communities. Therefore, the FHWA EJ community would use the original definition of Executive Order 12898 and focus strictly on the Minority and Low-Income populations.

Table 3-2 illustrates the differences in the EJ Communities:

- As defined by the EJ Taskforce (EJ - TF)
- As requested by FHWA (EJ - FHWA)

Table 3-2: EJ Area Characteristics

Environmental Justice Populations	EJ - TF	EJ - FHWA
	% of TAZs	% of TAZs
Minority	21%	27%
Low-Income	21%	27%
Vulnerable Communities		
•Housing Burden	15%	0%
•Single Parent	15%	0%
•Elderly	15%	0%
•Education	15%	0%
•Linguistic Isolation	15%	0%
•Vehicle Availability	15%	0%
TOTAL:	35%*	35%*
*The percentages do not add up arithmetically because many TAZs met more than one of the Environmental Justice thresholds.		

EJ Taskforce Parameters

Of the 1,963 TAZs in Fresno County, 788 make up the areas labeled as Environmental Justice Areas as defined by the EJ Taskforce. A total of 136 TAZs meet the low-income criteria alone, 181 meet the minority criteria alone, and 163 meet both the low-income and minority criteria. Together these 480 TAZs account for 61% of the EJ area. The other 39%* or 308 TAZs meet the Vulnerable Communities threshold criteria. Within these EJ TAZs, the minority population is 84.4% and the low-income population is 55.9%.

FHWA Parameters

Of the 1,963 TAZs in Fresno County, 692 make up the areas labeled as Environmental Justice Areas as defined by the FHWA. A total of 170 TAZs meet the low-income criteria alone, 156 meet the minority criteria alone, and 366 meet both the low-income and minority criteria. Within these EJ TAZs, the minority population is 89.0% and the low-income population is 58.3%. ***The total number of TAZs (EJ Taskforce's compared to FHWA's) are not the same because population varies within each TAZ.***

Comparing the two different EJ communities (EJ – TF vs. EJ – FHWA), the FHWA defined communities clearly are a better representation of the low-income and minority populations that the Civil Rights Act of 1964 and Executive Order 12898 intended. Furthermore, because the Environmental Justice analysis is a federally mandated task, it was decided that the EJ analysis would be modeled with the version of the EJ Communities limited to only Low-Income and Minorities (EJ - FHWA). See Figures 3-5 and 3-6 on pages 3-13 and 3-14 for maps of the EJ - FHWA and EJ – TF Communities.

3.4 Performance Measures

The following performance measures were used in Fresno COG's Environmental Justice analysis:

Accessibility – Calculate and compare the average AM peak period (work) trip time by mode (auto & transit) from the Non-EJ TAZs and EJ TAZs in Fresno-Clovis Sphere of Influence (SOI), the remaining county and countywide to areas of interest (major job centers, parks, schools, medical facilities). See Figures 3-7 and 3-8: Maps of areas of interest.

Mobility – Calculate and compare the average PM peak period trip time by mode (auto and transit) from the Fresno-Clovis SOI, the remaining county, and countywide to Non-EJ TAZs and to EJ TAZs.

Cost-effectiveness - Calculate the additional person-miles traveled on transit projects per $1,000 of project investment inside Non-EJ TAZs compared to the EJ TAZs in the Fresno- Clovis SOI, the remaining county and countywide.

Equity - Calculate percentages of person-miles of travel with percentages of transportation investment for the Non-EJ TAZs compared to the EJ TAZs in the Fresno-Clovis SOI, the remaining county and countywide.

Reliability - Calculate the percent of total Vehicle Miles Traveled (VMT) operating at level of service E or worse on links inside EJ TAZs versus Non-EJ TAZs in the Fresno-Clovis SOI, the remaining county and countywide.

Consumer satisfaction - Calculate the percent changes between 2008 and 2035 and 2040, in average trip delay on roadway projects after feedback between constrained and unconstrained roadways on links inside EJ TAZs and compare with Non-EJ TAZs in the Fresno-Clovis SOI, the remaining county and countywide. Delay refers to the amount of additional time a vehicle spends on the road because of congestion. Constrained and unconstrained roads refer to those streets, highways or freeways where congestion is either typical or atypical.

Measures of the seven criteria include:

Accessibility

1. Average automobile {Drive alone & Shared-ride} trip time from urban Non-EJ communities to areas of interest (from urban EJ communities to areas of interest)
2. Average transit travel time from urban Non-EJ communities to areas of interest (from urban EJ communities to areas of interest)
3. Average automobile {Drive alone & Shared-ride} trip time from rural Non-EJ communities to areas of interest (from rural EJ communities to areas of interest)
4. Average transit travel time from rural Non-EJ communities to areas of interest (from rural EJ communities to areas of interest)

Mobility

1. Average travel time for trips by automobile {Drive alone & Shared-ride} from the Fresno-Clovis SOI to urban Non-EJ communities (to urban EJ communities)
2. Average travel time for trips by transit from the Fresno-Clovis SOI to urban Non-EJ communities (to urban EJ communities)
3. Average travel time for trips by automobile {Drive alone & Shared-ride} from the Remainder of the County to rural Non-EJ communities (to rural EJ communities)
4. Average travel time for trips by transit from the Remainder of the County to rural Non-EJ communities (to rural EJ communities)
5. Average travel time for trips by automobile {Drive alone & Shared-ride} Countywide to rural Non-EJ communities (to rural EJ communities)
6. Average travel time for trips by transit Countywide to Non-EJ communities (to rural EJ communities)

Cost-effectiveness

1. Additional transit passenger miles {above the 2008 base year} in the Fresno-Clovis SOI per $1,000 invested in Non-EJ communities (in EJ communities)
2. Additional transit passenger miles {above the 2008 base year} in the Remainder of the County per $1,000 invested in Non-EJ communities (in EJ communities)
3. Additional transit passenger miles {above the 2008 base year} Countywide per $1,000 invested in Non-EJ communities (in EJ communities)

Equity

1. Investment comparisons relating to livable and/or walkable communities that support transit
2. Distribution of planned transportation expenditures inside and outside of EJ communities/neighborhoods

Reliability

1. Reasonably dependable levels of service as measured by percent of on-time arrivals
2. Reasonably dependable levels of service as measured by congestion on highways

Consumer Satisfaction

1. Average trip delay time (urban, auto, countywide)
2. Average trip delay time (rural, auto, countywide)
3. Average trip delay time (urban, auto, environmental justice area)
4. Average trip delay time (rural, auto, environmental justice area)

5. Average trip delay time (urban, transit, countywide)
6. Levels of service on roads countywide (A-F)
7. Levels of service on roads in environmental justice target areas (A-F)

Level of Service (LOS) is the 'yardstick' in standard use to categorize the flow, or efficiency, of highways, roads, and intersections.

Table 3-3: Roadway LOS Descriptions

Level of Service	Description
A	Free flow traffic conditions, with minimal delay to stopped vehicles (no vehicle is delayed longer than one cycle at signalized intersection).
B	Generally stable traffic flow conditions
C	Occasional back-ups may develop, but delay to vehicles is short-term and still tolerable.
D	During short periods of the peak hour, delays to approaching vehicles may be substantial but are tolerable during times of less demand (i.e., vehicle delayed one cycle or less at signal).
E	Intersections operate at or near capacity, with long queues developing on all approaches and long delays.
F	Jammed conditions on all approaches with excessively long delays and vehicles unable to move at times.

3.5 Modeling Results - Accessibility and Mobility

Accessibility and mobility are defined as the ability to move throughout the region, and the time it takes to reach desired destinations from specific origins. The criterion is measured by calculating average travel times during the base year 2008, in 2035 Build and 2040 Build, when all RTP projects are completed, and in a 2035 No Build and 2040 No Build scenarios where none of the RTP projects are completed.

Specifically, accessibility is defined as the ease of reaching destinations as measured by the average AM peak trip times to the defined areas of interest. Figures 3-7 and 3-8: Maps of areas of interest on pages 3-15 abd 3-16. Mobility looks at PM peak average auto and transit travel times to demonstrate the worst possible scenario.
The goal for both accessibility and mobility is to ensure that the EJ TAZs throughout the county have average trip times lesser than or comparable to the Non-EJ TAZs. In general, under all conditions EJ TAZs have average travel times to areas of interest equal to or shorter than the travel times from non-EJ TAZs for all modes of travel (drive alone, carpool and transit) in the Fresno-Clovis SOI, the remainder of the county, as well as countywide.

The exception is transit in rural areas of the county, where the EJ travel times are higher than the non-EJ travel times. This is to be expected because of the large, low populated EJ areas in the far western part of the county. It should also be noted that the travel times for the rural county to areas of interest are between 50% and 100% higher than Fresno-Clovis SOI travel times. Any transit trips from rural areas would have to include the time necessary to get from their home to the transit route stop, in addition to the comparatively longer transit ride itself. Fresno County Rural Transit Agency (FCRTA) is constantly reviewing routes and seeking solutions for unmet needs by monitoring demonstration routes. However, due to ridership and farebox restrictions, it is difficult to maintain new routes in unincorporated areas of Fresno County beyond the initial demonstration period because actual ridership and farebox recovery fail to meet the minimum State standards for public transit agencies. See Figure 3-9: EJ Communities Map with overlay of rural transit routes and RTP Chapter 5 for FCRTA's report.

Although the travel time for Accessibility and Mobility account for the congestion, travel times, and overall delay for travel, land use development and changes to the transportation system over time lead to changes in the home, work and shopping location selection to minimize travel time. The behavioral change to select activity locations that minimize time can be seen in the accessibility tables, where travel times to given areas of interest for modes between scenarios and years are roughly the same. With a balanced land use plan, the opportunities within each area do not drastically change

Table 3-4: Accessibility to Major Job Centers

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Fresno-Clovis SOI:					
Drive Alone	13 (13)	14 (14)	14 (13)	14 (14)	14 (13)
Shared-Ride	15 (14)	16 (15)	15 (15)	16 (15)	16 (15)
Transit	32 (32)	32 (31)	29 (27)	32 (31)	29 (27)
Remainder of County:					
Drive Alone	42 (22)	39 (21)	40 (21)	40 (21)	41 (21)
Shared-Ride	31 (26)	30 (27)	29 (27)	30 (27)	30 (27)
Transit	**46 (52)**	**47 (53)**	**45 (52)**	**47 (53)**	**45 (52)**
Countywide:					
Drive Alone	20 (15)	19 (15)	19 (15)	20 (16)	20 (15)
Shared-Ride	18 (18)	18 (18)	18 (18)	19 (19)	19 (18)
Transit	33 (33)	33 (33)	30 (29)	33 (33)	30 (29)

Values represent travel time in minutes designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ travel times are higher than non-EJ travel times

Table 3-5: Accessibility to Parks

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Fresno-Clovis SOI:					
Drive Alone	13 (13)	14 (13)	14 (13)	14 (13)	14 (13)
Shared-Ride	14 (13)	15 (14)	15 (14)	15 (14)	15 (14)
Transit	34 (32)	34 (32)	31 (28)	34 (32)	31 (28)
Remainder of County:					
Drive Alone	42 (27)	41 (26)	41 (26)	41 (26)	42 (26)
Shared-Ride	31 (30)	30 (30)	30 (30)	30 (30)	30 (30)
Transit	**53 (67)**	**53 (68)**	**52 (67)**	**53 (69)**	**53 (67)**
Countywide:					
Drive Alone	19 (16)	19 (16)	19 (15)	19 (16)	19 (15)
Shared-Ride	17 (17)	18 (18)	18 (18)	18 (18)	18 (18)
Transit	35 (33)	35 (33)	32 (29)	35 (33)	32 (29)

Values represent travel time in minutes designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ travel times are higher than non-EJ travel times

and there are enough opportunities to reach a balance without causing a change in accessibility. It should be noted that the accessibility times for the Fresno Clovis SOI are roughly half that of the remainder of the county, but that is as expected due to the urban nature of the Fresno-Clovis SOI compared to the remainder of the County.

A disparity in Accessibility and Mobility Tables can be seen in the Remainder of the County – Drive Alone data. The Non-EJ travel times are much longer (some as much as twice as long) compared to the EJ travel times. This is probably due to the fact that many of the Non-EJ Remainder of the County TAZs are in mountainous areas where the roads are windy and must be driven at slower speeds. Therefore these trips will take quite a bit longer.

In terms of overall mobility, EJ TAZs also perform well compared with Non-EJ TAZs in the Fresno-Clovis SOI, the remainder of the county, as well as countywide. As shown in Table 3-8, Fresno-Clovis SOI had shorter average travel times than the Remainder of the County and Countywide. This was to be expected as metropolitan commutes are shorter than rural commutes. Considering that countywide is a combination of both rural and urban commutes, one would expect that Fresno-Clovis SOI would have the shortest commute times and Remainder of the County would have the largest times, with Countywide slightly closer to Fresno-Clovis. EJ TAZs had equal to or shorter average travel times than all TAZs in all instances except for rural transit trips, which had slightly higher travel times than non-EJ TAZs under all situations. This is once again probably to be expected because of the large, low populated EJ areas in the far western part of the county. Fresno COG will continue to work with FCRTA and the EJ Taskforce to address the needs of the rural transit riders in Fresno County. See Figure 3-9: EJ Communities Map with overlay of rural transit routes and RTP Chapter 5 for FCRTA's report.

Table 3-6: Accessibility to Schools

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Fresno-Clovis SOI:					
Drive Alone	15 (14)	16 (15)	16 (15)	16 (15)	14 (13)
Shared-Ride	18 (17)	19 (18)	19 (18)	19 (18)	15 (14)
Transit	36 (35)	36 (35)	33 (31)	36 (35)	31 (28)
Remainder of County:					
Drive Alone	39 (22)	38 (21)	37 (20)	38 (21)	42 (26)
Shared-Ride	30 (28)	29 (28)	29 (28)	30 (28)	30 (30)
Transit	**44 (48)**	**45 (48)**	**43 (48)**	**45 (49)**	**53 (67)**
Countywide:					
Drive Alone	39 (22)	38 (21)	37 (20)	38 (21)	42 (26)
Shared-Ride	30 (28)	29 (28)	29 (28)	30 (28)	30 (30)
Transit	44 (48)	45 (48)	43 (48)	45 (49)	53 (67)

Values represent travel time in minutes designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ travel times are higher than non-EJ travel times

Table 3-7: Accessibility to Medical Facilities

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Fresno-Clovis SOI:					
Drive Alone	13 (13)	14 (14)	14 (14)	14 (14)	14 (14)
Shared-Ride	14 (14)	15 (15)	15 (15)	16 (15)	15 (15)
Transit	32 (31)	32 (31)	28 (27)	32 (31)	28 (27)
Remainder of County:					
Drive Alone	42 (22)	38 (20)	39 (20)	39 (20)	40 (20)
Shared-Ride	30 (25)	29 (24)	29 (24)	29 (24)	29 (24)
Transit	**45 (46)**	**45 (46)**	**44 (46)**	**45 (46)**	**44 (47)**
Countywide:					
Drive Alone	19 (15)	19 (15)	19 (15)	19 (15)	19 (15)
Shared-Ride	17 (17)	18 (18)	18 (17)	18 (18)	18 (17)
Transit	33 (32)	33 (32)	29 (29)	33 (32)	29 (29)

Values represent travel time in minutes designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ travel times are higher than non-EJ travel times

Cost-effectiveness

Cost-effectiveness is measured by maximized returns on transit investments. This measure is estimated by dividing the new added average number of daily passenger miles traveled (PMT) served by RTP transit projects in the full project list from 2008 to 2035 and 2040, by the total $1,000s of investment inside and outside of EJ TAZs. Because the cost-effectiveness criterion assumes that RTP projects will be built, the no-build scenario is not displayed. The goal for Cost-effectiveness is for EJ TAZs to show an average cost per passenger mile for transit that is no less than the Non-EJ TAZs. The PMT served per $1,000 invested is higher for all conditions for the EJ TAZs compared to the Non-EJ TAZs.

To capture the entire distance traveled, the PMT is a zone-to-zone calculation rather than only the distance covered by transit. The benefit of this calculation method is sensitivity to walk access, stop distance, or park-n-ride locations compared to only accounting for the distance covered on the transit vehicle.

As shown in Table 3-9, higher returns are realized for transit investments in EJ TAZs within Fresno-Clovis SOI, rural areas, and countywide than Non-EJ TAZs when looking at average additional daily passenger miles traveled per $1,000 investment dollars. As expected due to the population of each area, the Fresno-Clovis SOI has a much higher value than the Remainder of County.

Equity

Equity is defined as an equitable distribution of transportation investment benefits based on the share of person miles traveled. Fresno COG took a similar approach to equity as with cost-effectiveness, comparing the total investment in transit through 2040, with total passenger miles traveled in the Fresno-Clovis SOI, rural areas and the county as a whole. Since transit functions as a system and the main transit investments connect communities and would have less value without the connectivity, the investment in transit as a

Table 3-8: Mobility (PM Peak Period Average Travel Time

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Fresno-Clovis SOI:					
Drive Alone	14 (14)	15 (15)	15 (15)	16 (15)	15 (15)
Shared-Ride	16 (16)	17 (16)	17 (16)	18 (17)	17 (16)
Transit	34 (32)	34 (32)	31 (28)	34 (32)	31 (28)
Remainder of County:					
Drive Alone	38 (22)	36 (21)	36 (21)	37 (20)	37 (20)
Shared-Ride	29 (25)	28 (24)	28 (24)	28 (24)	28 (24)
Transit	**45 (48)**	**45 (48)**	**44 (48)**	**45 (48)**	**44 (48)**
Countywide:					
Drive Alone	20 (17)	21 (17)	20 (17)	21 (17)	21 (17)
Shared-Ride	19 (19)	20 (19)	20 (19)	20 (19)	20 (19)
Transit	35 (34)	35 (34)	31 (30)	35 (34)	32 (30)

Values represent travel time in minutes designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ travel times are higher than non-EJ travel times

Table 3-9: Average Additional Daily Transit Passenger Miles Traveled per $1,000 Investment

Area	2035 Build	2040 Build
Fresno-Clovis SOI	35.37 (36.71)	40.26 (42.01)
Remainder of County	5.01 (8.89)	5.34 (9.46)
Countywide	40.38 (45.6)	45.61 (51.47)

Values represent additional PMT over 2008 per $1,000 investment designated as Non-EJ TAZs (EJ TAZs).

Table 3-10: Percentage of Passenger Miles Traveled (PMT) and Expenditures for 2040 Build

	Fresno-Clovis SOI	Remainder of County	Countywide
Non-EJ TAZs:			
2040 PMT	115,927	16,571	132,498
Expenditure/PMT	$13.73	$96.06	$12.01
EJ TAZs:			
2040 PMT	125,544	26,617	152,161
Expenditure/PMT	$12.68	$59.81	$10.46
EJ TAZs Ratio:			
2040 PMT	52%	62%	53%

whole ($1,591,878) was used to evaluate Equity rather than the portion of the transit improvement within each area. Under 2040 build conditions which includes projects through 2040, EJ TAZs will have a higher benefit from expenditures (53%) compared to their non-EJ counterparts. Fresno-Clovis SOI EJ TAZs will account for over 52% and over 62% percent for the EJ zones in the remainder of the county. (See Table 3-10)

Reliability

Reliability is estimated as a percent of level of service E or worse VMT inside the EJ target TAZs as well as for the Non-EJ TAZs. With 2035 and 2040 Build conditions, all EJ TAZs in the Fresno-Clovis SOI, the remaining county and countywide have a lower percentage of overall VMT operating at level of service E or worse when compared with Non-EJ TAZs. This was the goal. As shown in Table 3-11, the VMT at LOS E or worse is roughly 15% Countywide for all future scenarios. In future scenarios, both EJ and non-EJ areas have a reduction in the percentage of VMT at LOS E or worse when compared to the No Build Scenario. However, the EJ areas are about 5% higher than the Non-EJ areas. This is could be due to the fact that the congested parts of the freeways in the Fresno-Clovis SOI are mostly in EJ communities. It should be noted that freeway congestion on state highways falls under the jurisdiction of Caltrans.

Consumer satisfaction

Consumer satisfaction is defined as the condition where consumers can largely agree that their transportation needs are being met in a safe, reliable, efficient and cost-effective manner. The goal is for EJ TAZs to have less Vehicle Hours of Delay (VHD) than the Non-EJ TAZs. When there is less delay, there is less congestion on the roadway. The criterion is estimated by the percent change between 2008 and 2035 and 2040, in

Table 3-11: Percent Average Daily Vehicle Miles Traveled (VMT) LOS E or Worse Conditions

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Average Daily VMT					
Fresno-Clovis SOI	7,261,900 (3,690,300)	9,899,400 (4,970,800)	9,668,300 (4,944,500)	10,373,400 (5,189,500)	10,145,100 (5,171,100)
Remainder of County	5,331,100 (5,605,200)	8,141,200 (9,026,900)	7,762,100 (8,932,800)	8,593,500 (9,537,100)	8,140,500 (9,435,500)
Countywide	12,592,900 (9,295,500)	18,040,600 (13,997,700)	17,430,400 (13,877,400)	18,966,900 (14,726,600)	18,285,600 (14,606,500)
Average VMT LOS E or Worse					
Fresno-Clovis SOI	1,553,300 (568,600)	1,277,800 (891,100)	1,185,800 (868,100)	1,548,700 (1,023,700)	1,391,500 (981,700)
Remainder of County	521,000 (72,300)	1,141,200 (540,100)	1,174,000 (536,400)	1,261,300 (622,000)	1,273,300 (597,900)
Countywide	2,074,300 (640,900)	2,419,000 (1,431,300)	2,359,800 (1,404,500)	2,810,000 (1,645,700)	2,664,800 (1,579,600)
Average VMT LOS E or Worse					
Fresno-Clovis SOI	21.39% (15.41%)	**12.91% (17.93%)**	**12.26% (17.56%)**	**14.93% (19.73%)**	**13.72% (18.98%)**
Remainder of County	9.77% (1.29%)	14.02% (5.98%)	15.12% (6.%)	14.68% (6.52%)	15.64% (6.34%)
Countywide	16.47% (6.89%)	13.41% (10.23%)	13.41% (10.23%)	14.82% (11.18%)	14.57% (10.81%)

Values represent VMT LOS E or worse designated as Non-EJ TAZs (EJ TAZs).
Bold designates where EJ VMT LOS E or worse is a higher percentage than the non-EJ percentage

Table 3-12: Average Vehicle Hours of Delay (VHD)

Mode	2008	2035 No Build	2035 Build	2040 No Build	2040 Build
Average Daily Vehicle Delay (hours)					
Fresno-Clovis SOI	69,811 (21,297)	24,207 (10,709)	23,057 (10,913)	29,704 (13,115)	27,736 (13,084)
Remainder of County	10,813 (476)	355,244 (4,541)	355,577 (4,518)	656,304 (10,947)	656,896 (10,897)
Countywide	80,623 (21,774)	379,451 (15,249)	378,633 (15,431)	686,008 (24,062)	684,633 (23,981)

Values represent vehicle hours of delay designated as Non-EJ TAZs (EJ TAZs).

the daily amount of trip delay in hours on roadway and transit projects. Trip delay refers the difference between the time a trip should take and the time it actually requires, or the difference between uncongested traffic (free flow) and some level of congestion. Although coordination with Caltrans is required for projects on the freeways, the Vehicle Hours of Delay (VHD) includes freeways throughout the county. See Table 3-12 above for the delay comparisons.

Conclusions

This section of Fresno COG's 2014 RTP attempts to determine the equitability of the RTP's proposed list of projects, as well as their overall cost/benefit to our inhabitants, especially on those living in disadvantaged neighborhoods. The results of the EJ Analysis show that in terms of overall equity, the 2014 RTP projects appear to distribute impacts evenly over Fresno County. In most cases, EJ communities fared better than non-EJ communities. There were only a few instances where

the EJ Communities did not fare better than the Non-EJ Communities in the EJ analysis.

It is widely known that transportation projects do not achieve immediate transportation goals, but frequently they will create fundamental changes on our physical and socioeconomic environment. Notwithstanding all the enhancements they create, it is inevitable that some transportation projects will produce negative impacts.

Although our EJ analysis focuses on racial minorities and the low-income populations, Fresno COG is very involved with programs for the elderly and disabled populations. Some of these include the Senior Taxi Scrip program, FTA Section 5310 grants (Transportation for Elderly Persons and Persons with Disabilities), Section 5316 grants (helping low-income commuters), Section 5317 grants (help for Americans with Disabilities) and consultation with Social Services Transportation Advisory Council (SSTAC). The SSTAC serves as an advisory body to Fresno COG regarding the transit needs of the transit dependent and transit disadvantaged persons, including the elderly, handicapped, and persons of limited means.

Although improvements are needed in a couple of areas, the analysis in the Environmental Justice Report confirms that the EJ communities are not "disproportionately burdened by high and adverse" effects and do share equitably in the benefits from the 2014 RTP/SCS.

Figure 3-5: Environmental Justice Areas (EJ-FHWA)

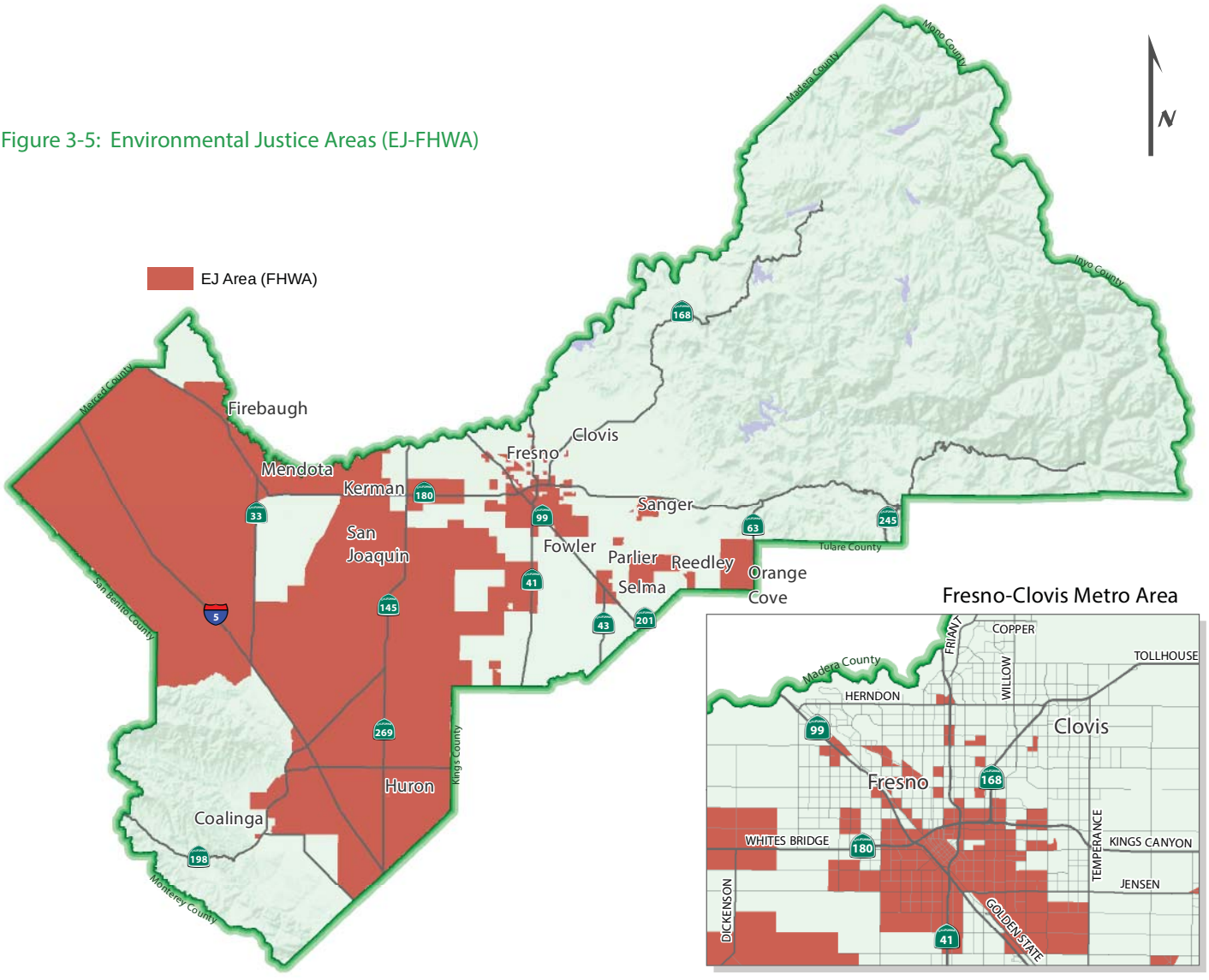


Figure 3-6: Environmental Justice Areas (EJ-TF)

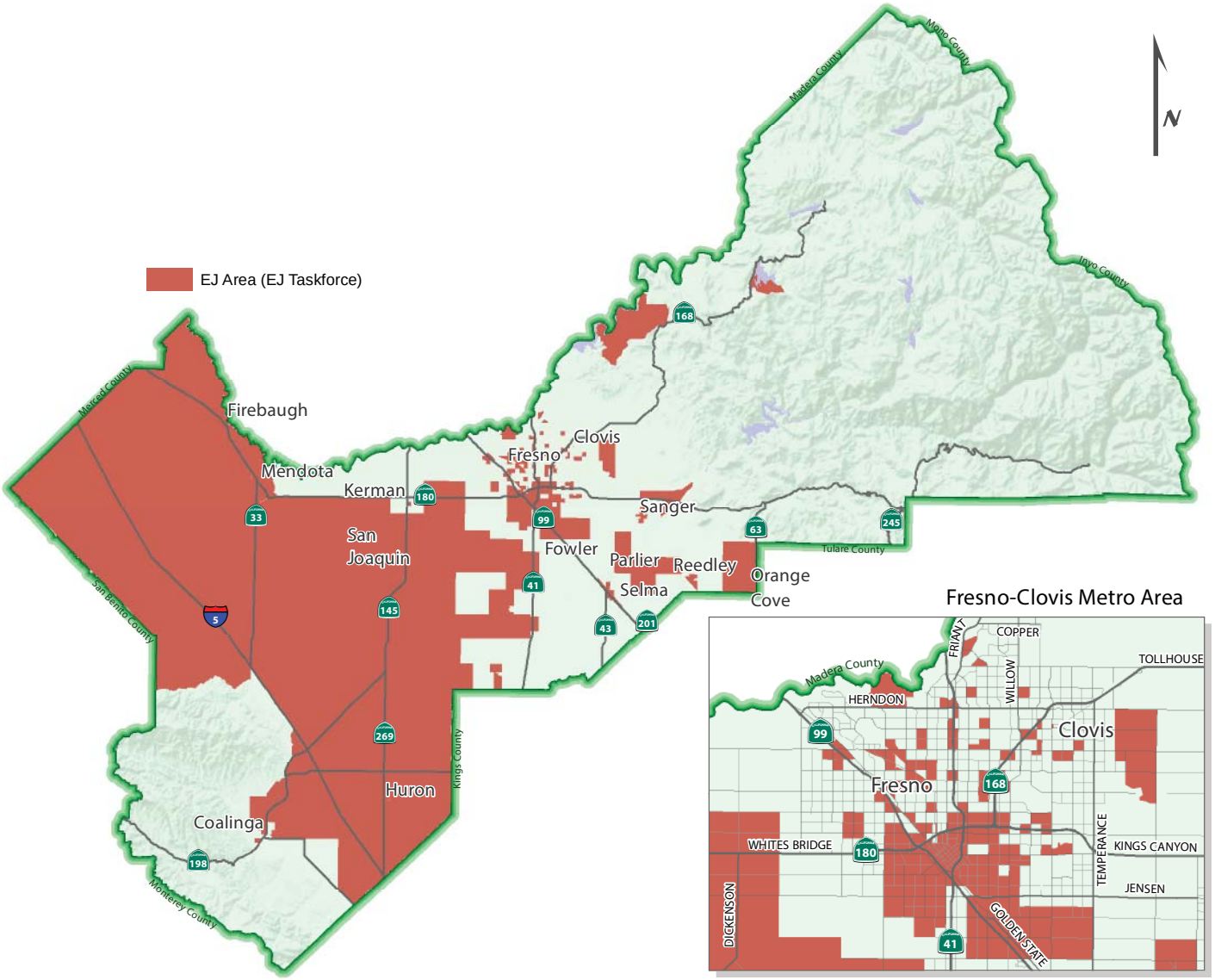


Figure 3-7: Areas of Interest - Urban Area

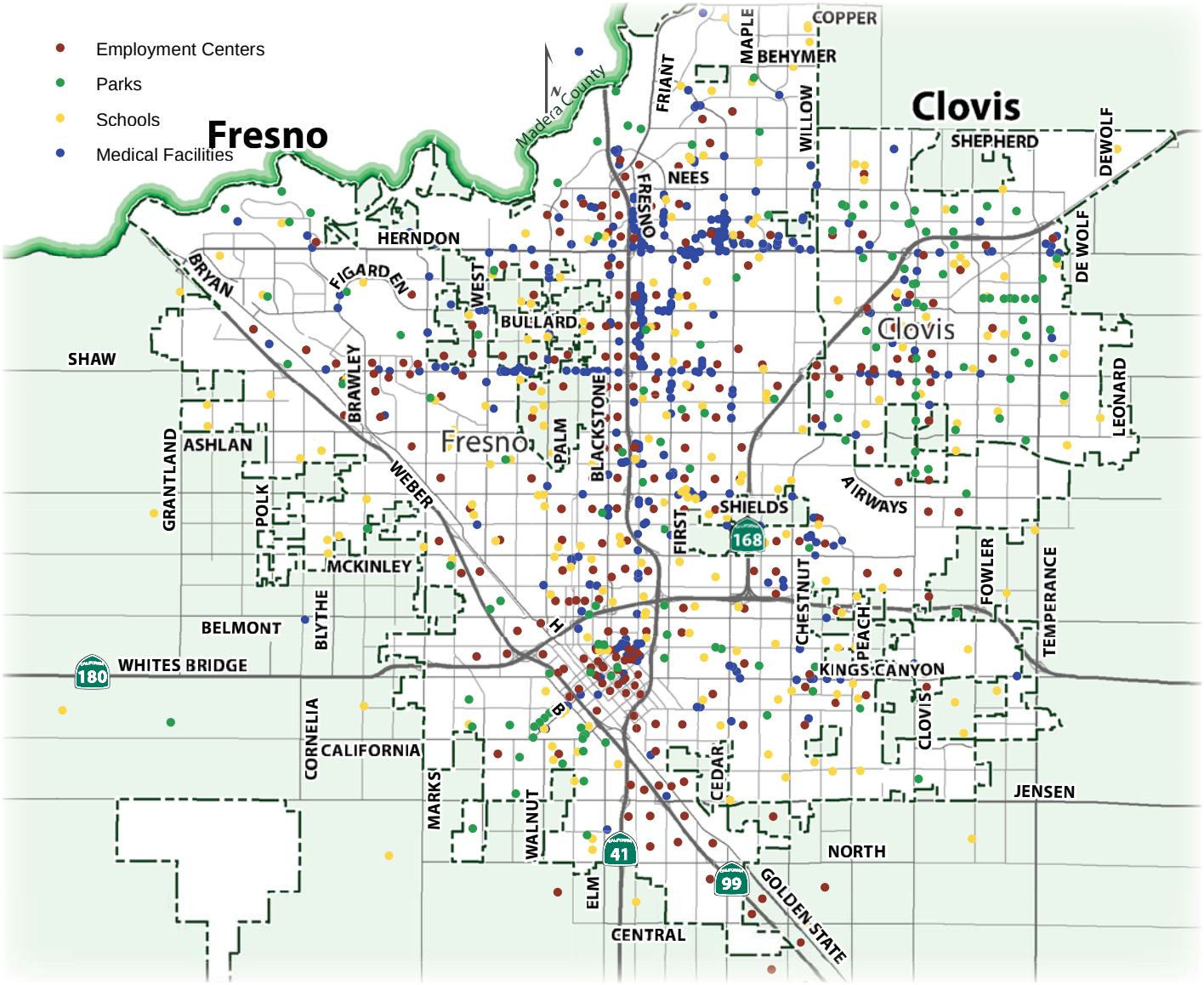


Figure 3-8: Areas of Interest - County

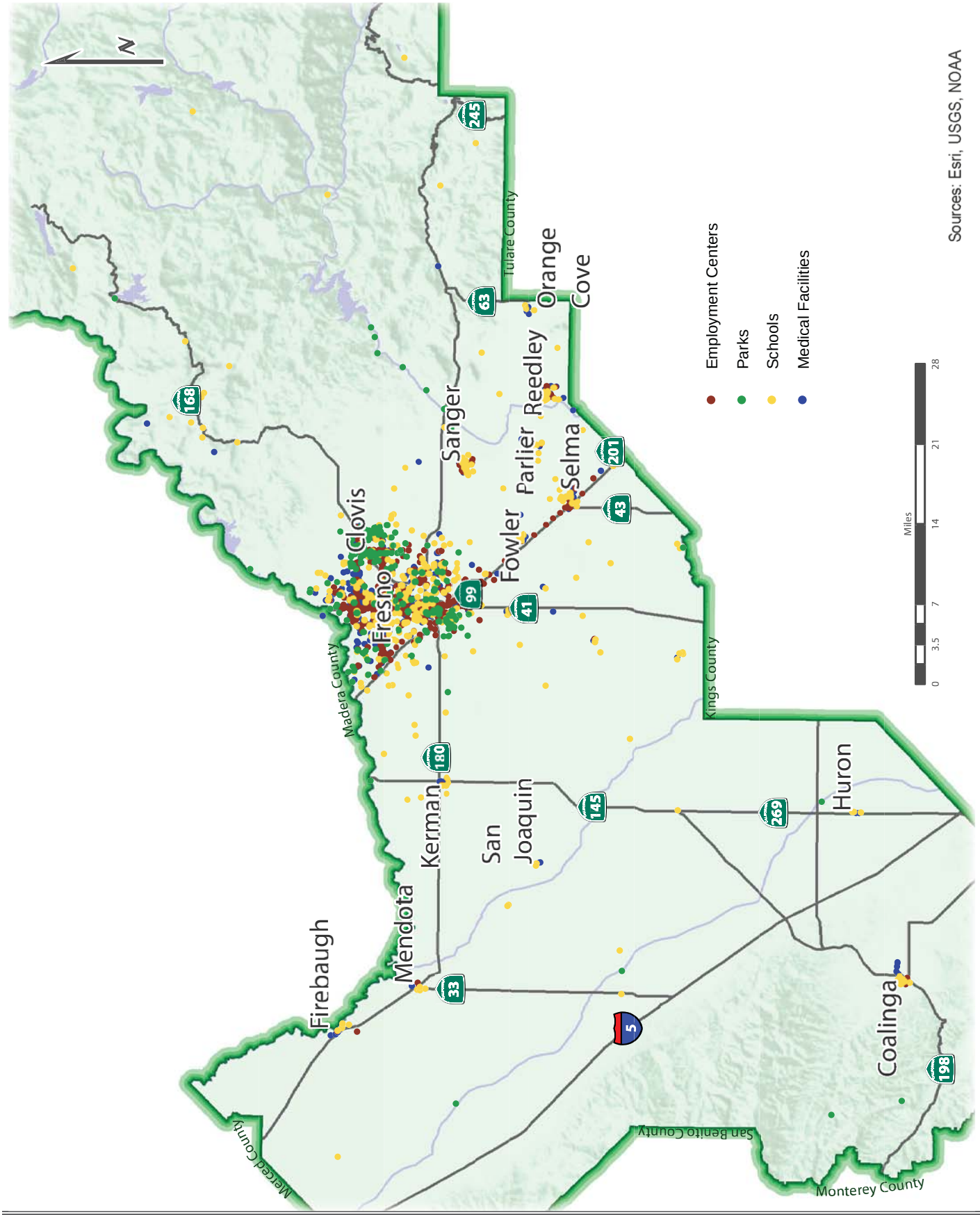
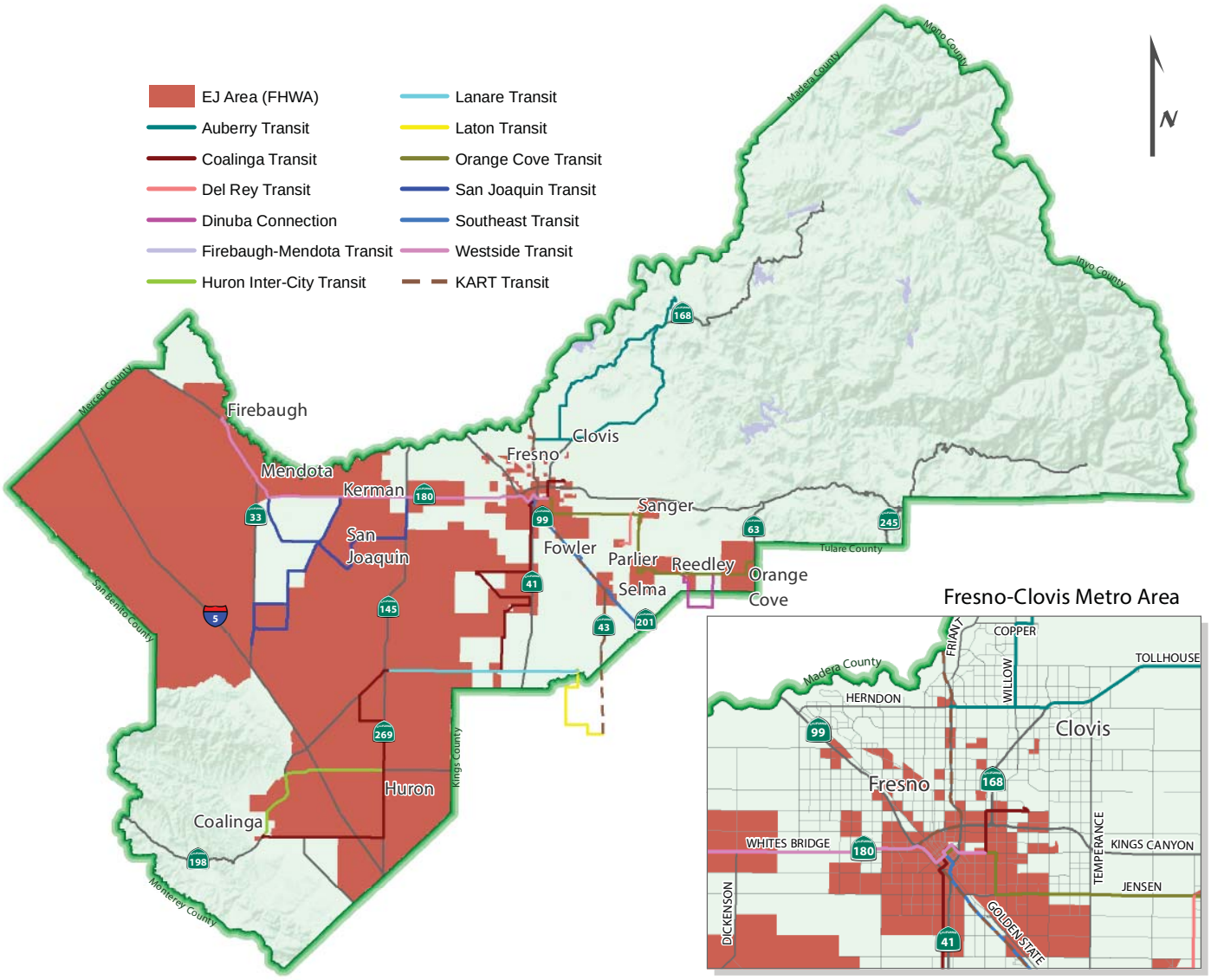


Figure 3-9: Communities Map with overlay of Fresno County Rural Transit Agency routes



Chapter 4

Reedley, California Spring Blossoms

Sustainable Communities Strategy:

People. Choices. Community.

While focusing attention on meeting Greenhouse Gas emission reduction targets, Fresno COG also established other important goals in its 2014 RTP/SCS, aimed at improving the overall quality of life in the region.

4.1 Sustainable Communities Strategy

Senate Bill 375 (SB 375), which went into effect in 2009, added statutes to the California Government Code to encourage planning practices that create sustainable communities. It calls for each metropolitan planning organization to prepare a Sustainable Communities Strategy (SCS) as an integrated element of the Regional Transportation Plan (RTP) that is updated every four years. The SCS is intended to show how integrated land use and transportation planning can lead to lower greenhouse gas (GHG) emissions from autos and light trucks. Fresno COG is including the SCS for the first time in its 2014 RTP. Figure 4-1 shows Fresno COG's SCS Development Process with adoption of the RTP/SCS in June of 2014.

The 2014 RTP/SCS seeks to guide the Fresno region toward a more sustainable future by integrating land use, housing, and transportation planning to create communities that are more compact, walkable, and transit oriented. Sustainability is defined as simultaneously meeting current economic, environmental, and community needs, while ensuring that the ability of future generations to meet their needs is not jeopardized. A prosperous economy, a healthy environment, and social equity are described as the "Three Es" of sustainability.

The path toward living more sustainably is clear: focus housing and job growth in urbanized areas where there is existing and planned transportation infrastructure, protect sensitive habitat and open space, invest in a transportation network that provides residents and workers with transportation options that reduce GHG emissions, and implement the plan through incentives and collaboration.

It is important to note that the 2014 RTP addresses vehicle miles traveled from a broader range of vehicles than those addressed in SB 375 – such as public transit buses, heavy duty trucks, and school buses. The SCS focuses only on the requirements of SB 375 which call for travel related GHG reductions for the specific vehicle classes of cars and light trucks. Other performance metrics related to GHG emissions are addressed in the balance of the 2014 RTP chapters where appropriate.

In terms of cars and light trucks, there are three primary GHG emissions reduction strategies developed by the State. The SB 375 SCS requirements address regional land use and housing accommodation in the context of transportation investments. In future years, the State will also require increased use of lower carbon fuels and increased fuel efficiency in vehicles.

Transportation strategies contained in the RTP – investing in public transit system, managing transportation demand, making transportation system improvements, and continuing to expand and improve bike and pedestrian facilities - are major components of the SCS. However, the SCS also focuses on the general land use growth pattern for the region, because geographical relationships between land uses—including density and intensity—help determine the need for travel.

In summary, under SB 375, an SCS must:

- Identify future land use patterns;
- Identify areas to accommodate long-term housing needs as well as 8-year housing needs;
- Consider resource areas and farmland;
- Identify transportation needs and the planned transportation network;
- Set forth a future land use pattern to meet GHG emission reduction targets

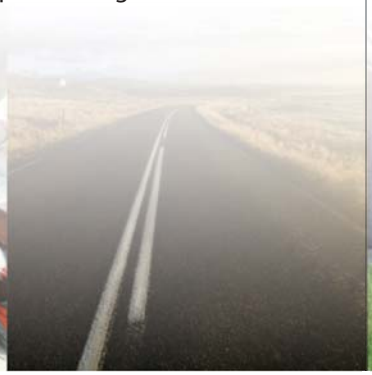
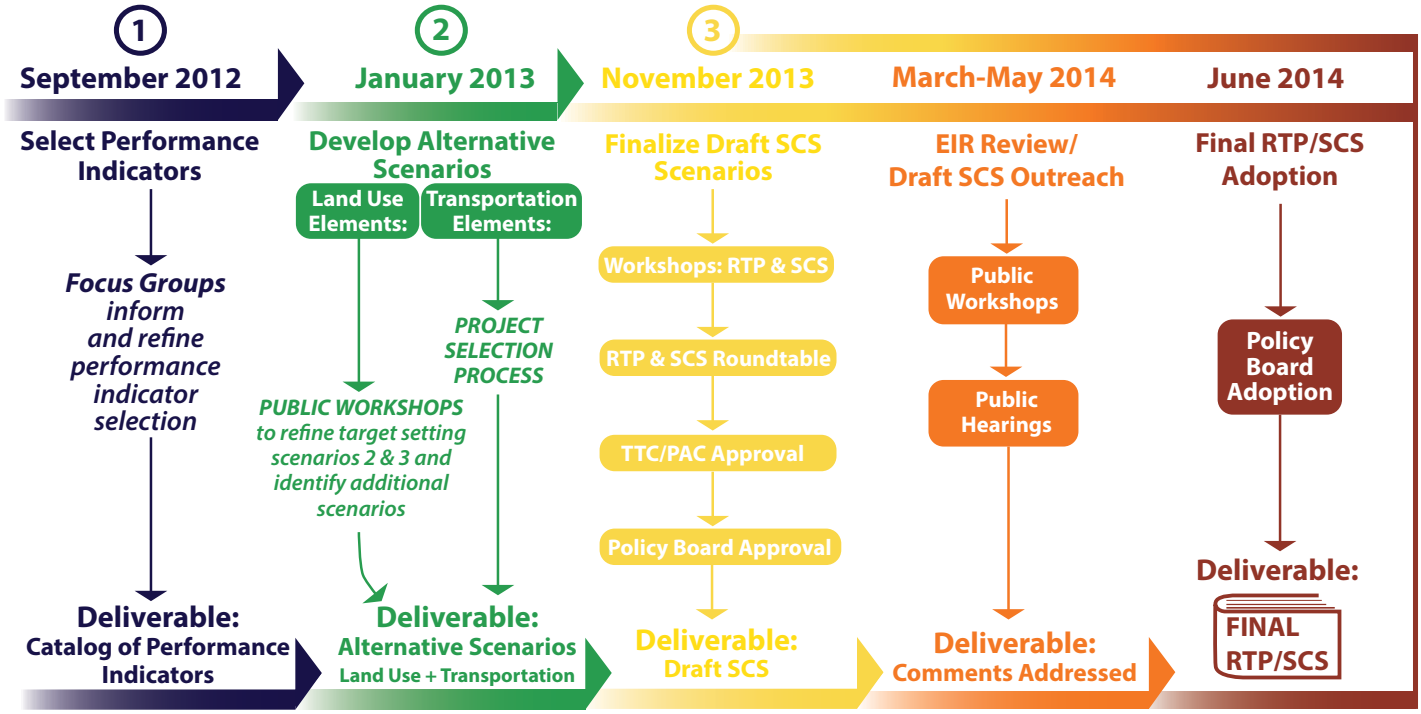



Figure 4-1: Fresno COG's SCS development process and timeline



SCS requirements do not mean that the SCS creates a mandate for certain land use policies at the local level. SB 375 specifically states, "Neither a sustainable communities strategy nor an alternative planning strategy regulates the use of land, nor, except as provided by subparagraph (J), shall either one be subject to any state approval. Nothing in a sustainable communities strategy shall be interpreted as superseding the exercise of land use authority of cities and counties within the region." (Government Code Section 65080(b)(2)(K)). Rather, the SCS provides a regional policy foundation that local governments may build upon as they choose.

Because local land use agencies have land use authority, there is no requirement in the SB 375 legislation for cities and counties to change or amend their general plans to be consistent with the SCS. Local jurisdictions maintain the discretion and will be solely responsible for determining consistency of any future projects with the SCS, including discretion in certifying the environmental review for a project, regardless of eligibility for streamlining.

Cities and Counties have and will continue to be involved in the SCS planning process and will be encouraged to recognize the land use and transportation policies developed in the SCS. Federal and State transportation funds go through the MPOs to the jurisdictions, so there certainly is an implication for collaboration and working together.

4.2 SCS Co-benefits

It is intended that the 2014 RTP/SCS will produce benefits beyond simply reducing GHG emissions. The 2014 RTP/SCS will help the region contend with many ongoing issues across a wide range of concerns, including placemaking, the environment, responsiveness to the marketplace, and mobility:

- The 2014 RTP/SCS promotes development of better places to live and work through measures that encourage more compact development, varied housing options, bike and pedestrian improvements, and efficient transportation infrastructure.

- The demographic profile of the region is changing and the market for housing is changing with it. Residents will be looking for a "value lifestyle" in which

both housing and transportation costs are minimized even as they maintain a high-quality of life. Strategies focused on high-quality places, compact infill development, and more housing and transportation choices provide a response to these newly emerging market forces.

- By including options that create more compact neighborhoods and placing destinations closer to homes and closer to one another, the 2014 RTP/SCS's strategies can reduce the cost of development for taxpayers and reduce everyday costs of housing and transportation.

- Reducing the footprint of new development protects farmland and open space.

- The 2014 RTP/SCS does not envision wholesale redevelopment of the region. The vast majority of neighborhoods and business districts that will exist in 2035 already exist today, and most of them will be unchanged in the next 20-25 years. Rather, the 2014 RTP/SCS envisions a new development pattern for new neighborhoods and revitalized neighborhoods and business districts that will build upon current patterns to give residents more choices and opportunities as they consider where to live and work.

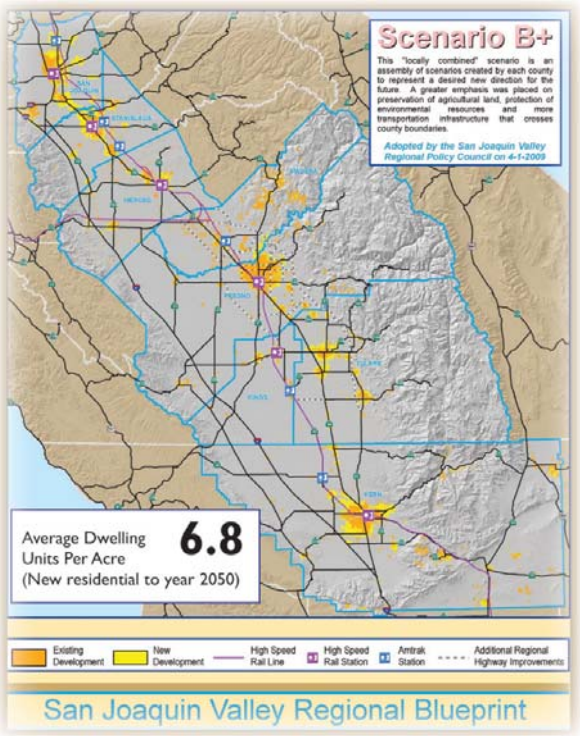
4.3 San Joaquin Valley Blueprint

The 2014 RTP/SCS is the latest refinement of the evolving Blueprint process that began in 2006. The Merced County Association of Governments, in coordination with the Great Valley Center, led the Valleywide Blueprint effort on behalf of the San Joaquin Valley organizations at its inception. Fresno COG assumed the lead agency role from the adoption of the Blueprint, through the development of the Blueprint Roadmap, which included the documentation of the Blueprint Planning Process, a Guidance Framework, an Institutional Arrangements Whitepaper and the web-based Blueprint Planners Toolkit. Seven Valley COGs and one RTPA participated in the Valley Blueprint: the Fresno Council of Governments (Fresno COG), the Kern Council of Governments (Kern COG), the Kings County Association of Governments (KCAG), the Madera County Transportation Commission (MCTC), the Merced County Association of Governments (MCAG), the San Joaquin Council of Governments (SJCOG), the Stanislaus Council of Governments (StanCOG), and the Tulare County Association of Governments (TCAG).

On April 1, 2009, the San Joaquin Valley Regional Policy Council, the decision-making body for the Valleywide process, approved Scenario B+ and 12 Smart Growth Principles, concluding the planning phase of the San Joaquin Valley Blueprint planning process. The Valley Blueprint is a vision for the future of the San Joaquin Valley, in which less land is consumed for development, more resources are preserved for future generations, distinctive communities are enhanced, and more travel choices are available.

Fresno COG conducted extensive public outreach to provide residents with the opportunity to participate in planning the future growth of the county and its cities. During Phase 1 of the Blueprint process, Fresno COG conducted community values and vision workshops in all 15 cities. Over 2,600 participants attended these workshops and outreach events. In Phase 2 Fresno COG conducted 20 public workshops throughout Fresno County to identify a preferred growth scenario for the county.

The Fresno COG Policy Board directed and oversaw the Fresno COG Blueprint process, and ultimately selected a preferred growth scenario. The Policy Board was advised by the Fresno COG Blueprint Roundtable throughout the process. The Roundtable met monthly during the visioning and growth scenario planning phases to discuss and make recommendations on the Blueprint. Fresno COG Policy Board endorsed the Fresno Blueprint concept on May 29, 2008.



The Fresno COG preferred growth scenario is referred to as the "Hybrid" concept because it is based on elements of several alternative growth scenarios originally developed by the Fresno COG Blueprint Roundtable. The Hybrid concept includes a high-capacity, multi-modal transportation network that provides connectivity throughout the region. It involves a mix of infill development, greenfield development, and redevelopment. One of the principal objectives of the preferred growth scenario is to provide for employment centers to serve the west side of Fresno County, either along the I-5 corridor or in other appropriate locations. The preferred growth scenario also discourages growth on strategic farmland and resource conservation/ open space land. By linking east-west transportation corridors to I-5 and balancing jobs and housing, the preferred growth scenario predicts lower VMTs than the status quo scenario. The Fresno COG preferred growth scenario estimates that by 2050 countywide average residential densities for new residential growth will be 8.0 dwelling units per acre. The density of new growth in the Fresno-Clovis Metropolitan Area (FCMA) will be slightly higher, while the average density of new growth in the non-FCMA areas will be lower.

The Blueprint in many ways was a precursor to the growth alternative scenarios developed in the SCS process. The extensive public outreach conducted for the Blueprint and the resulting shared principles support and guide the SCS process.

4.4 Targets for Reducing Greenhouse Gas Emissions

As part of its mandate under SB 375, in 2010, the California Air Resources Board (CARB) set specific GHG emission reduction targets for cars and light trucks for each of the state's 18 metropolitan planning organizations from a 2005 base year. The GHG targets set for the Fresno region call for a 5 percent per capita reduction by 2020, and a 10 percent per capita reduction by 2035.

SB 375 requires that Fresno COG demonstrate in its SCS that GHG emission reduction targets will be met for 2020 and 2035. If not, then an Alternative Planning Strategy (APS) shall be prepared to demonstrate how the targets can be met through the alternative strategies in the APS. Fresno COG will be able to meet the targets set by the CARB through its 2014 RTP/SCS as shown in the following table:

Table 4-1: Greenhouse Gas Reduction Targets

Year	Per Capita GHG Reduction Targets	Fresno COG Per Capita GHG Reduction
2020	5%	9%
2035	10%	11%
2040	NA	12%

Fresno COG will continue to update modeling tools and planning assumptions to reflect the latest information available. Should the likely future development pattern change, this would be reflected in the next regional growth forecast and SCS land use pattern. Fresno COG will also continue to improve modeling capabilities and update modeling assumptions to reflect the most recent published and accepted data regarding changes in travel behavior and technological advances.

4.5 Creating the SCS Scenarios

Fresno COG's SCS scenario process was initiated in August 2012. Four land use scenarios were developed through an open and engaging public process. Several transportation project scenarios were also initially created, which were eventually narrowed down to one project list for all the land use scenarios.

The four scenarios submitted to the Fresno COG Policy Board for consideration:

A **Public input from November 2012 workshop** proposed by public

B **Current planning assumptions** proposed by member agencies

C **Foothill growth to city of Fresno** proposed by RTP Roundtable

D **Foothill growth to existing communities** proposed by coalition of community organizations (completed after public outreach workshops)

The scenarios were designed to explore and clearly convey the impact of both where the region grows over the next 21 years—to what extent growth is focused within existing cities and towns, and how it grows—the shape and style of the neighborhoods and transportation systems that will shape growth over the period.

The Fresno COG Policy Board selected Scenario B as the preferred SCS scenario for the Fresno County region in November 2013.

Growth Forecast

Fresno County is now home to nearly 1 million people. The County is expected to accommodate an additional 388,076 people during the period 2008 – 2035, increasing to a total population of 1,300,597 in 2035, with equally significant housing unit and employment growth. This future growth will put additional pressure on an already congested transportation system, on communities and neighborhoods that have been in existence for many decades, and on the region's natural environment.

The 2014 RTP/SCS depends heavily on an accurate and credible forecast for future growth in population, housing, and employment. The eight county-wide MPOs selected The Planning Center|DC&E and Arthur C. Nelson, PhD. to prepare growth forecasts to be used in the SCS.

Table 4-2: Forecasts for Fresno County 2008-2040, Preferred Scenario

Year	Household Population	Housing Units	Employment
2008	894,270	310,579	345,816
2020	1,059,233	363,142	363,581
2035	1,272,410	434,519	427,727
2040	1,343,709	458,330	449,111

The forecast models have been developed to allow each MPO to update the underlying data each year as new data are published by state and federal agencies. The ability to update is an important component of the forecast model as updating the models over the next few years will allow the forecasts to better capture demographic characteristics that return to trend and those that are at a new normal.

Three demographic measures form the primary forecasts: household population, housing units, and employment. The forecasts developed as part of the 2014 RTP/SCS are shown in Table 4-2. It is important to note that the population and employment forecasts were held constant for each SCS scenario and were the basis for the spatial distribution of land use in each scenario.

SCS Modeling

Fresno County will meet GHG reduction targets established by the CARB by focusing housing and employment growth in urbanized areas, protecting sensitive habitat and open space, and investing in a transportation system that provides residents and workers with transportation options. The determination that Fresno COG will meet the CARB GHG reduction target is based upon the modeling methodology described below.

In Fresno COG's 2014 RTP/SCS process, "Envision Tomorrow" was used to develop future land uses for the scenarios. The resulting land uses from Envision Tomorrow were input into the travel demand forecast model referred to as the Model Improvement Program (MIP) model to estimate vehicle trips (i.e. every home or office will generate "x" number of vehicle trips). Then, the output from the transportation model was used as input to the air quality model EMFAC2011 to determine the amount of GHG emission reductions.

Envision Tomorrow is a land-use scenario planning tool that uses development types to model possible future development patterns, called scenarios. In any given land-use scenario, parcel-level planning areas expected to acquire new development are assigned a development type, which determines the number and types of housing and employment projected to develop in that area. The aggregation of these areas, controlled to reflect Countywide targets for population and employment, reflects one particular SCS scenario for the Fresno County region.

The four land-use scenarios were developed for the 2014 RTP/SCS process, representing different growth strategies and applications of smart-growth principles. The effects of these strategies are manifest in the relative growth patterns and growth allocations reflected in the four scenarios—for example, scenarios that reflect a strong preference for compact development will contain more high-density development types and will generally exhibit smaller growth footprints on average.

The growth scenarios from the SCS process were revised and modified many times based on inputs from the public and stakeholders. Many iterations of each of the scenarios were then run through the models before scenarios were finalized.

Fresno COG's 4-step travel demand model was used in combination with EMFAC2011 to estimate GHG emission. The 4-step traffic model includes trip generation, trip distribution, mode choice and trip assignment. The improved Fresno COG traffic model is more sensitive to smart growth principles and incorporates the 4 Ds: density, destination, diversity and design. With the forecast social economic data derived from the land use pattern produced by Envision Tomorrow, and the proposed transportation network, the traffic model estimates vehicle miles traveled by the region, and provides information such as congestion level, speed, transit ridership, and travel by different modes, etc.

Please refer to the "Fresno COG technical methodology" memo submitted to the ARB for more information regarding how Fresno COG modeled the GHG emission in the 2014 RTP/SCS. The traffic model documentation is available in Appendix J. Documentation for the EMFAC2011 can be found at: www.arb.ca.gov.

4.6 SCS Public Participation

SCS Public Participation Requirements

There are a few public outreach requirements spelled out in Senate Bill (SB) 375. Requirements include the development of a Public Participation Plan and conducting consultation with specific types of agencies during the development of the SCS. It also requires that each Planning Agency conduct informational meetings and workshops for elected officials and member of the public during development of the SCS and once the draft SCS is released for public review and comment.
See RTP Chapter 2 for detailed information regarding the following Public Participation Activities, as well as Appendix H.

Requirement #1:

The MPO shall adopt a Public Participation Plan in advance of developing an SCS and/or APS to include the following: Outreach efforts encouraging the active participation of a broad range of stakeholders in the planning process, consistent with the agency's adopted Federal Public Participation Plan. This includes, but is not limited to affordable housing advocates, transportation advocates, neighborhood and community groups, environmental advocates, home builder representatives, broad-based business organizations, landowners, commercial property interests, and homeowner associations.

Requirement #2:

Regional public workshops with information and tools providing a clear understanding of policy choices and issues. At least one workshop in each county. At least three workshops for counties with a population greater than 500,000. To the extent practicable, each workshop shall include urban simulation computer modeling to create visual representations of the SCS and APS.

Fresno COG's Public Participation Plans and Strategies

Fresno COG's Public Participation Plan was adopted by the COG Policy Board in March of 2012. Two additional, complimentary strategies were then developed specific to the development process of the RTP/SCS.

RTP Public Outreach Strategy

The Regional Transportation Plan Public Outreach Strategy established a process and outlined specific activities for communicating with the public throughout the RTP development process. The goals, strategies and methods outlined guided Fresno COG's efforts to build awareness of Fresno COG and the Regional Transportation Plan with particular emphasis on the Sustainable Communities Strategy.

Valleywide SCS Public Outreach Strategy

The eight San Joaquin Valley Metropolitan Planning Organizations (MPOs) elected to collaborate to develop and implement a Valleywide Public Outreach Strategy as well. In recognition of their shared interests and collaboration, the MPOs received a Proposition 84 grant for funding assistance with SCS modeling and public outreach. The purpose of this Valleywide SCS Outreach Strategy entitled "Valley Visions" was to provide a project identity and consistent messaging for the SCS, while supporting individual county outreach efforts. This strategy described the approach, target audiences, methods and priorities for Valleywide SCS Outreach.

The Regional Transportation Plan Public Outreach Strategy and the Valleywide SCS Outreach Strategy were presented, reviewed and approved in open meetings by Fresno COG's 35-member Regional Transportation Plan Roundtable, the Transportation Technical Committee, the Policy Advisory Committee and the

Fresno COG Policy Board. Copies of each public outreach plan or strategy are available on Fresno COG's website.

RTP Roundtable

A key to active and earnest public involvement was the formation of the Regional Transportation Plan Roundtable by Fresno COG to support COG staff and COG standing committees in their development and preparation of the 2014 RTP/SCS. The 35-member Roundtable, comprised of a representative from each local member agency, representatives of a wide variety of private and public sector stakeholder groups and agencies, and the public-at-large. (See Table 2-1 in RTP Chapter 2 for the Roundtable representation.) The RTP Roundtable met monthly beginning August 2012. Their comments support the final decision on the RTP by the Fresno COG Policy Board. At its September 18, 2013, meeting, after over a year of meetings, the RTP Roundtable voted 11-6 to endorse Scenario B for inclusion in the SCS.

18 Regional Community Workshops were held throughout Fresno County:

Community Workshop (November 2012)

Our first Sustainable Communities Strategy community workshop became the birthplace of Sustainable Communities Strategy (SCS) Scenario A. Held November 2012, it was attended by approximately 150 people from around Fresno County. At the workshop participants were surveyed via real-time voting technology using "clickers". They were asked to rank transportation spending priorities and issues of importance related to the development of Sustainable Communities Strategies.

Once the surveying was completed, attendees participated in a hands-on mapping exercise, placing colored chips on maps of the Fresno County region, creating visual representations of their own land use and transportation choices. Presentation and mapping materials were available in English and Spanish, and Spanish and Hmong interpreters worked with participants who requested their services. Participants then presented their area map designs to other workshop attendees.

Community Workshops (May-July 2013)

Fresno COG completed a round of 10 community workshops held throughout Fresno County beginning in May 2013 that gave residents an opportunity to hear more about Fresno COG and the region's RTP/SCS Strategy. The workshops were conducted in five different languages: English, Spanish, Hmong, Punjabi and Laotian. The combined workshop attendance totaled approximately 330 people, with 262 participating in a "clicker exercise" that encouraged participants to consider transportation funding needs and the relationship of land use and transportation.

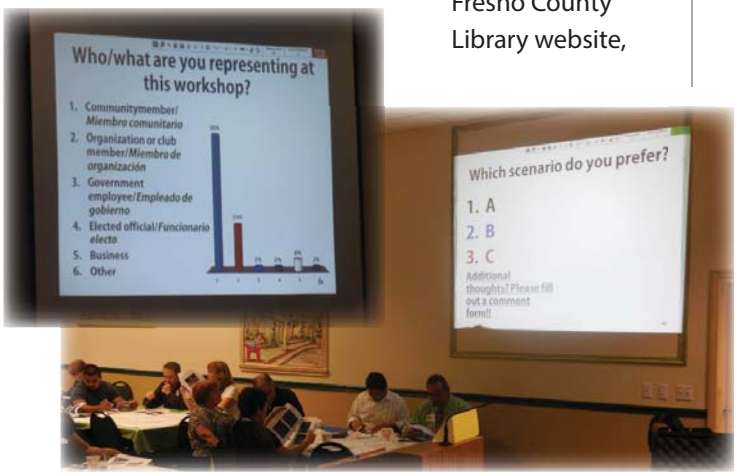
Presentation materials used for the workshops were also available in all five languages on the Fresno COG website at www.fresnocog.org/rtp from May through July 2013. The "clicker exercise" conducted at the workshops was also available in three languages on the same webpage for interested community members that were unable to attend one of the workshops.

Scenario Workshops (August-September 2013)

In response to the SB 375 workshop requirement, Fresno COG hosted six workshops and one video conference presentation of Sustainable Communities Strategy Scenarios A, B and C in August and September 2013. The

workshops were held in Fresno, Kingsburg, Kerman, Huron and Clovis for the general public with free transportation, child care and dinner provided. The sixth workshop was co-hosted by the American Lung Association for medical professionals and health organizations at UCSF Fresno. A video conference of the presentation was requested by the City of San Joaquin with their preferred scenario selections submitted via hard copy.

COG staff also developed complete online versions of the presentation in English and Spanish that were accessible through the COG website at www.fresnocog.org and the Fresno County Library website,



and are available on YouTube. Online participants were asked to view the presentation and then click into the link provided to select their preferred scenario and submit comments. The online presentation and survey was available to the public for participation until September 18, 2013. During each of the workshops Sustainable Communities Strategies A, B and C were presented and explained using graphic comparison charts of the 10 indicators identified in August 2013.

Demographic data was requested via clicker technology from each participant. At the completion of the presentation, following a question and answer session, participants were asked to select their preferred scenario and to submit any comments they had regarding the scenarios. Summaries of the demographic and scenario preference selections, and all of the comments received were submitted to the RTP Roundtable, TTC, PAC and Policy Board for review and consideration. Of the 348 community workshop attendees, 251 chose a personal preferred scenario from the A, B, and C scenario data presented. Of those 251 respondents, 19% chose Scenario A, 24% chose Scenario B and 57% chose Scenario C. No information was presented addressing the achievability of the scenarios.

A fourth Scenario

During the development of a fourth scenario, Scenario D, the process and the scenario itself were vetted before four standing committees and were available online on the Fresno COG website for over two months throughout October and November of 2013. Staff also met with our member agency representatives at the local agencies and public presentations were given before many of their city councils, and before the Board of Supervisors. Those presentations allowed Fresno COG staff to share the scenario indicator results and information, and answer questions regarding the RTP/SCS.

Additional Public Participation

Community Survey:

In addition to what was required by SB375, Fresno COG commissioned a Scientific Survey of the Fresno County Community with AIS Market Research to conduct a random sample survey of Fresno County residents regarding their community values and transportation needs. Because of the way the respondents were selected, the results are representative of the county's population as a whole. The completed results were reported to the RTP Roundtable, TTC, PAC and Board, to be used during development of the RTP/SCS. Some highlights of the survey revealed that the top 10 Transportation Spending Priorities include (in ranked order):

1. **Repair potholes on city streets and/or rural roads**
2. **Improve transportation for the disabled**
3. **Improve transportation for the elderly**
4. **Resurface city streets and/or rural roads**
5. **Resurface highways and/or ramps**
6. **Reduce traffic congestion on highways and/or ramps**
7. **Repair/maintain sidewalks pedestrian walkways, and trails**
8. **Reduce traffic congestion on streets/roads**

9. Expand local bus service routes

10. Improve/increase local bus service

Focus Groups:
In order to prioritize a list of close to 40 indicators selected by COG staff, six focus group meetings were held to solicit input from the public and stakeholders. The focus groups were: transportation, environment, health, business, social equity and natural resources. The RTP Roundtable committee members were also polled. In all, 54 ballots were received. The top 10 performance indicators as a result of the focus groups and polling are as follows:

These 10 indicators were used to evaluate and report the impact of the SCS scenarios. Comments from the focus group members were also received and noted for the development of future Sustainable Communities Strategies.

During the entire process, Fresno COG's website hosted dedicated pages, calendar listings, agendas, data, links, presentations, results, videos, minutes, committee processes and various other listings. In addition, staff gave presentations to community and business groups, chambers, and service groups as requested.

For complete descriptions of the 2014 Regional Transportation Plan public outreach conducted during the development of the Sustainable Communities Strategy please see RTP Chapter 3, and Appendix H.

4.7 Land Use Scenarios and Outcomes

Fresno COG's SCS process was kicked-off in August 2012. Several focus group meetings were held and a list of priority performance indicators were selected by stakeholders and interested parties. In November 2012, a public workshop was held where the participants were asked to provide input regarding where growth should occur. The public input was then digitized, analyzed and converted into Scenario A. Scenario B was inherited from the 2012 target-setting process. Fresno COG staff met with each of the 15 cities and the County, and verified the growth allocation in Scenario B based on their latest planning assumptions. Scenario C was proposed by the RTP Roundtable Committee to study the "what if" impact if there is no growth in the foothill areas north and east of Fresno.

Scenarios A, B, and C were presented to the public in August 2013 at a series of public workshops, on Fresno COG's website and through other media channels. The public was polled regarding their preference of the scenarios. Scenario D was proposed by a coalition of community based organizations after scenario A, B and C were presented to and vetted through the public outreach process. Scenario D, which was developed later, had only COG committee review.

The four scenarios for consideration by the COG Policy Board are shown in Figure 4-2 and described below:

Scenario A

Scenario A was based on public input from the November 2012 workshop conducted by the COG. Participants were asked to place chips at locations where growth is preferred. They also provided input about types of development at the preferred locations.

Scenario B

Scenario B was developed to reflect current planning assumptions; it was developed after extensive outreach to the cities and the county about their growth plans and planning assumptions for land uses likely to be developed

Figure 4-2: SCS Scenario Comparisons

Scenario >	A	B	C	D
Central Theme	Public input from November 2012 workshop	Current planning assumptions	Foothill growth to City of Fresno	Foothill growth to existing communities
Proposed By…	Public	Member Agencies	RTP Round Table	Coalition of Community Organizations
Defining Characteristics	• Considers public input from November 2012 workshop • Growth in the metro area conforms to historical trend • Some rural communities receive much higher growth	• Follows current general and specific plan updates • Growth allocation follows historical trend • Includes development in Friant Ranch, Millerton, and the proposed pharmacy school	• Additional 4% of countywide growth allocated to City of Fresno along corridors and activity centers • Unincorporated growth constrained to 10 existing communities; little change in incorporated cities • Development in Friant Ranch, Millerton, and the proposed pharmacy school not included	• Developed by coalition of community organizations • Increased redevelopment and higher density for new growth • Growth reduced from the foothill communities and reallocated to existing cities and communities • Development in Friant Ranch, Millerton, and the proposed pharmacy school not included
Communities with Significant Changes in Growth Allocation*	**Less Growth** • Clovis, Coalinga, Parlier, Sanger • Auberry, Friant Ranch, Millerton, Shaver Lake **More Growth** • Firebaugh, Fresno, Huron, Kerman, Kingsburg, Orange Cove, San Joaquin • Caruthers, Easton, Lanare, Laton, Raisin City, Riverdale, Squaw Valley	Each city/community receives growth based on historical trend	**No Growth** • Auberry, Friant Ranch, Millerton, Raisin City, Squaw Valley **More Growth** • Fresno	**No Growth** • Friant Ranch, Millerton **Less Growth** • Auberry **More Growth** • Biola, Bowles, Caruthers, Del Rey, Easton, Lanare, Laton, Raisin City, Riverdale, Tranquillity

*Compared to planning assumptions based on historical trend. Cities/communities not listed will receive growth approximately consistent with historical trend.

in the 2020 and 2035 horizons. Scenario B also included land uses based on the draft General Plan updates for Fresno and Clovis, both heavily influenced by the Valley-wide Blueprint goals.

Scenario C

Scenario C was proposed by the RTP Roundtable largely at the request of the community-based organizations who expressed that Fresno and Clovis plans were not 'ambitious' enough to make a significant impact on environmental issues. The Scenario would shift foothill growth from unincorporated Fresno County to the downtown and corridors in the City of Fresno.

Scenario D

A fourth scenario, D, was proposed by the community-based organizations and would shift foothill growth from unincorporated Fresno County to existing smaller communities and incorporated cities, as well as to downtown Fresno.

The Merits of Scenario B

Although all four scenarios meet the greenhouse gas emission reduction targets set by CARB, Scenario B represents a growth scenario that is both ambitious and achievable for the Fresno County region. The merits of Scenario B are summarized as follows:

- An ambitious plan for sustainability with significant advancements over the status quo
- A growth plan that acknowledges current planning assumptions and local land use authority
- On track to meet the goals set in the San Joaquin Valley Blueprint
- Meets the requirement of SB375.

- A realistic and feasible growth scenario that allows the Fresno County region to grow at its own pace and retain its own character

The Fresno COG Policy Board adopted Scenario B as the Prefered SCS scenario.

4.8 Scenario Outcomes

Once the four scenarios were created, computer models were used to estimate a broad set of land use, transportation, and environmental impacts across the four scenarios in order to facilitate comparison. Figures 4-3 through 4-12 compare the top 10 performance indicators for the four SCS scenarios.

Figure 4-3: GHG Emission Reductions compared to 2005

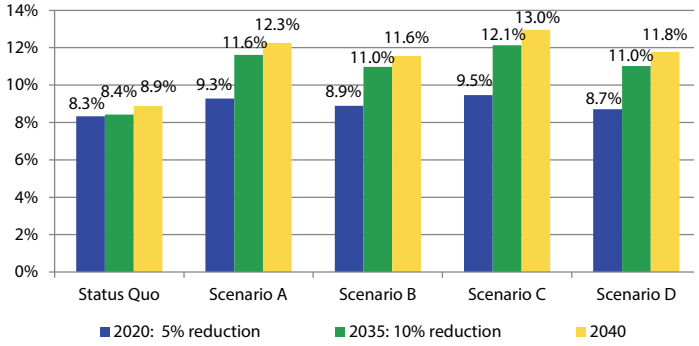


Figure 4-4: Housing types

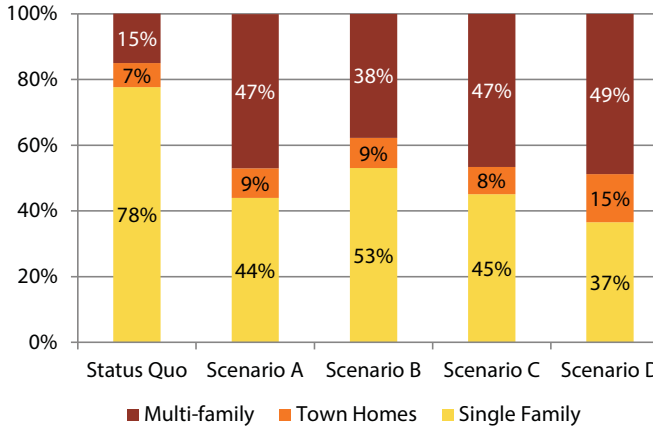


Figure 4-5: Residential density (units per acre)

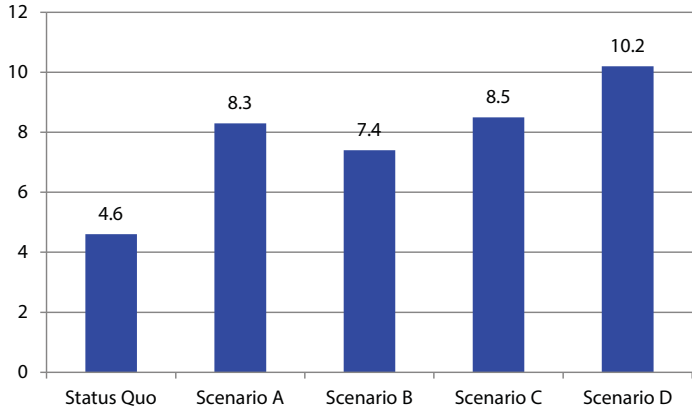


Figure 4-6: Compact development (persons per acre)

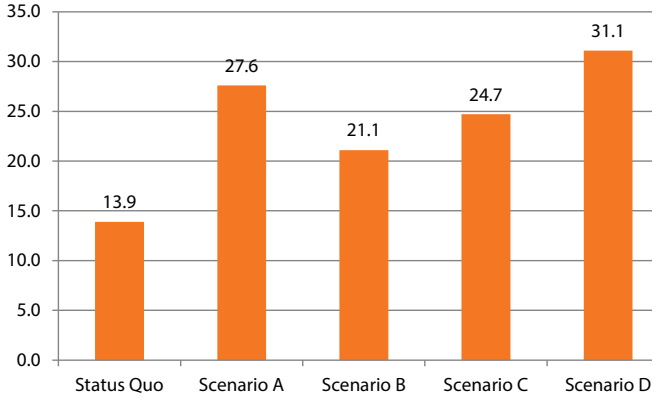


Figure 4-7: Transit Oriented Development (% growth within 1/2 mile of Bus Rapid Transit --2008-2035)

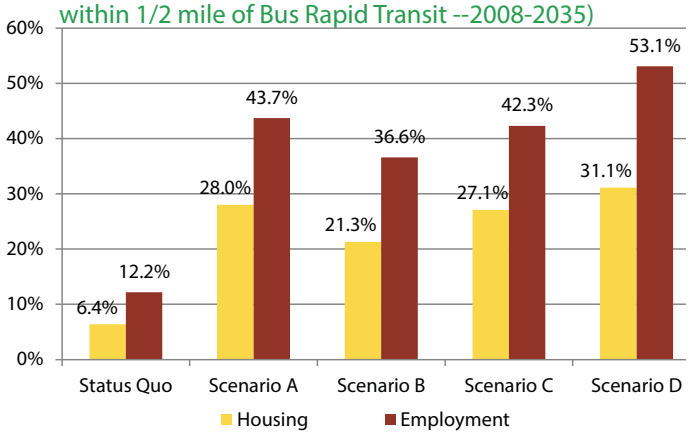


Figure 4-8: Land Consumption (acres)

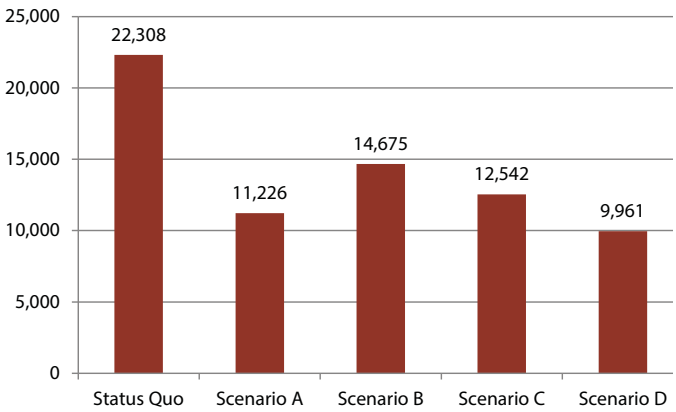


Figure 4-9: Important Farmland Consumed (by SB 375 definition, acres)

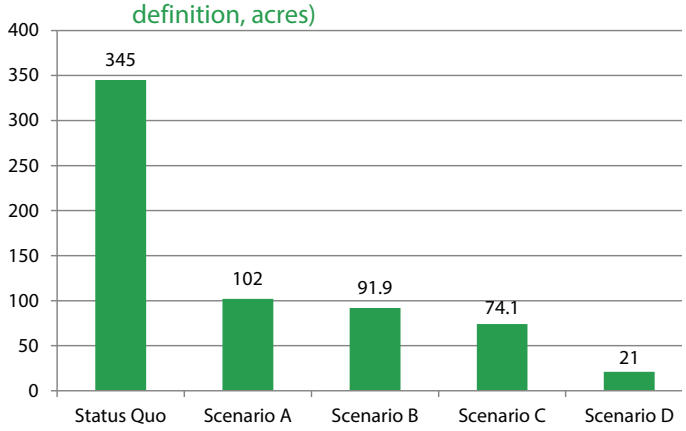


Figure 4-10: Daily Vehicle Miles Traveled (million miles)

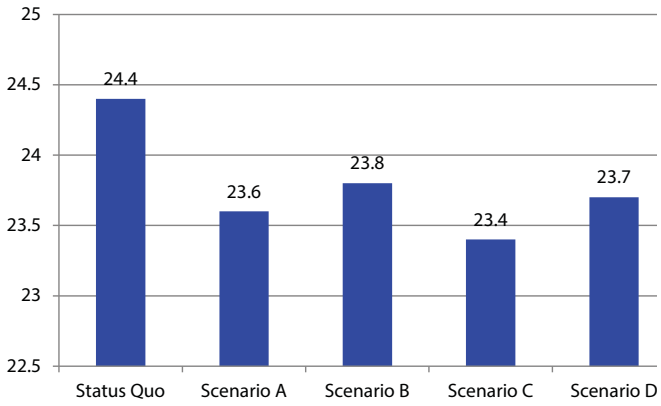


Figure 4-11: Criteria Pollutants emissions (tons per day)

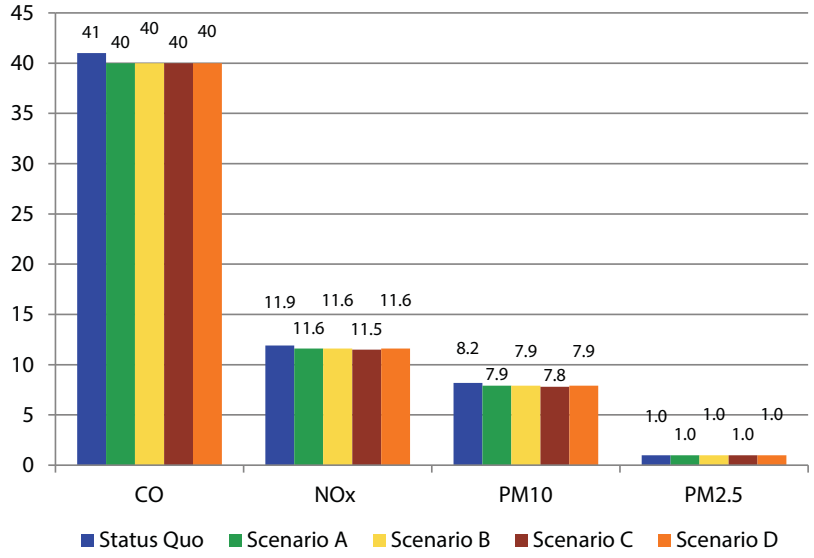
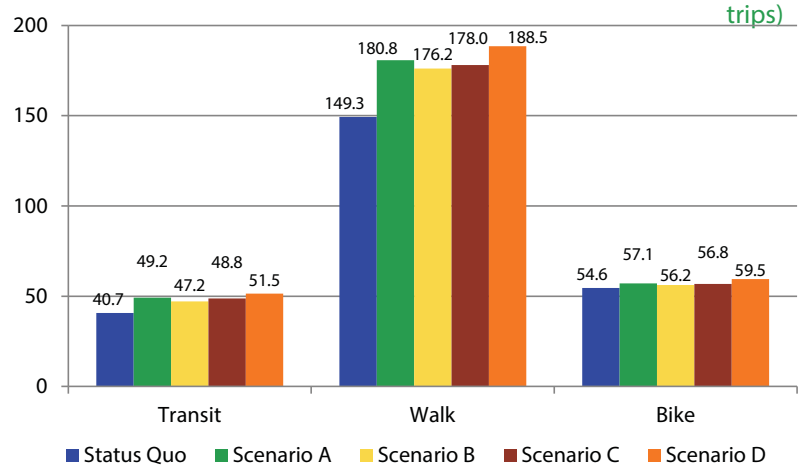


Figure 4-12: Active transportation and transit travel (thousand person trips)



As each of these metrics was measured across the scenarios, a clear improvement in impacts was observed by each scenario compared to the status quo. For example, compared to the status quo land consumption of 22,308 acres to accommodate growth to 2035, Scenario D consumed 9,961 acres; Scenario A consumed 11,226 acres; Scenario C consumed 12,542 acres; and Scenario B consumed 14,675 acres. All indicators showed a reduction compared to the status quo and, most importantly, all four scenarios met the 5% and 10% per capita GHG reduction targets for 2020 and 2035.

Major features and benefits of Scenario B include:

- Compared to the status quo, Scenario B reduces total land consumption by 7,633 acres, or 34%.
- Scenario B will increase transit, walking and bicycle trips by 15-25% compared to the status quo.
- Residential densities will increase from an average of 4.6 units per acre to 7.4 units per acre under Scenario B. While average densities will be highest in the downtown metropolitan area, average residential densities will also increase in outlying communities.
- Less land consumed and higher densities are indicators of more compact development. Under Scenario B, average persons per acre of land will increase from 13.9 under the status quo to 21.1, or more than 50%.

- With Scenario B, 21.3% of all new housing and 36.6% of new employment will take place within ½ mile of bus rapid transit.

Figures 4-13 to 4-15 provide important characteristics of Scenario B, including, housing growth density, and employment growth density.

4.9 The SCS Land Use Pattern

Fresno COG used the feedback from local planning sessions, public outreach workshops, and consultation with local jurisdictions to work collaboratively with policymakers, stakeholders, and local governments to develop and analyze four growth scenarios. On November 21, 2013, the Fresno COG Policy Board unanimously selected Scenario B as the preferred scenario for the 2014 RTP/SCS. Scenario B was built primarily from existing local General Plans, general plan updates and input from local governments as to the most likely growth assumptions for the future.

Jurisdictions within the Fresno COG region continue to implement their own local land use and transportation projects that support the 2014 RTP/SCS. These local efforts were considered in the development of the overall land use pattern of the RTP/SCS. It is clear that there has been, and continues to be, a significant trend of local development policies and decisions toward increased integration of land use and transportation.

Through the combined vision and efforts of the municipal governments in Fresno County, significant strides are being made toward sustainable growth, walkable communities, and mixed-use development—values that are evident in their current planning assumptions and reflected in the SCS.

Figure 4-13: 2035 Land use pattern

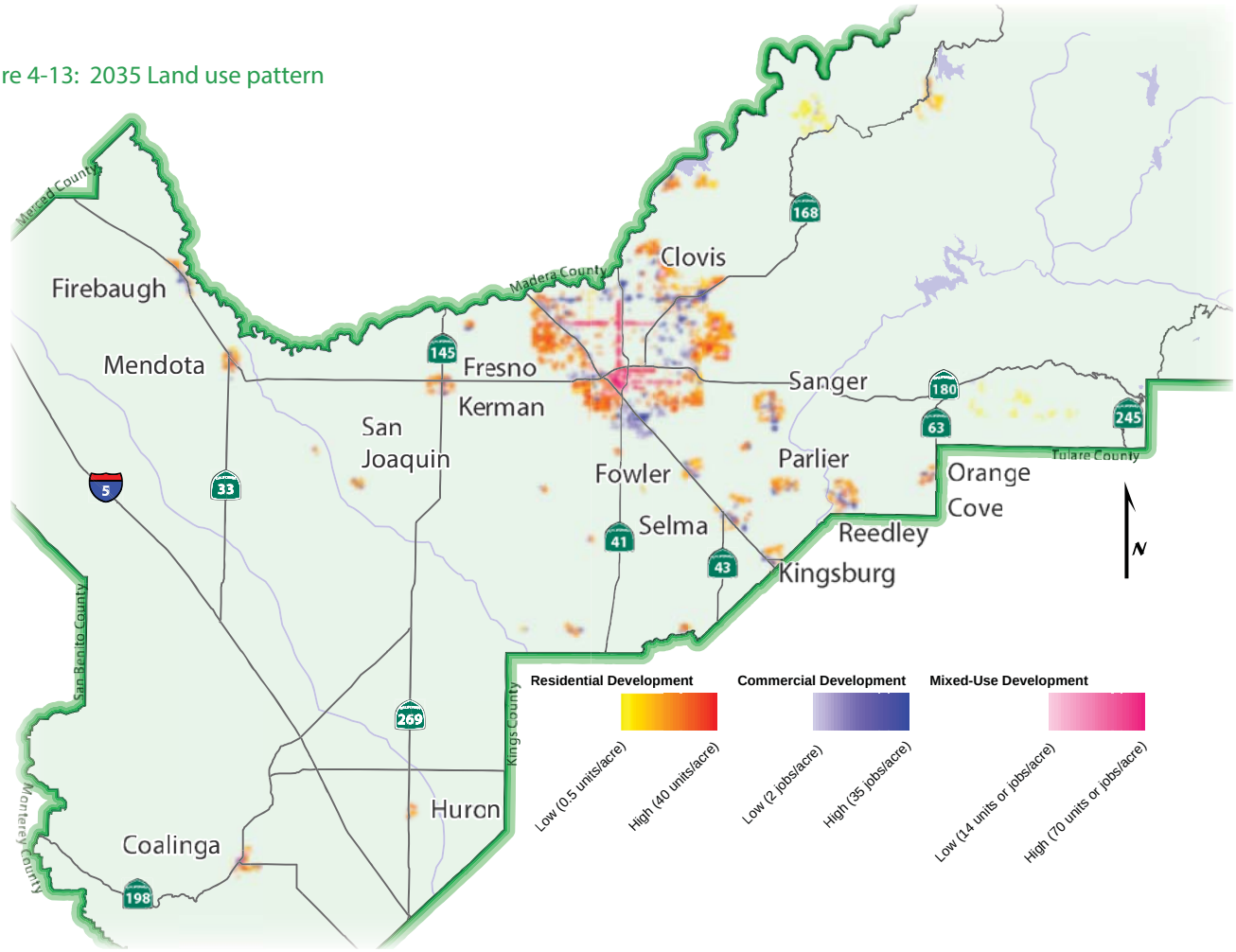
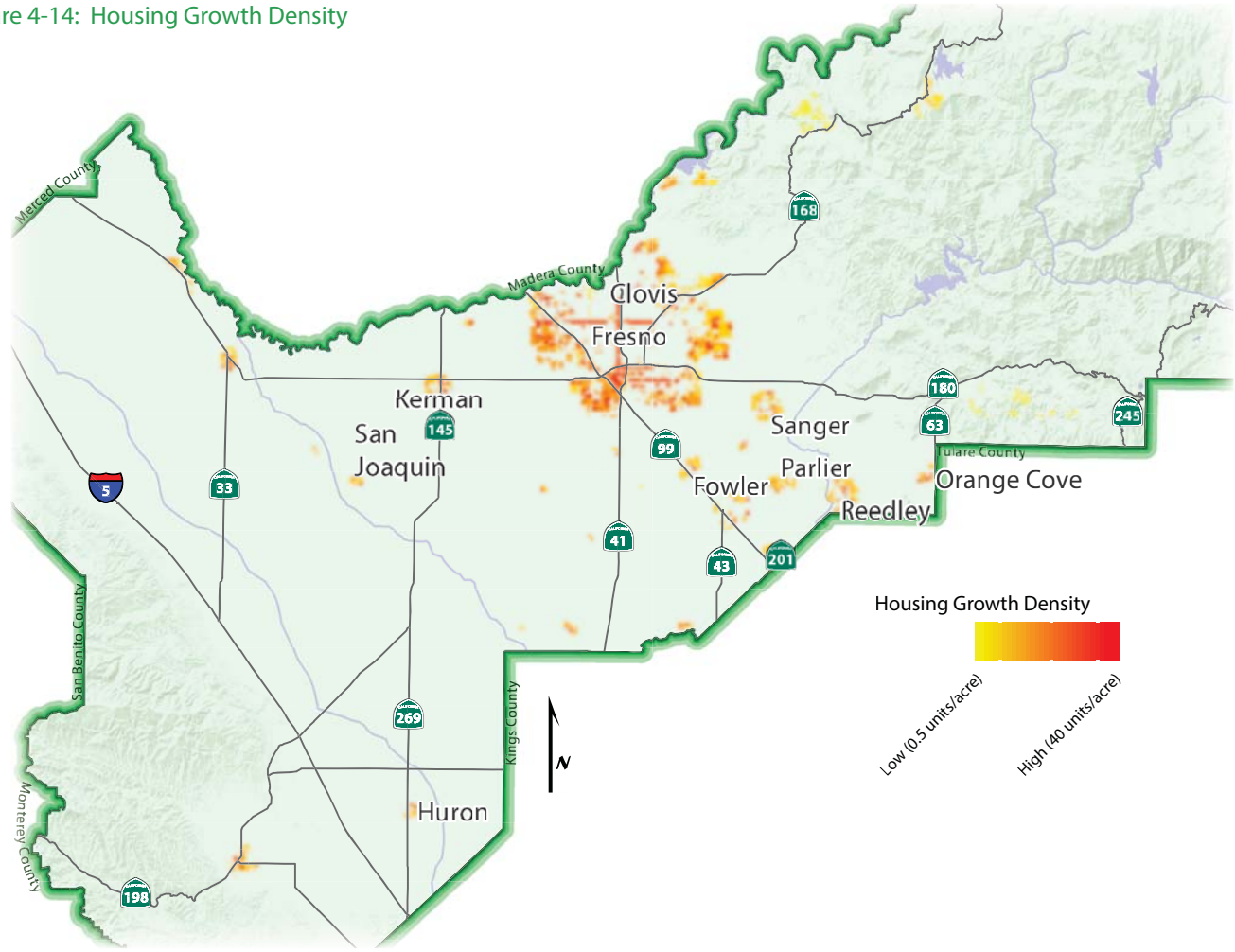


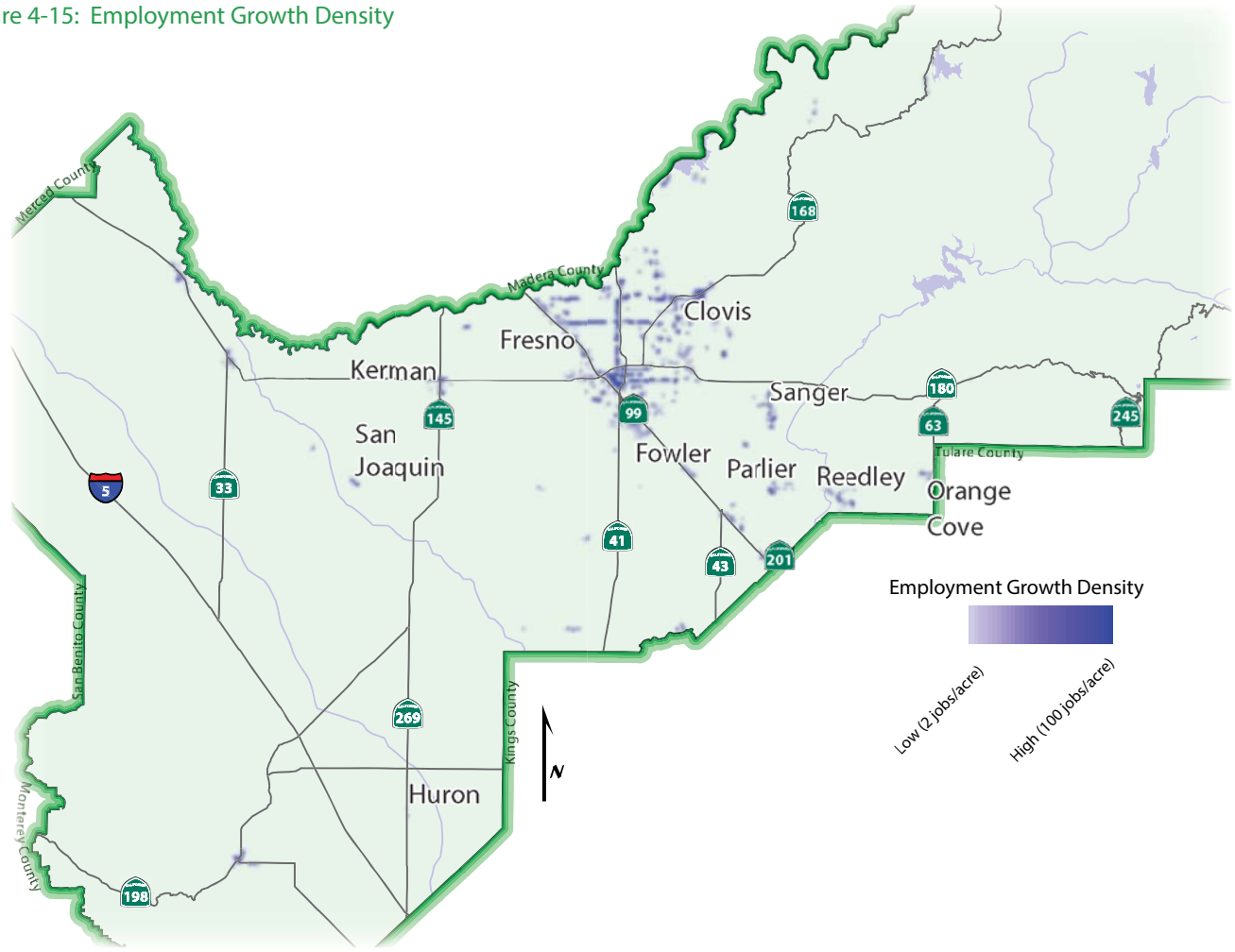
Figure 4-14: Housing Growth Density



The Fresno COG 2014 RTP/SCS reflects the core values residents in Fresno County identified in the Blueprint process. The Blueprint Smart Growth principles were reflected and implemented in the general plan updates and specific plans that are part of the SCS. The Fresno Region SCS creates a range of housing opportunities and choices by providing a more balanced supply of various housing types. The increased density and mixed use development proposed in the SCS helps preserving the precious farmland in the region, and also protects other natural resources such critical habitat, wetland and vernal pools, etc. In addition, over 20% of new housing and 36% of new employment are allocated along the high-capacity transit corridors and activity centers, which provide foundation for Transit Oriented Development (TOD).

The SCS also reflects the sustainability principle of directing and strengthening development towards existing communities. The City of Fresno's Alternative A of the general plan update includes 45% of new growth in the designated infill development areas and proposed no sphere of influence expansion by 2035, which is a significant stride towards reining in fringe development in a traditionally sprawling region. City of Fresno's Alternative A also includes elements of complete neighborhood, where residents have easier access to job, school, and other services by different transportation modes, including bike, walk and transit. The complete neighborhood concepts foster distinctive and attractive communities with a strong sense of place. The communities envisioned in the SCS will be more people friendly with more access to bike and walk facilities.

Figure 4-15: Employment Growth Density



4.10 Protecting Resources and Farmland

In identifying the overall land use pattern, the 2014 RTP/SCS also considers areas to be protected from development. These farmlands, open space, and natural resource areas are critical for the region's environmental and economic health.

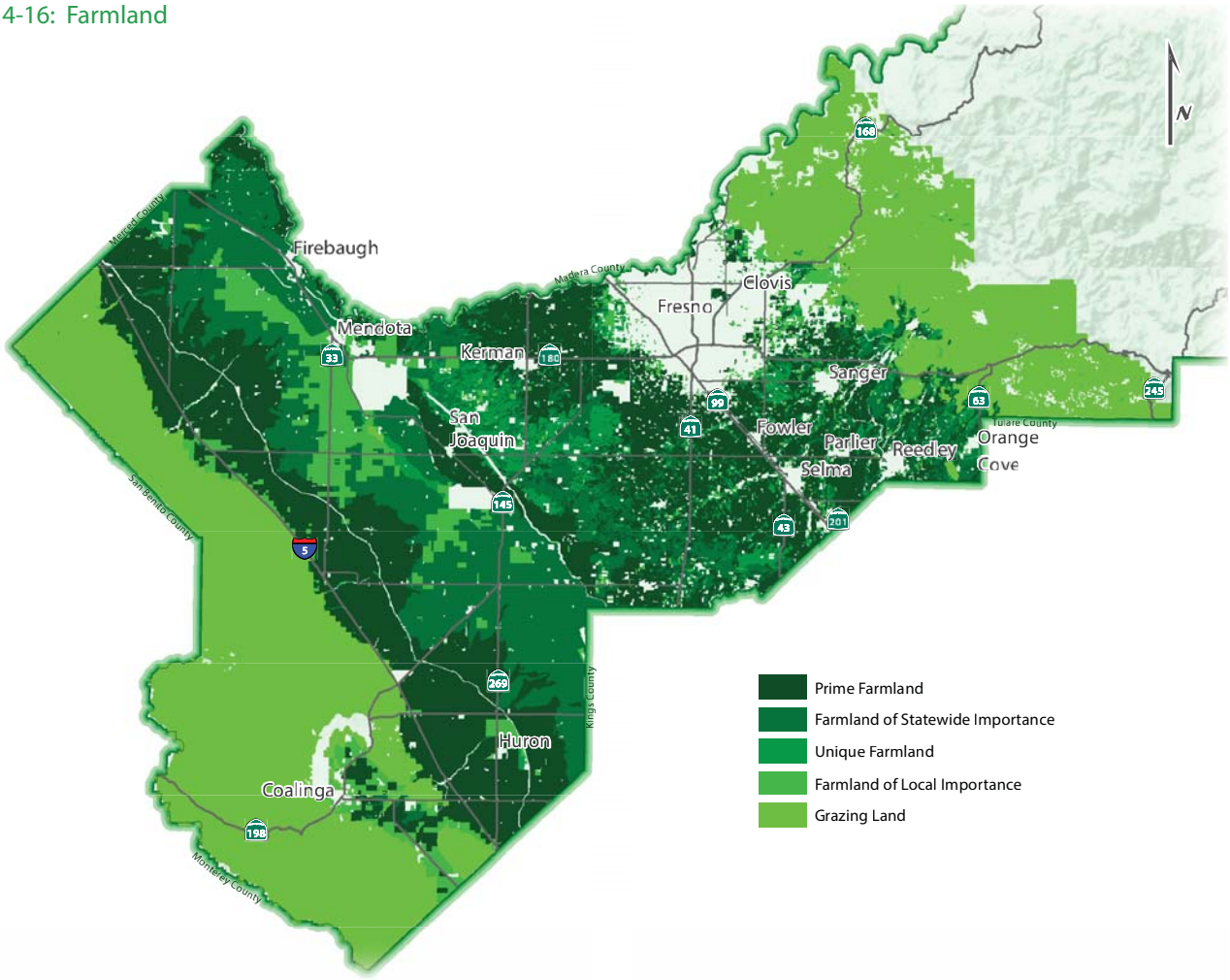
The California Department of Conservation administers the Farmland Mapping and Monitoring Program (FMMP) which analyzes impacts to agriculture in the State. FMMP maps are updated every two years to characterize existing farmland, agricultural resources, and the loss of farmland to other uses. The FMMP utilizes four categories of agricultural productivity developed by the United States Department of Agriculture (USDA) which consider factors such as soil quality, water availability, slope, and flooding potential. Figure 4-16 shows that the future land use proposed in the SCS will convert 91.8 acres of Important Farmland as defined by SB375 and categorized as follows:

Prime Farmland	**75.7 acres**
Farmland of Statewide Importance	**16.1 acres**
Unique Farmland	**0 acres**

In addition, the SCS would convert an estimated 1,013 acres of grazing land and 51.6 acres of farmland of local importance bringing the total farmland conversion to 1,157 acres, or 7.9% of the total land consumed for new growth between 2008 and 2035.

The San Joaquin Valley Greenprint project, funded by the Strategic Growth Council, has been a huge undertaking by the Valley to document how natural resources support the region's economy, health and quality of life, and to

Figure 4-16: Farmland



identify strategies to guide stewardship of land, water and living resources. The project covers the entire area within the eight Valley counties that are members of the San Joaquin Valley Regional Policy Council. Throughout the process, public officials, property owners, interest groups, technical experts and the public are invited to participate and provide input. A Steering Committee has been formed that consists of individuals representing the public and private sector and a diverse range of interests in the Valley's resources.

The Greenprint project will be completed in mid-2015. The first phase identified and compiled data for the natural resources in the San Joaquin Valley. The second phase will develop principles to guide resource management options and strategies.

The Greenprint project has provided valuable information regarding natural resources land for the Fresno COG SCS process. A list of natural resource data sets were recommended and forwarded by the Greenprint to be considered in the SCS planning process.

The location of some of the Fresno Region's natural resources are provided in Figures 4-16 through 4-20.

Figure 4-17: Critical Habitat

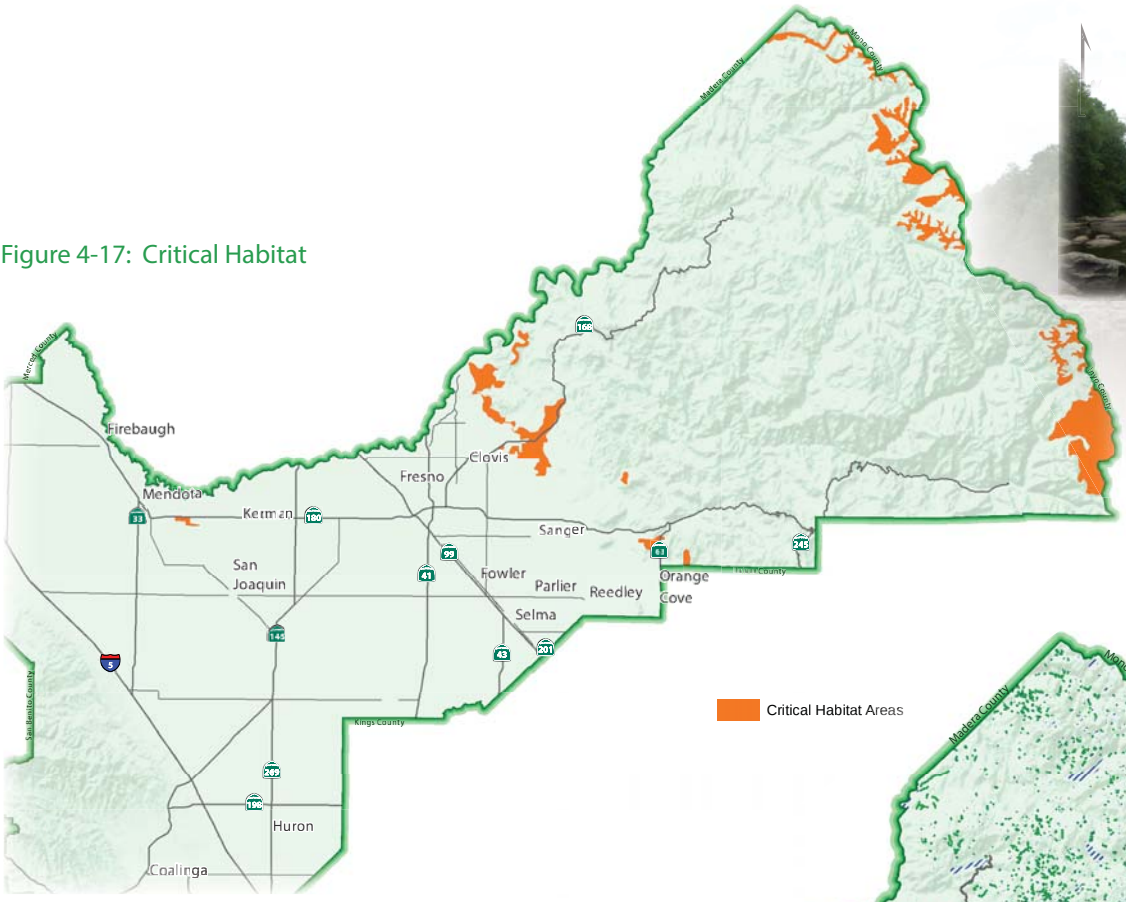


Figure 4-18: Wetlands, Riparian Forests and Vernal Pools

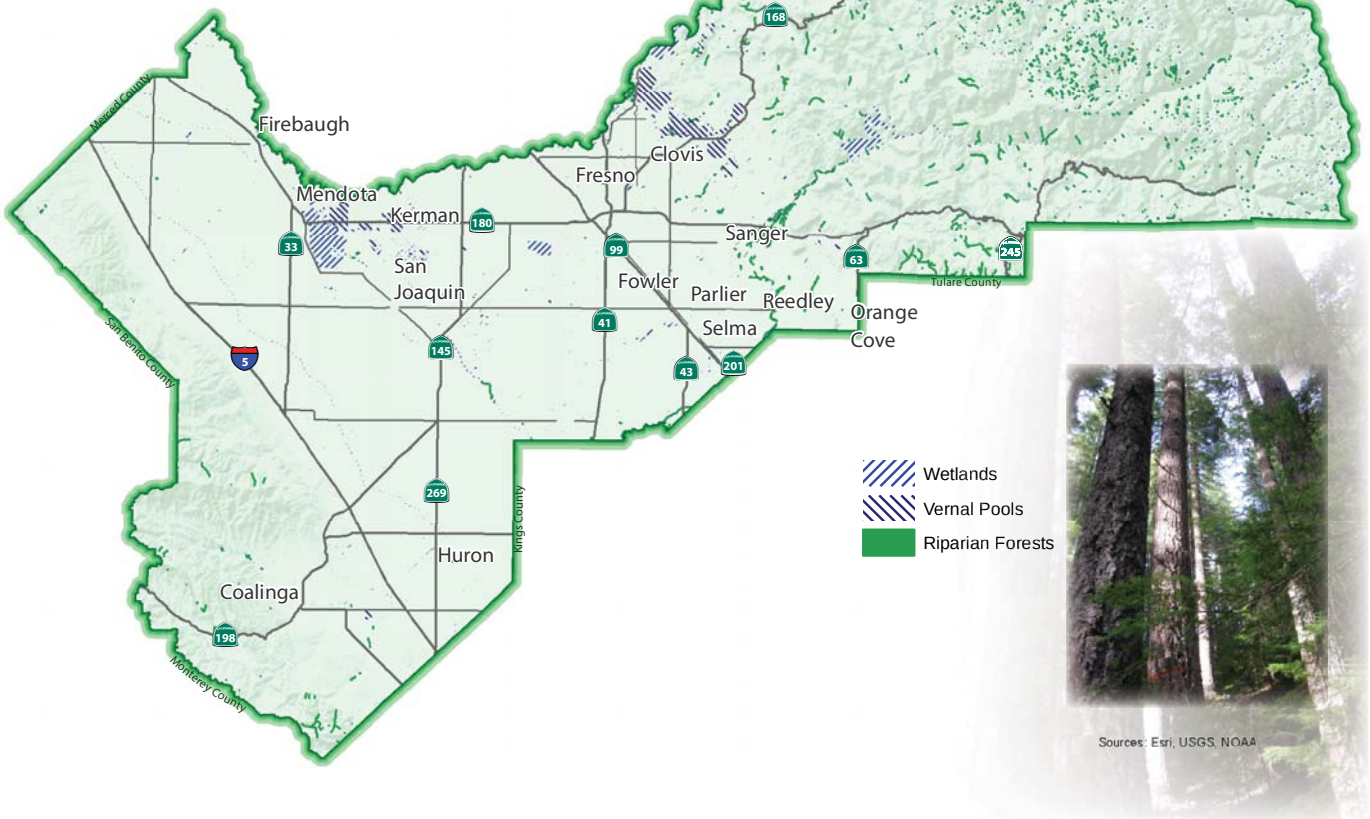


Figure 4-19: Floodplains and Groundwater Recharge Zones

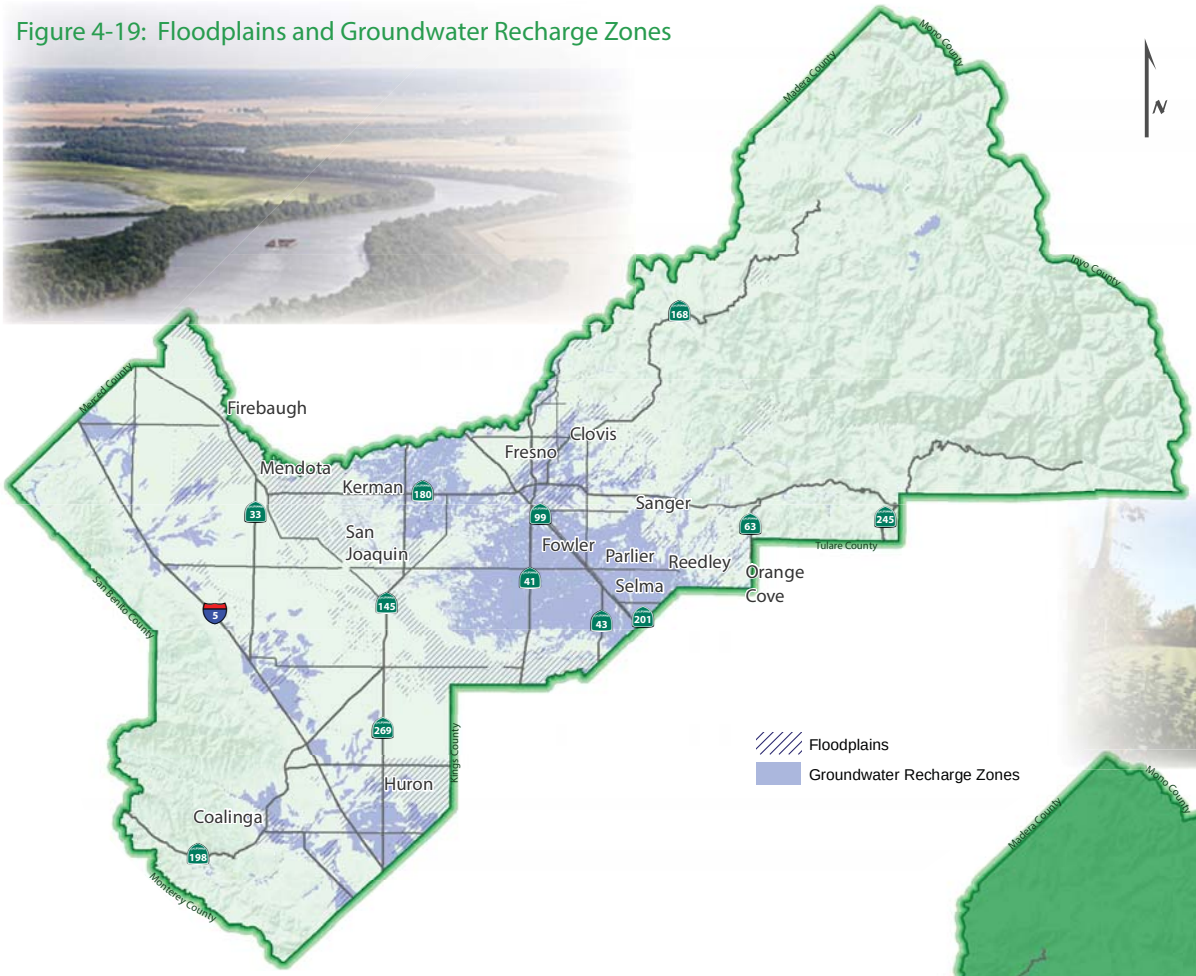
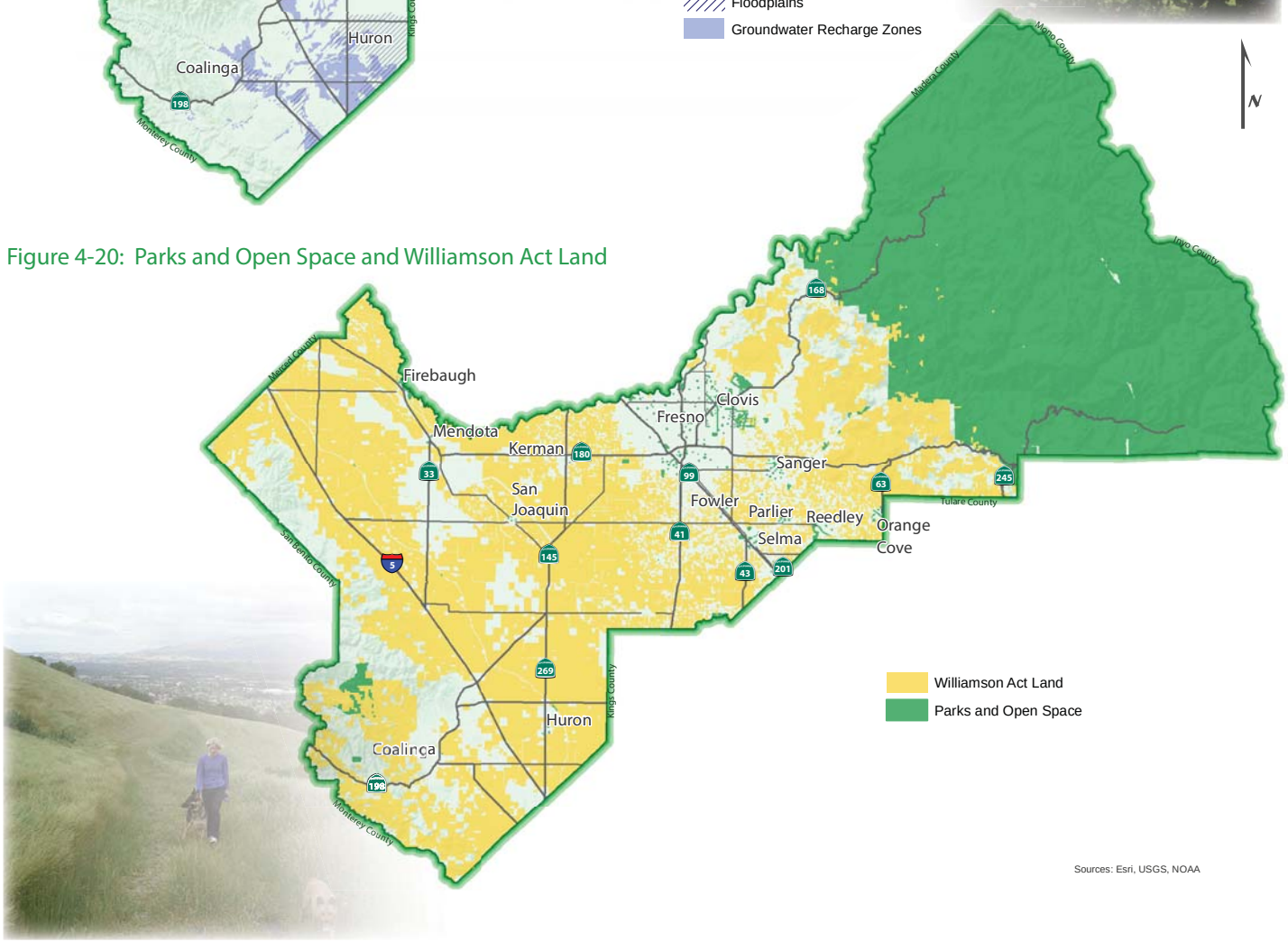


Figure 4-20: Parks and Open Space and Williamson Act Land



Impacts of Climate Change on the Transportation Network

The climate of Fresno County and the region can be expected to change even with reductions in GHG emissions projected by the 2014 SCS/RTP. Aspects of climate change in the San Joaquin Valley include, but are not limited to, water shortages, longer wildfire seasons, more intense heat waves, and increased energy use. In addition, air quality could deteriorate given increased periods of stagnant air mixing. Climate change can have long-term impacts on the transportation network, including:

- More frequent/severe flooding of low-lying infrastructure, requiring drainage and pumping, due to more intense precipitation events.
- Increased thermal expansion of bridge joints and paved surfaces, potentially causing possible degradation.
- Higher maintenance/construction costs for roads and bridges, due to increased temperatures.
- Asphalt degradation and shorter replacement cycles, leading to limited access and higher costs, due to higher temperatures.
- Air traffic disruptions, due to severe weather and precipitation events that impact arrival and departure rates.

In addition to direct impacts of climate change, transportation systems may also have to adapt to changes in the patterns of settlement or economic activity that may be induced by climate change. For example, changes in the location of agricultural production may demand changes in the transportation system. Better understanding of broad climate change impacts and adaptation strategies will permit a better understanding of potential direct and indirect impacts on transportation. Preparing transportation infrastructure for climate change impacts is a new priority as future projects are designed and our current system is maintained. The tools and methodologies for evaluating and adapting to such impacts are still in the early stages of development and will require ongoing monitoring.

Transportation Energy Demand and GHG Emissions

On May 19, 2009, President Obama announced a new national policy aimed at increasing fuel economy and reducing greenhouse gas emissions for all new cars and trucks sold throughout the U.S. The new national policy, which harmonizes greenhouse gas emissions standards and fuel economy standards, is the result of an agreement among California, the federal government, and the automobile industry. As part of the agreement, EPA and the federal Department of Transportation jointly developed new federal standards for model years 2012-2016 that will require an average fuel economy standard of 35.5 mpg in 2016.

California's Low Carbon Fuel Standard (LCFS) Program requires a reduction in the carbon intensity of transportation fuels that are sold, supplied, or offered for sale in the state by a minimum of 10% by 2020. CARB regulations require transportation fuel producers and importers to meet specified average carbon intensity requirements for fuel. The LCFS Program allows producers and importers to generate, acquire, transfer, bank, borrow, and trade credits.

The region's need for gasoline and diesel may be further reduced by offering incentives for a variety of fuel options for personal vehicles that include electricity, hydrogen, natural gas, and biofuels.

4.11 Accommodating the Eight-Year Regional Housing Needs Assessment - RHNA

The Regional Housing Needs Assessment (RHNA) is prepared by Fresno COG and provides regional housing allocations by jurisdiction in Fresno County as input to individual Housing Elements. An overall County-wide RHNA Determination is provided to Fresno COG by the California Department of Housing and Community Development (HCD) from which the COG, working closely with local agencies, allocates each jurisdiction's fair share of regional housing need by income group. SB 375 contains two important changes to Housing Element law – the Housing Element cycle is changed from five years to eight years, and the RHNA and RTP processes are now linked to better integrate housing, land use, and transportation planning.

The Fresno region has received its RHNA Determination from HCD for the fifth housing element cycle (2013-2023). Fresno COG has been engaged in the RHNA process concurrently with development of the 2014 RTP/SCS, but has not yet completed the allocation of these units by jurisdiction. This process requires COG to work with its member agencies to identify areas within the region that can provide sufficient housing for all economic segments of the population and ensure that the state's housing goals are met.

SB 375 requires consistency between the Regional Housing Needs Allocation (RHNA) and the development pattern of the Sustainable Communities Strategy (SCS). The Fresno County RHNA and SCS are consistent in both development pattern and quantity of housing units. Both use the same three factors to distribute housing units to jurisdiction: (a) past shares of county housing unit growth in each jurisdiction, (b) current shares of county population or housing units in each jurisdiction, and (c) the amount of available land for residential development in each jurisdiction. The RHNA and SCS consistency cannot be precise because (1) the RHNA has a 10-year (2013-2023) projection period while the SCS has a 27-year (2008-2035) projection period, and (2) the RHNA distributes housing by jurisdiction while the SCS distributes housing by location. However, the overall Fresno COG RHNA number is less than the overall SCS housing unit number further proving their consistency per the State of California Department of Housing and Community Development (HCD) definition of consistent.

Housing elements are due no later than 18 months after the Fresno COG Board adopts the 2014 RTP, or December 31, 2015. Any changes to land use plans or zoning that occur during the updates of housing elements by local jurisdictions as a result of the RHNA will be reflected in the next regional growth forecast and RTP. This will ensure that land use changes resulting from the RHNA and the

housing element process will be considered in future updates of these two key planning documents. The goal is to ensure consistency between future land use and transportation plans through an iterative process.

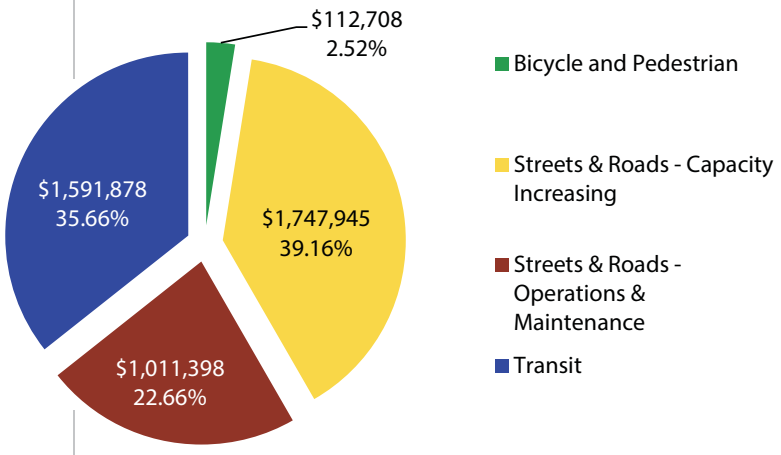
4.12 Transportation Strategies

The per capita GHG emissions reductions calculations do not include the use of alternative fuels. Also, they do not consider the benefits of California's low carbon fuel standard program, which calls for a reduction of at least 10 percent in the carbon intensity of California's transportation fuels by 2020. They also do not consider the benefits due to increases in vehicle efficiency ("Pavley" regulations that reduce GHG emissions in new passenger vehicles). Although Fresno COG is not able to take credit for these transportation measures toward meeting the state-mandated GHG emissions targets for the region pursuant to SB 375, Fresno COG recognizes the role that regional and local governments can play in accelerating the deployment of alternative fuel vehicles and fueling and recharging stations. Therefore, Fresno COG has been active in this area, which in turn helps the state meet its overall reduction target for greenhouse gases. The strategies in the 2014 RTP/SCS are aimed at reducing travel and providing additional travel choices. As such, the 2014 RTP/SCS complies with the conformity requirements of the Clean Air Act, as further detailed in the conformity document.

An important part of the Revenue Constrained Transportation Network, described more fully in RTP Chapter 7, is a significant investment in public transit as well as facilities that encourage walking and bicycling as forms of active transportation. The aim of these investments is to significantly increase the attractiveness of public transit, walking, and bicycling – particularly in areas that are planned for more compact and mixed-use development. Investments in our local streets and roads, including access to regional airports; goods movement projects, and Transportation Demand Measures (TDM) and Transportation System Measure (TSM) projects and programs also are integral to the overall transportation network. Proposed investments in the Revenue Constrained Transportation Network in the 2014 RTP/SCS are shown in Figure 4-21 below.

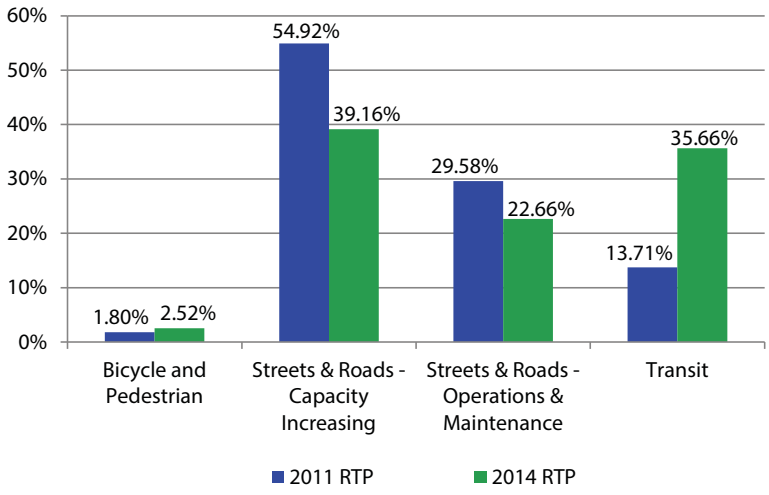
The 2014 RTP/SCS brings about big changes to transportation planning and funding. Figure 4-22 below shows the difference in projects programmed by mode between the previous and current RTP/SCS. Capacity Increasing road projects declined by about 16% and bike and pedestrian and transit projects are up about 23%.

Figure 4-21: Proposed Investments in the Revenue Constrained Transportation Network in the SCS *(in thousand dollars)*



The steep increase in transit projects is mostly due to the BRT corridors currently planned within the region and the decline in capacity increasing projects is evidence of an increase in active transportation.

Figure 4-22: Comparison of 2011 RTP and 2014 RTP projects programmed by mode



In the 2014 RTP/SCS, an important component of the transportation network is a commitment to "complete streets" policies and implementation measures. Complete streets are designed and operated to enable safe access for all users and make it easy to cross the street, walk to shops, and bicycle to work, school and shopping. Roadways planned and designed using a complete streets approach may include sidewalks, bike lanes, special bus lanes, transit stops, pedestrian crossings, narrower travel lanes, and roundabouts.

By adopting a complete streets policy, communities direct their transportation planners and engineers to routinely design and operate the entire right of way to enable safe access for all users, regardless of age, ability, or mode of transportation. This means that every transportation project will make the street network better and safer for drivers, transit users, pedestrians, and bicyclists.

Transportation Demand Management

Transportation Demand Management (TDM) programs are designed to reduce automobile usage by changing traveling behavior and encouraging the use of alternative transportation modes other than single occupant vehicle. TDM strategies also reduce vehicle trips during peak traffic periods, thereby helping to reduce GHG emissions. Managing demand can be a cost-effective alternative to increasing capacity. A demand management approach also has the potential to deliver better environmental outcomes, improved public health, and more livable communities.

TDM strategies in Fresno County include, but are not limited to:

- Measure C Carpool Incentive program, which provides incentives to commuters who share a ride to work or school with at least one other person
- Measure C Commuter and Farmworker Vanpool Subsidy programs, which provide subsidies and reimbursements to new and existing commuter vanpools
- CalVans is a Joint Powers Public Transportation Agency comprised of a number of Local Transportation Planning Agencies. They run a mult-county vanpool program for commuters and agricultural workers
- Fresno COG's Valleyrides.com website and Carpool App offer commuters free ride matching, and houses the information needed to participate in the Measure C Carpool and Vanpool Programs
- Flex-time work schedules with employers to reduce congestion at peak times
- Other trip reduction programs

Fresno County's Measure C Extension, a half-cent sales tax measure, allocates close to $20 million over its 20 year life-span to fund carpool, vanpool and farmworker vanpool programs. Rule 9410: Employer Based Trip Reduction, implemented by the San Joaquin Valley Air Pollution Control District (SJVAPCD), is another good example of programs designed to encourage employees to reduce single-occupancy vehicle trips, thus reducing GHG and other pollutant emissions.

Transportation Systems Management

The Transportation Systems Management (TSM) approach to congestion mitigation and GHG emission reduction seeks to identify improvements to enhance and optimize the existing transportation systems. Through better management and operation of existing transportation facilities, these techniques are designed to improve traffic flow, air quality, and movement of vehicles and goods, as well as enhance safety.

TSM measures include, but are not limited to:

- Intersection operational improvements, including traffic signal synchronization
- Geometric changes and bottleneck alleviation
- Arterial access management
- Traffic/Freeway management system.
- Special events management strategies.
- Incident Management/emergency services

The 2014 RTP/SCS programs about $160 million to fund operational improvement projects.

Public Transit

The 2014 RTP/SCS calls for an expansion and improvement of the public transit network and transit service on new and existing routes, resulting in greater transit accessibility and connectivity throughout the region. Transit expansion and improvement includes the addition of new corridors and improving the service of existing ones, as well as the introduction of the first bus rapid transit (BRT) system in the City of Fresno. Also included is implementation of the California High-Speed Train (HST) project.

The Bus Rapid Transit (BRT) corridors defined in the Fresno COG SCS conform to the City of Fresno's 2035 General Plan Update, and are an integral part of high-capacity transit corridors that link major activity centers within the urbanized area. The BRT corridors are planned for Blackstone Avenue from Friant Road to the Central Business District (CBD), and Ventura Avenue/Kings Canyon Corridor from Clovis Avenue to the CBD. Shaw Avenue from Highway City on the west to State Route 168 (SR 168) on the east is proposed as the second BRT corridor. The other BRT corridors planned in the 2014 RTP are California Avenue in Southwest Fresno, Cedar Avenue BRT, and the Southeast Growth Area (SEGA) BRT extension.

These BRT corridors form vital links to existing and planned activity centers within Fresno. These activity centers include a close proximity of buildings with mixed land uses and are well integrated with multiple modes of transportation including walking, biking, and public transit. Frequent and reliable BRT service will be a cornerstone of these activity centers.

Bike and Pedestrian Facilities

The 2014 RTP/SCS also includes a notable increase in the regional active transportation network for walking and bicycling. Active transportation is an essential part of the Fresno COG transportation system, is low cost, does not emit greenhouse gases, can help reduce roadway congestion, and increases health and the quality of life of residents. This emphasis signifies an important opportunity to advance the goals of SB 375 by increasing non-motorized modes of transportation, thereby expanding access to a variety of land uses and transit and improving public health and air quality. A total of $94 million is proposed in the 2014 RTP/SCS to fund bike and pedestrian projects. It is estimated that more than 500 (lane) miles of bike lanes and 120 miles of sidewalks will be added by the end of the 2040, the horizon year of this 2014 RTP.

Figure 4-23: Capacity Increasing Projects

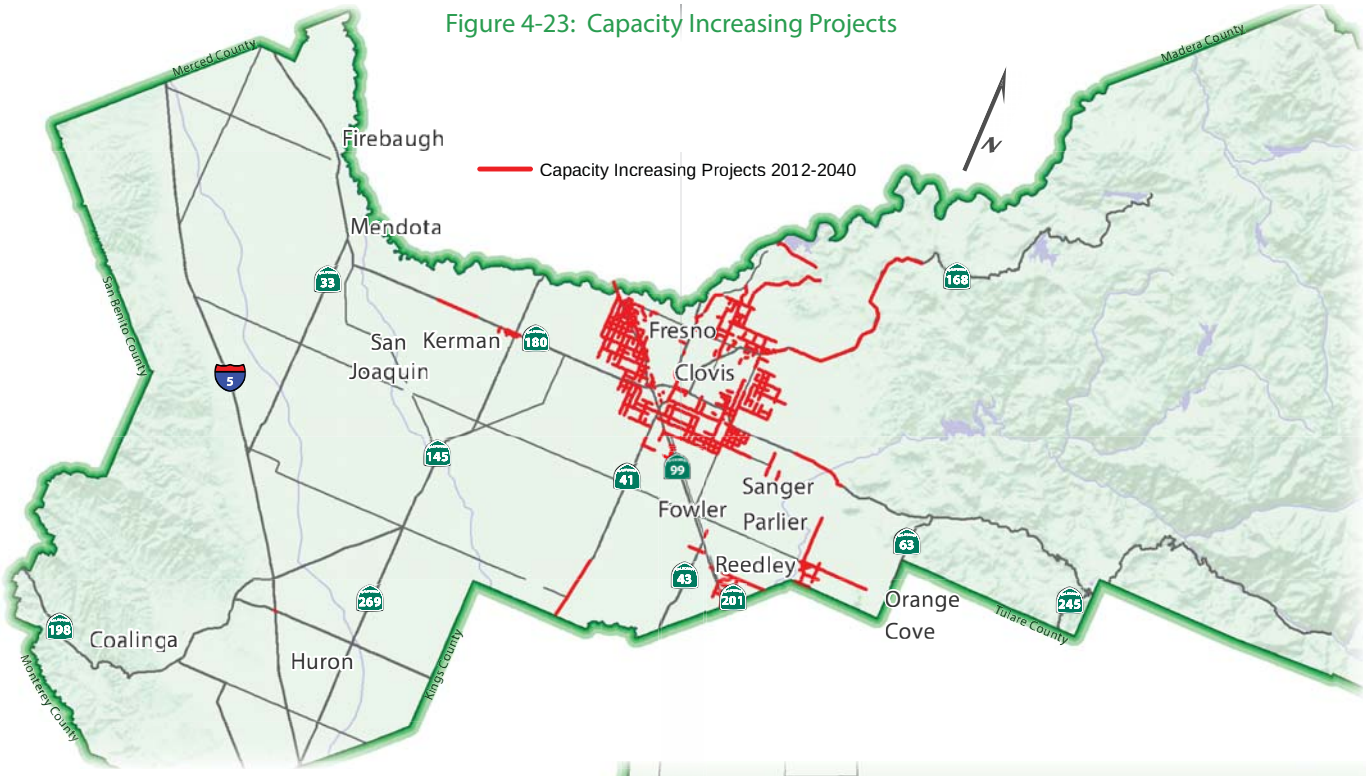
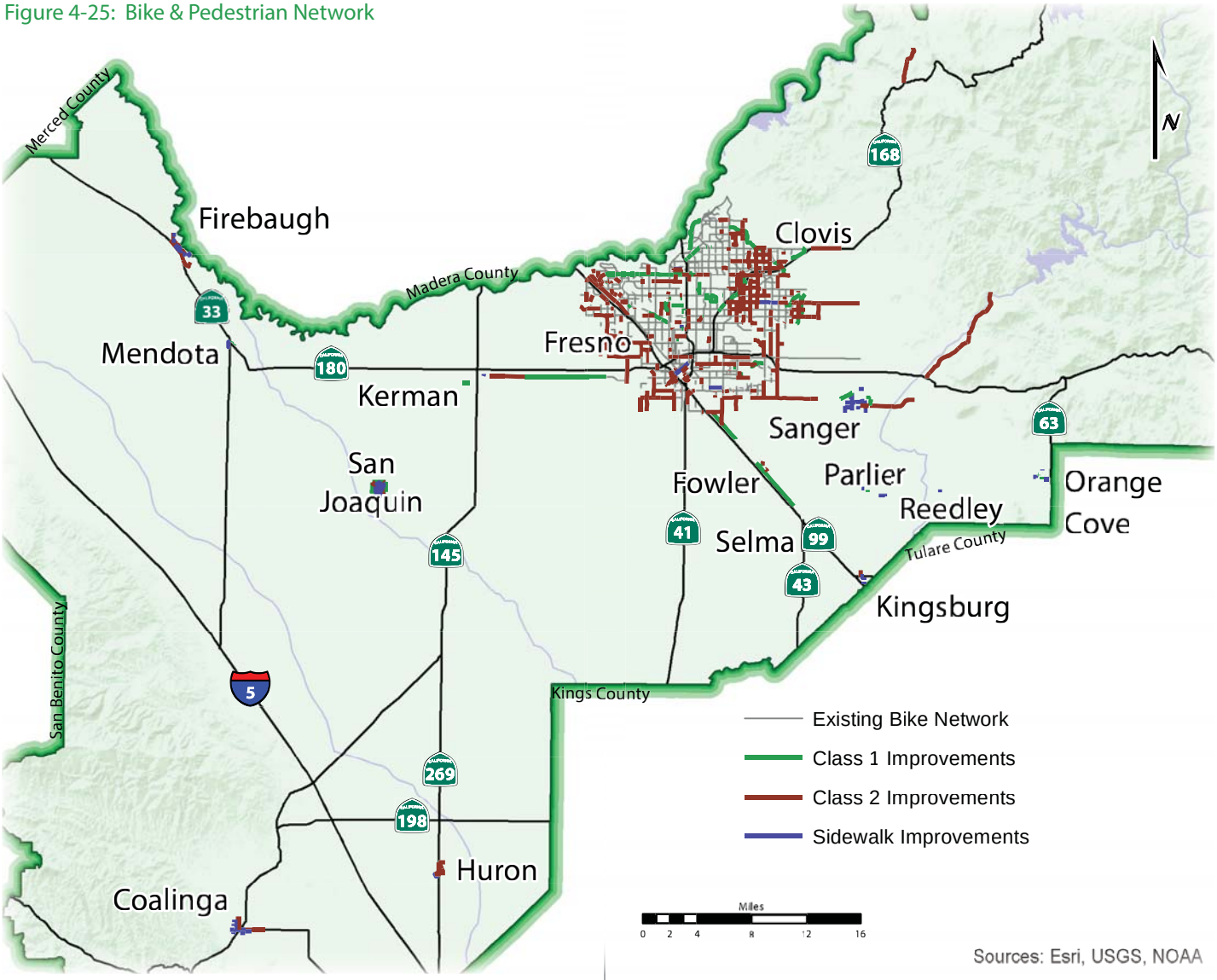


Figure 4-24: Proposed Bus Rapid Transit Network

Figure 4-25: Bike & Pedestrian Network



These transit and active transportation expansions complement the preferred land use pattern and support expected growth throughout the region. The overall land use pattern's focus on locating additional growth along transit corridors in the Fresno metropolitan area relies on the development of efficient transportation corridors, lead to significant VMT reductions and other benefits due to higher walk/bike mode share, more transit use, and shorter auto trips.

The transportation network, including proposed roadway expansion, existing and future transit lines and existing and future bike and pedestrian network, are shown in Figures 4-23, 4-24 and 4-25.

4.13 Consultation with the Local Agency Formation Commission

SB 375 requires that SCS preparation include coordination with the Local Agency Formation Commission (LAFCo) and specifically consider adopted Spheres of Influence (SOI) adopted by LAFCo. LAFCos are empowered by enabling legislation to promote orderly development, ensure that urban services can be provided, and preserve open space and agricultural lands. SOIs have been adopted by the Fresno LAFCo for each city and special district in Fresno

County and are considered the probable future urban boundaries for each agency. Within the SOI, orderly annexations may take place if the proposal is consistent with the General Plan, the subject property is pre-zoned consistent with the General Plan designation, and has met other LAFCo standards and requirements.

In the 2014 RTP/SCS process, Fresno LAFCo was a member of the RTP Roundtable and its Executive Officer served as chairman of the roundtable. In the development of the 2014 RTP/SCS, LAFCo and Fresno COG consulted regularly and the LAFCo commission was updated regularly. In addition, the Fresno LAFCo was provided a final update on the status of the 2014 RTP/SCS and presented materials on the various scenarios at a public meeting on October 9, 2013.

4.14 Considering Social Equity in the SCS

In the wake of federal guidelines for environmental justice based on Title VI of the Civil Rights Act, growing attention has been placed on the need to incorporate environmental justice principles into transportation planning. In response, Fresno COG has developed methods to assess the impacts of their transportation plans and planning processes on low-income and minority populations. Under Title VI and related statutes, Fresno COG assures that no person shall on the grounds of race, color, or national origin, as provided by Title VI of the Civil Rights Act of 1964, and the Civil Rights Restoration Act of 1987 (P.L. 100.259), be excluded from participation in, be denied the benefits of or otherwise subjected to discrimination under any agency-sponsored program or activity. Nor shall sex, age or disability stand in the way of fair treatment of all individuals. Fresno COG further assures that every effort will be made to ensure nondiscrimination in all of its programs and activities, whether those programs and activities are federally funded or not.

The population and housing projections included in the SCS include population growth of 388,076 persons in 123,940 housing units to the year 2035. These projections include all economic segments of the population. The number of multifamily housing units is projected to increase from 15% of the housing stock to 38% of the housing stock, providing the greatest opportunity for affordable housing to be built. Additionally, 21.3% of all new housing and 36.6% of all new employment will take place within one-half mile of planned Bus Rapid Transit lines. The opportunities for affordable housing and access to public transit are expected to reduce housing and transportation costs on lower income individuals and families.

Public Outreach

Fresno COG's extensive SCS public outreach process ensures that people regardless of race, income, color, or national origin have equal access to the information being developed for the SCS. Extra efforts were made to reach out to the underserved communities that are traditionally hard to reach. In the summer of 2012, 10 workshops were conducted for the disadvantaged communities to inform them about the development of the SCS. Interpreters of Spanish, Hmong, Punjabi, and Laotian were provided at the workshops. Presentations were also published on Fresno COG's website in multiple languages. Workers hired by the Fresno COG went door to door to inform the residents

about the events. Transit was provided free of charge to those who needed transportation to the workshops. For more details about the workshops, please refer to RTP Chapter 2: Public Participation.

Environmental Justice Task Force

During the SCS process, an Environmental Justice (EJ) Task Force was formed to provide guidance for the environmental justice analysis for the RTP required under Title VI of the Civil Rights Act and federal policies and guidance on environmental justice. The Task Force consisted of members representing interests of communities of low income, minorities, seniors and the disabled. A representative of the EJ Task Force was also a voting member on the RTP Roundtable Committee which advised the development of the 2014 RTP/SCS. The EJ Task Force helped define the "Environmental Justice Communities" in Fresno County. Six performance measures were used to assess the impacts of the 2014 RTP/SCS on the EJ communities in comparison to non-EJ communities. The six performance measures are: accessibility, mobility, cost-effectiveness, equity, reliability and consumer satisfaction. The Accessibility measure was broken down by accessibility to major job centers, parks, schools and medical facilities. The EJ analysis also compared impacts by different geographical areas of Fresno-Clovis Sphere of Influence (SOI), the Remainder of the County and County-wide. Although improvements are needed in a couple of areas, the analysis in the EJ Report confirms that the EJ communities are not "disproportionately burdened by high and adverse" effects and do share equitably in benefits from the 2014 RTP/SCS. In most cases, EJ communities fare better than non-EJ communities. Please refer to the Environmental Justice Report for additional details on the analysis.

4.15 Considering Public Health in the SCS

In much of Fresno County, housing, schools, shopping, employment, and parks are separated from each other by distances that discourage walking and biking and make people dependent on cars. In an effort to improve the health of residents, cities are promoting physical activity, particularly walking and biking, through their general plans, zoning codes, and transportation planning. These strategies address both the obesity epidemic—rates of obesity increase in proportion to vehicular miles traveled—and state mandates to reduce greenhouse gases. The co-benefits of using the general plan, zoning code and infrastructure investments to promote safe, active transportation, increased open space and nutritious food are a healthy population and a healthy environment.

Cities throughout the region are using their planning processes to address the obesity epidemic. Many are including a focus on smart growth principles -- developing healthy, vibrant communities where homes, jobs, schools and places for play are nearby each other and linked by walking, biking, and transit. The smart growth approach is gaining ground as GHG emission reduction mandates shape transportation and housing planning. Examples of smart growth incorporated into the 2014 RTP/SCS include:

- Promote Compact, Mixed-Use and Transit-Oriented Development
- Increase Walking and Biking Through Street Design
- Target infrastructure investments on walking, biking, and transit
- The selected SCS land use scenario moves the region toward towards a healthier future by improving the connection between land use and transportation. The result is more walkable communities, increased bicycling, more people using transit, and better access to healthy food.

4.16 Streamlining the CEQA Process

Under SB 375, general consistency with a CARB-approved SCS allows projects to qualify for two types of California Environmental Quality Act (CEQA) streamlining:

- **Projects consistent with the SCS or APS**

  A residential or mixed-use project consistent with the density and policies in an SCS is not required to discuss (1) growth-inducing impacts; or (2) project specific or cumulative impacts from cars and light-duty truck trips on global warming or the regional transportation network if the project incorporates the mitigation measures required by an applicable prior environmental document.

- **Three Types of Streamlining for Transit Priority Projects**

  A "transit priority project" (TPP) is created by SB 375 that must meet three requirements:

  (1) contain at least 50% residential use

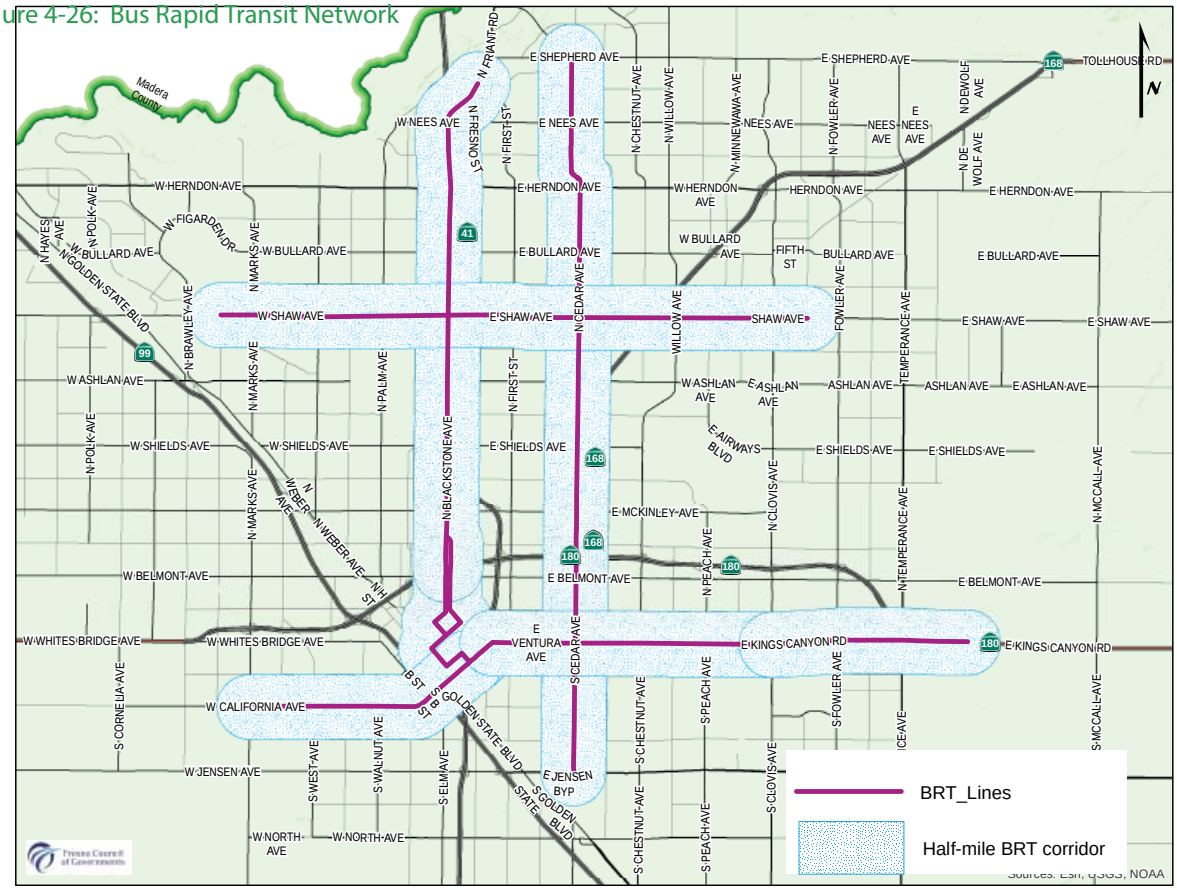
  (2) have a minimum net density of 20 units per acre

  (3) be located within one-half mile of a major transit stop or high quality transit corridor included in an RTP. A major transit stop refers to an existing rail transit station, a ferry terminal, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during peak commute periods. There are currently no bus routes in Fresno County with 15 minutes service during peak commute periods. A high quality transit corridor means a corridor with fixed route service with service interval of 15 minutes or less during peak commute hours. The proposed BRT routes in the 2014 RTP/SCS meet the definition of high quality transit corridor. Figure 4-26 shows the ½ mile corridors of high capacity transit in Fresno County.

A TPP is exempt from CEQA if the following applies:

1. it is not more than 200 units on not more than 8 acres
2. It can be served by existing utilities
3. It does not affect historical resourcesBuildings are

Figure 4-26: Bus Rapid Transit Network



15% more energy efficient than required

4. The project is designed to achieve 25 percent less water usage
5. It provides either a minimum of 5 acres/1,000 residents of open space, or housing for moderate, low, or very low income residents.

A TPP that does not qualify for an exemption may qualify for a sustainable community environmental assessment (SCEA) if the project incorporates mitigation measures, performance standards, or criteria from prior applicable environmental impact reports. A SCEA is similar to a negative declaration under CEQA.

SB 375 also authorizes the adoption of specific traffic mitigation measures that apply to TPPs to include requirements for traffic control improvements, street or road improvements, transit passes, or other measures that will mitigate traffic impacts of transit priority projects. A TPP does not need to comply with any additional mitigation measures for the traffic impacts of that project if traffic mitigation measures have been adopted.

However, it is widely believed that very few development projects in Fresno County could qualify as Transit Priority Project, at least in the near future. TPPs are designed for more urban locations with higher development concentrations such as the Bay Area and the Southern California region. Local jurisdictions maintain the discretion and will be solely responsible for determining consistency of any future project with the SCS. Fresno COG staff may provide a lead agency at the time of its request readily available data and documentation to help support its finding upon request.

4.17 What is next?

The 2014 RTP/SCS will reduce GHG emissions by focusing growth in urbanized areas, moderately increasing residential densities, encouraging in-fill development, protecting open space and agricultural land, and providing transportation alternatives to the private automobile. New opportunities to reduce GHG emissions will occur with each four-year update of the RTP.

Fresno COG will update its RTP/SCS in 2018 in accordance with applicable federal and state laws. As part of this update, Fresno COG will be reviewing its own progress in implementing the strategies identified in this Plan. In addition, the GHG emission reduction targets are reevaluated at least every eight years and may be revised every four years by ARB. This will enable the state and Fresno COG to consider changes in circumstances, funding availability, technological advances, new legislation, and other considerations that could arise over time.

Fresno COG will also track its own progress in implementing its 2014 RTP/SCS strategies in conjunction with the preparation and adoption of its Overall Work Program and Annual Budget. The OWP/Budget process provides an opportunity for Fresno COG to allocate staff resources and funding to implement short-term and mid-term strategies contained within the RTP/SCS. In addition, Fresno COG will periodically monitor the progress being made by the state, the CTCs, local jurisdictions, and other agencies and entities in implementing the strategies identified in this plan.

While SB 375 places a great deal of attention on meeting GHG emission reduction targets, Fresno COG has also established other important goals in its 2014 RTP/SCS aimed at improving the overall quality of life in the region. Map-21, the Moving Ahead for Progress in 21st Century Act, requires the metropolitan planning organizations to establish and use a performance-based approach to transportation planning and decision making. Fresno COG has been, and will continue to work with the federal, state and local partners in establishing performance measures and targets, and monitoring progress towards meeting the performance targets.

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.

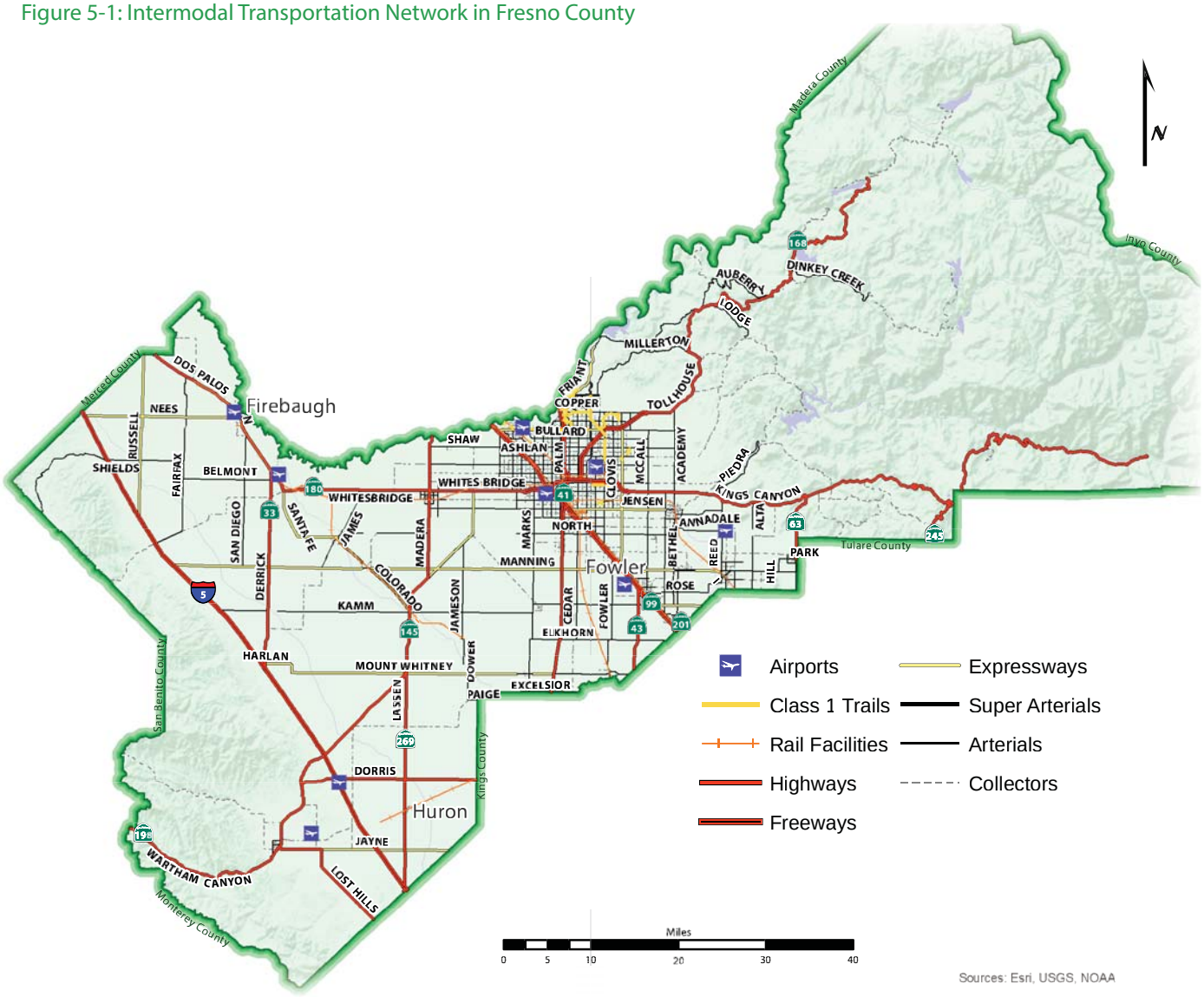
Through the use of this local funding source, which has been extended for a twenty-year period, and federal and state participation, Caltrans continues to work on the completion of a metropolitan freeway system which includes Freeways 41, 168, and 180. Major improvements have been made to overcrossings 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

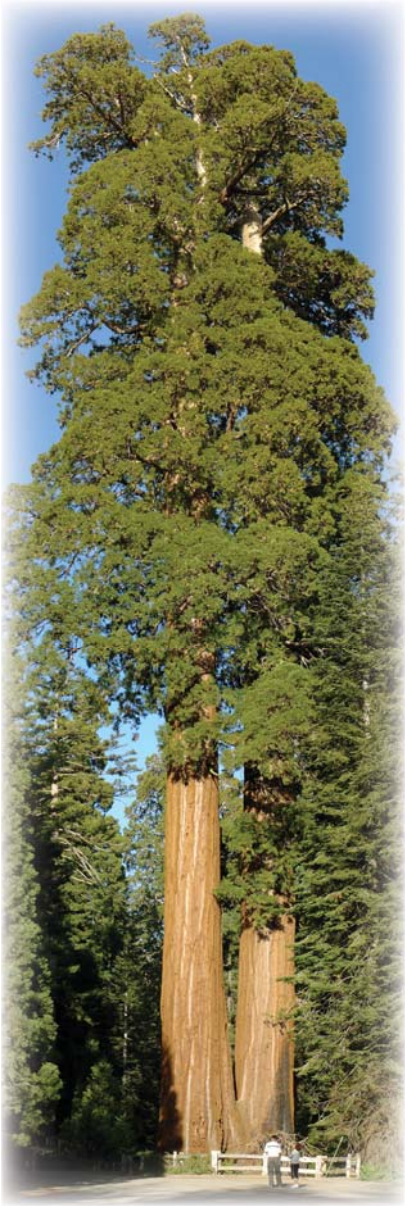
improving the safety and efficiency of freight movement in the region. The Freight Advisory Committee meeting schedule varies. The importance of this Committee is expected to increase over the coming years as the ability to move an ever-growing amount of freight becomes more challenging and as state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

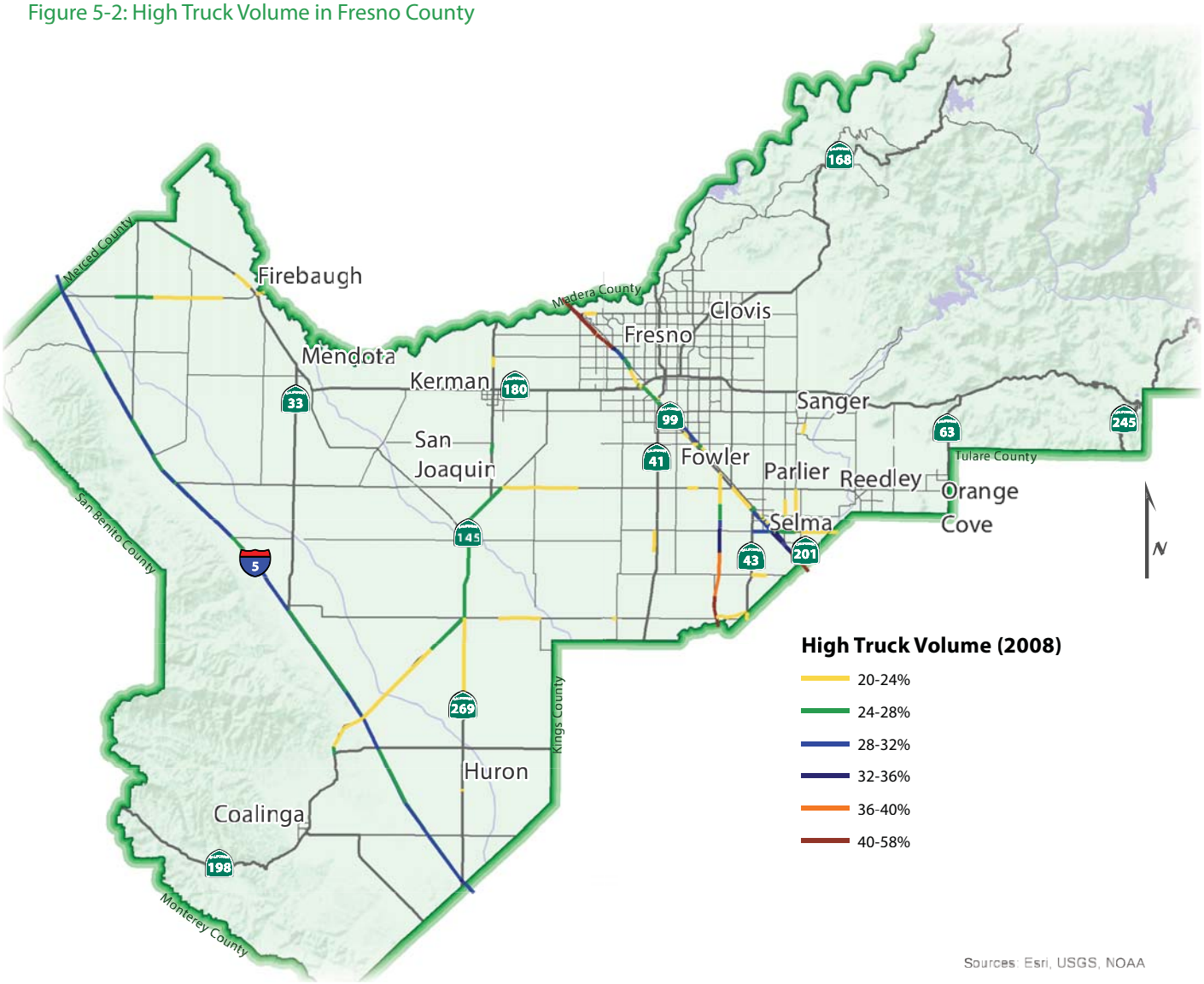


In addition to the San Joaquin Valley Goods Movement Study, Fresno COG served as the project manager for a Caltrans-funded study focusing on the potential for a short-haul rail intermodal service that would connect the San Joaquin Valley with the Port of Oakland. The study, known as the California Interregional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

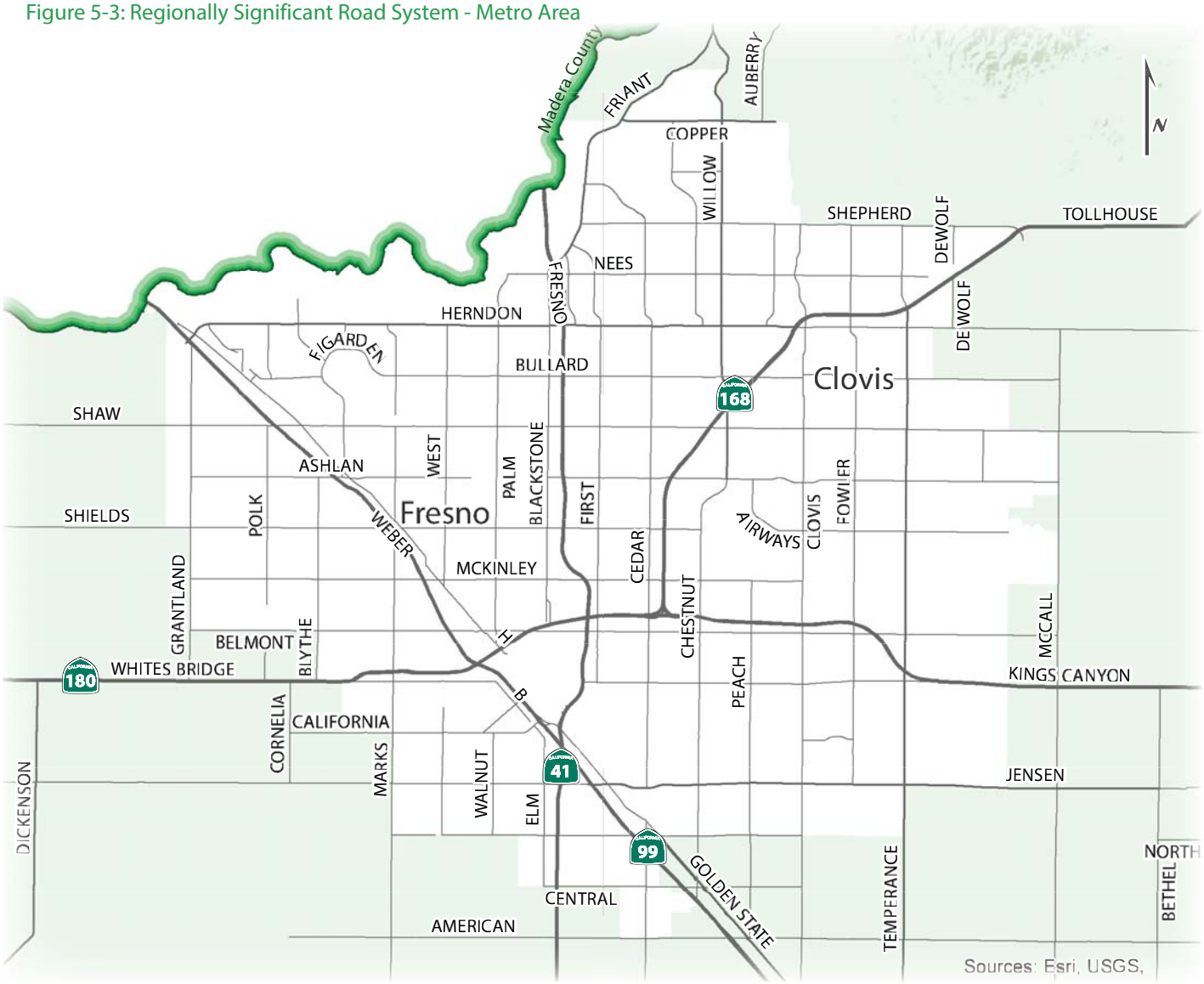
While the needs assessments and the planned highway improvements to meet those needs are presented in this document, a major remaining issue to be addressed is the financing required to implement the needed improvements. The people of Fresno County made a commitment in 2006 to the future transportation 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

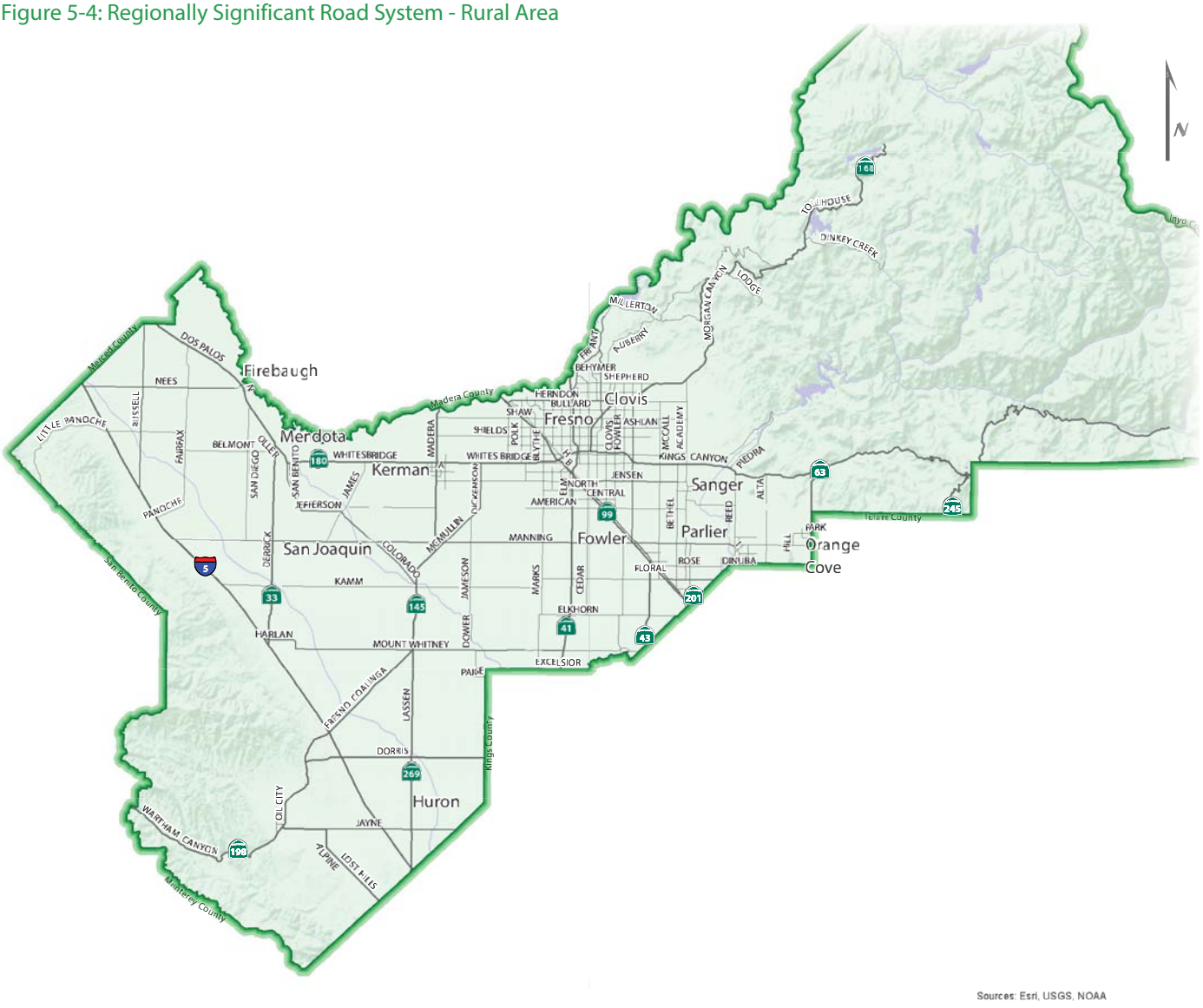


Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. Basic to this process is the recognition that individual roads and streets do not serve travel independently in any major way. 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.

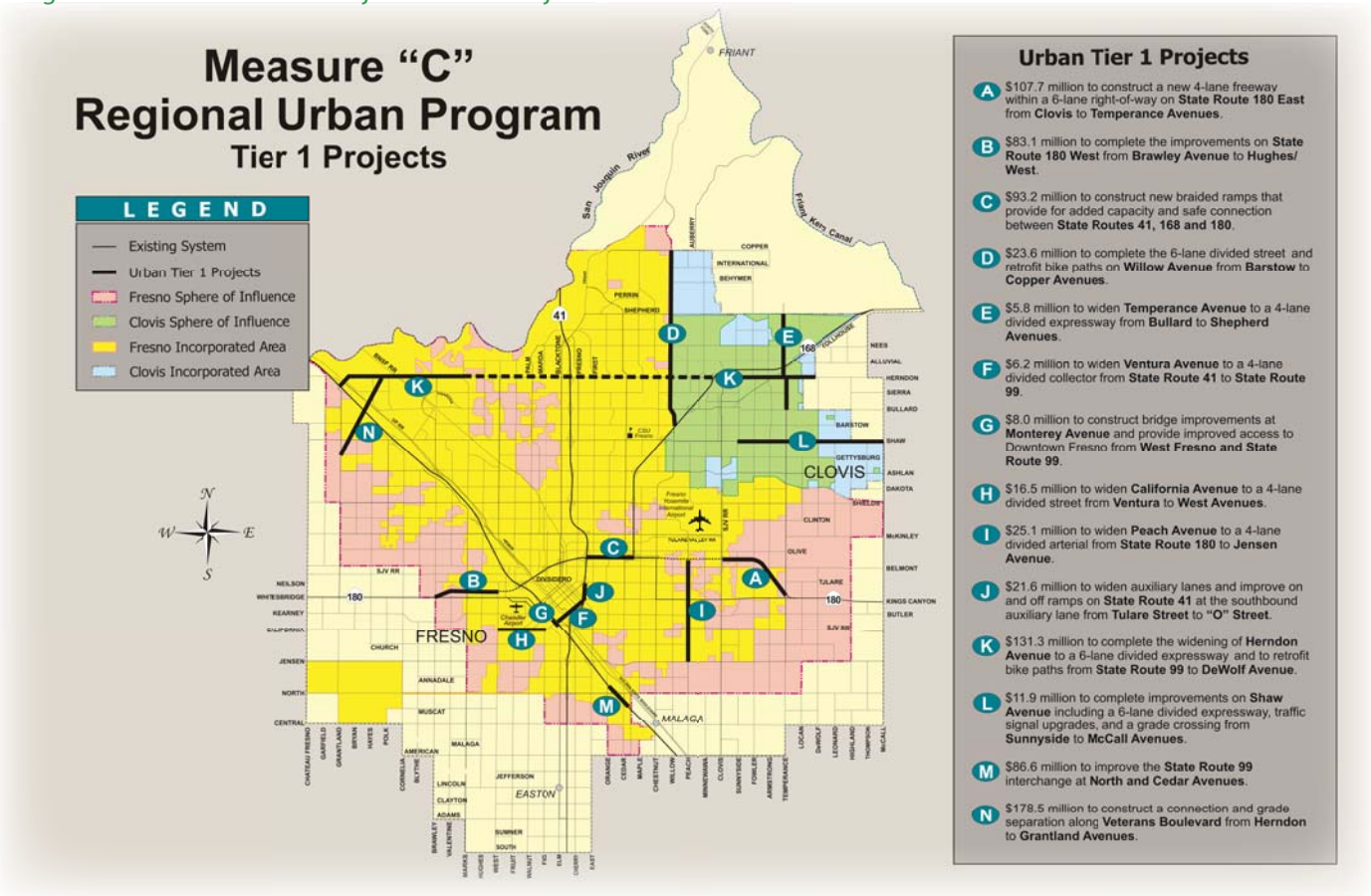
Accomplishments

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



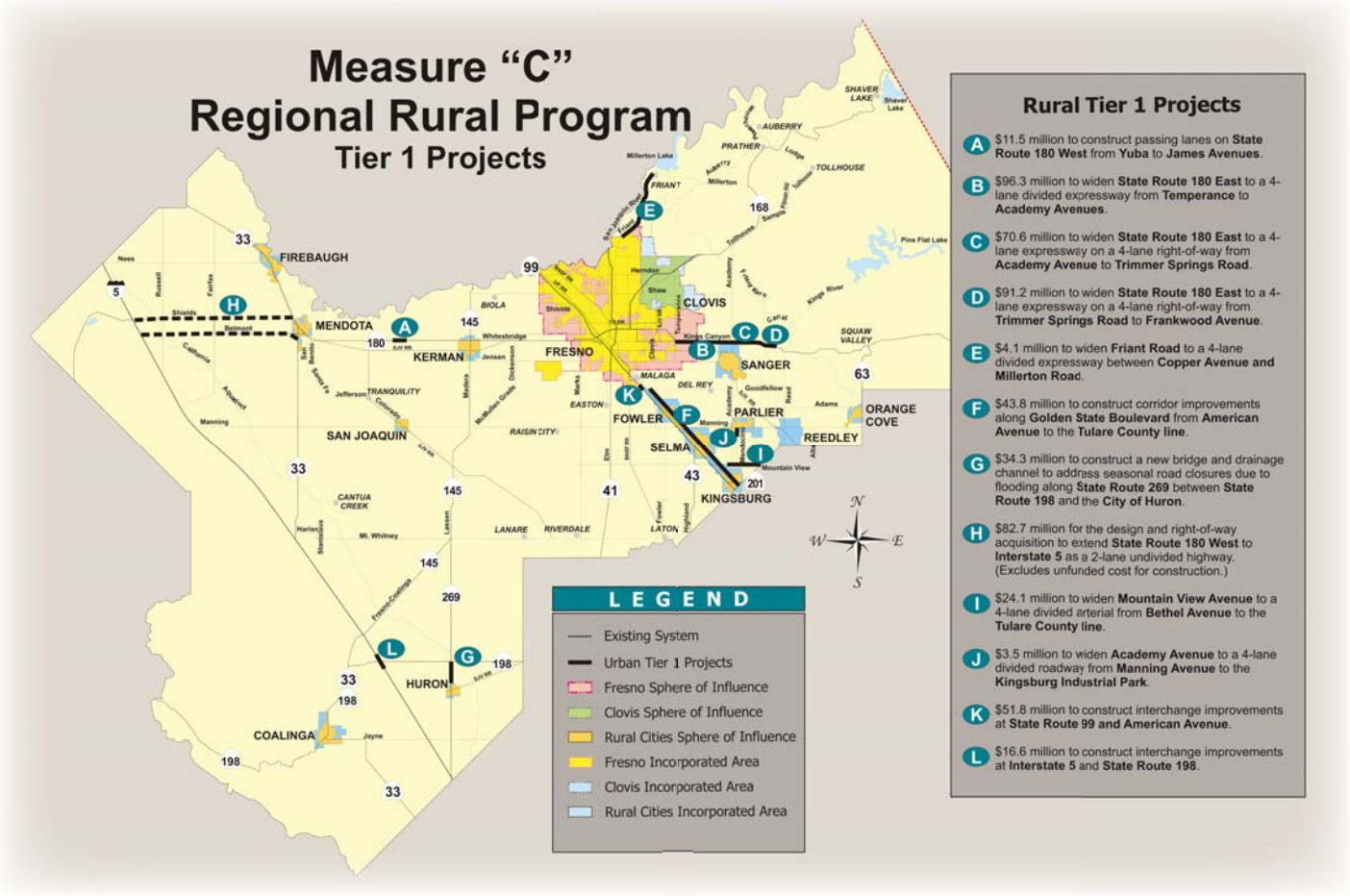
Expenditure Plan for use of the revenues. It is estimated that Measure C will generate approximately $1.5 billion in revenues over its life which will be used to construct and implement the multi-modal projects and programs contained within the measure.

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

MEASURE
FRESNO COUNTY TRANSPORTATION AUTHORITY
www.MeasureC.com

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.

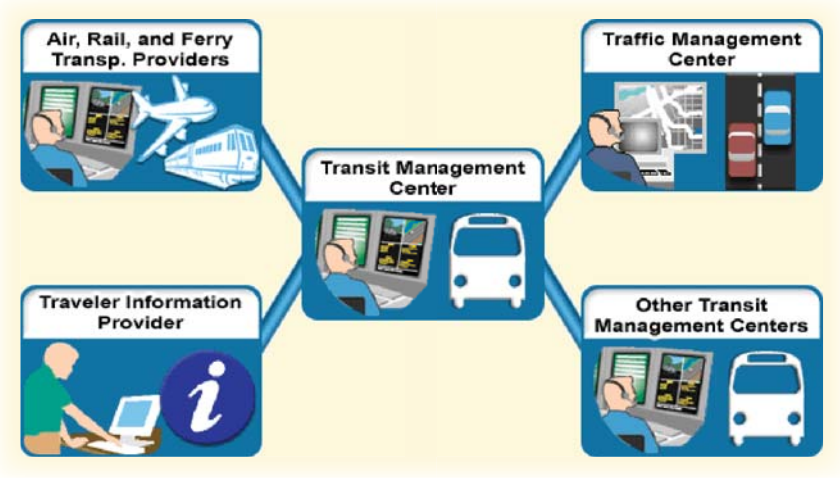
In September of 1999, the Fresno Council of Governments Policy Board adopted the Fresno County Intelligent Transportation System Strategic Deployment Plan (SDP). The plan was funded by a federal planning grant and is intended to provide a framework for the planning, programming, and deployment of advanced 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.

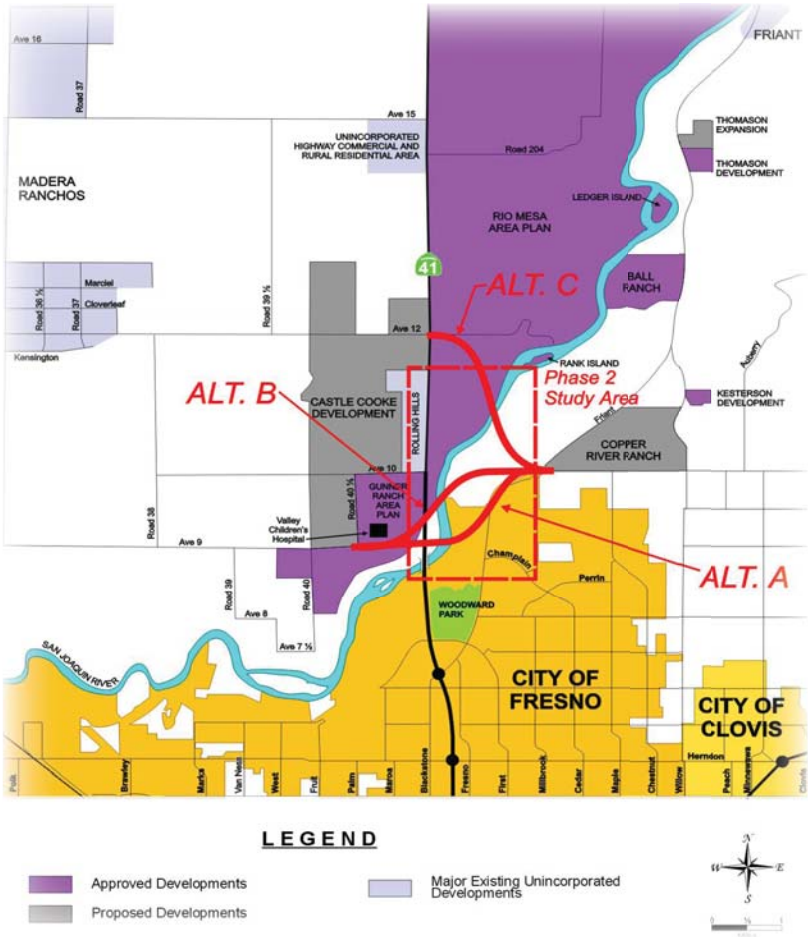
Transportation Corridor Needs

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

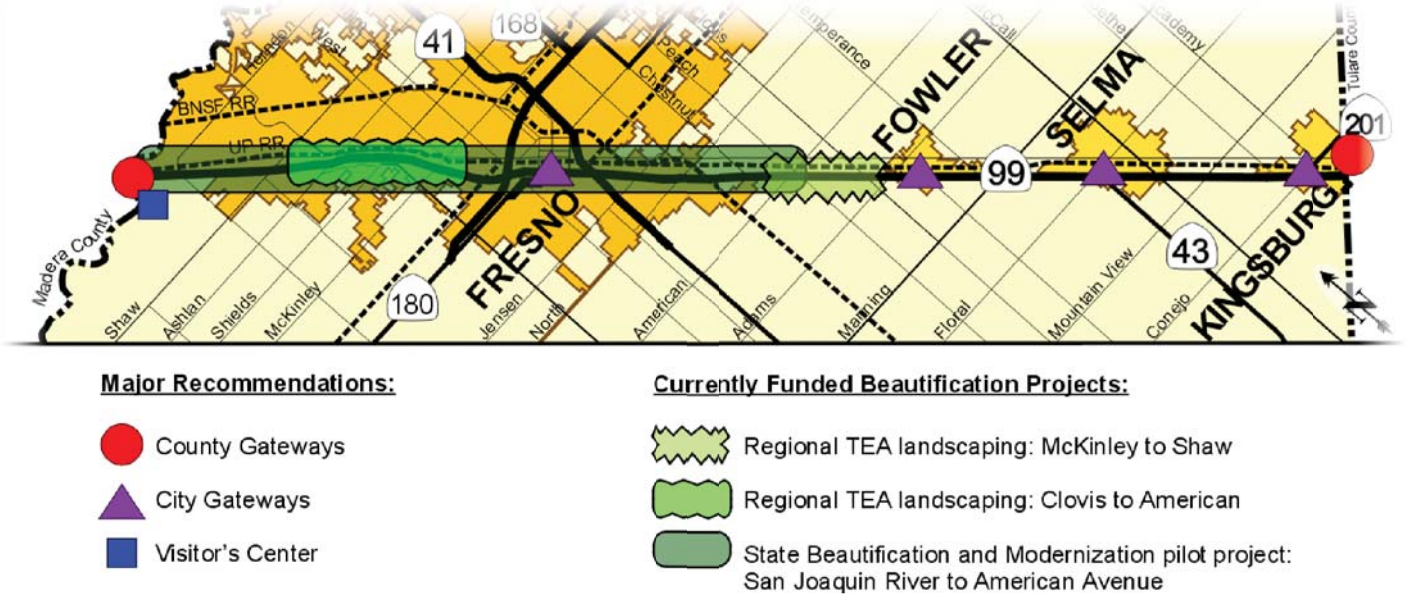


Phase One of the study focused on examining Fresno and Madera Counties' long-range transportation needs within the study area by considering various future land use plans together with circulation element policies and engineering and environmental constraints. Phase Two focused on the preliminary engineering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

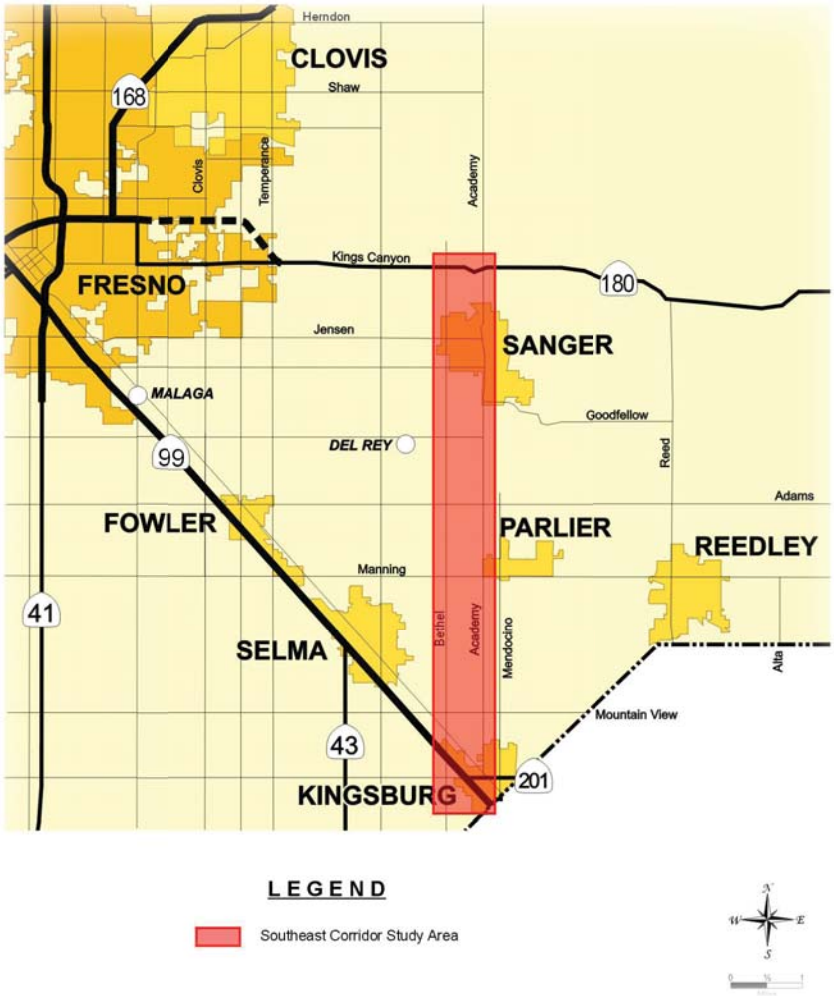
Figure 5-8: Highway 99 Beautification Master Plan



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.

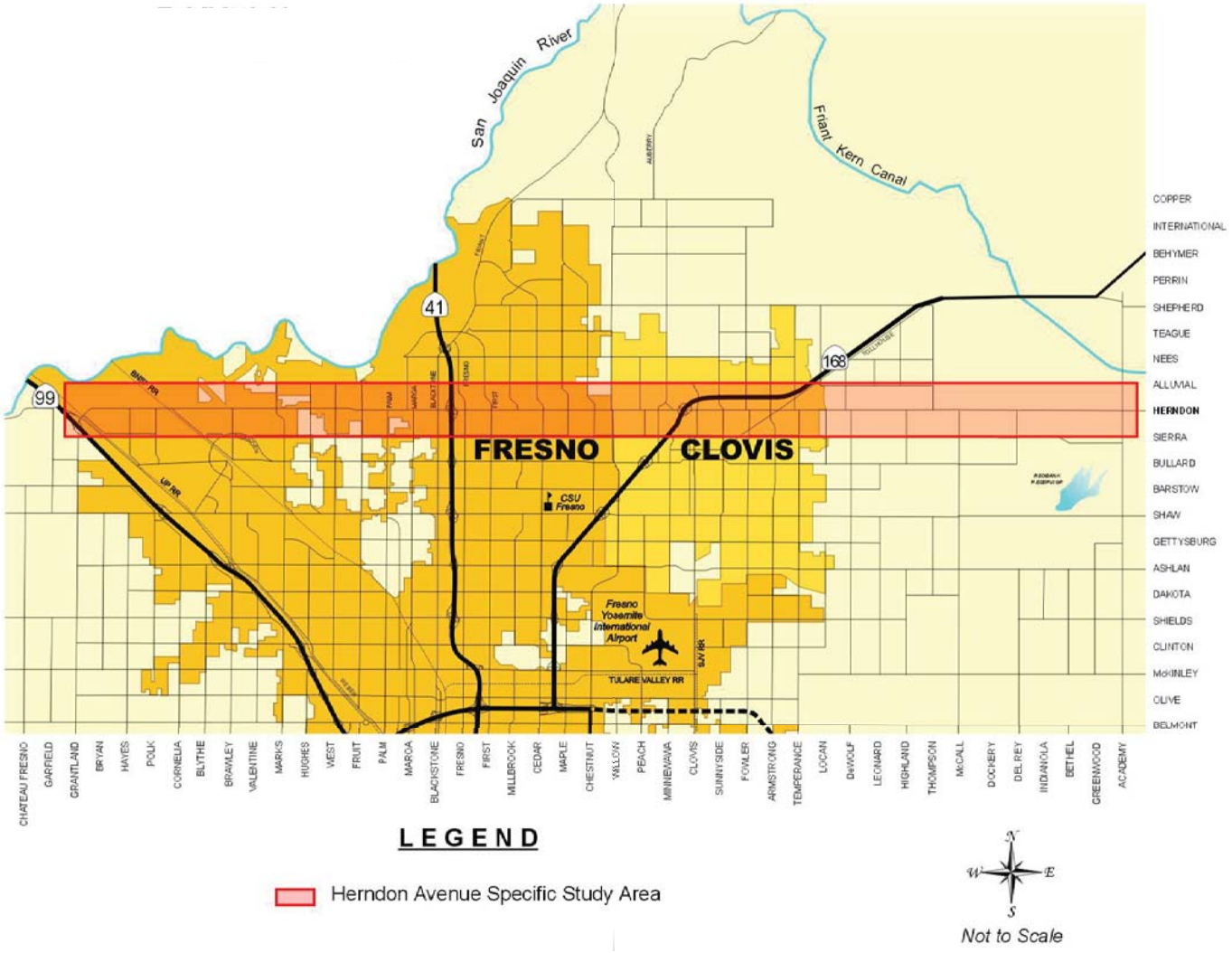
Fresno-Madera County Freeway Deficiency Study

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)

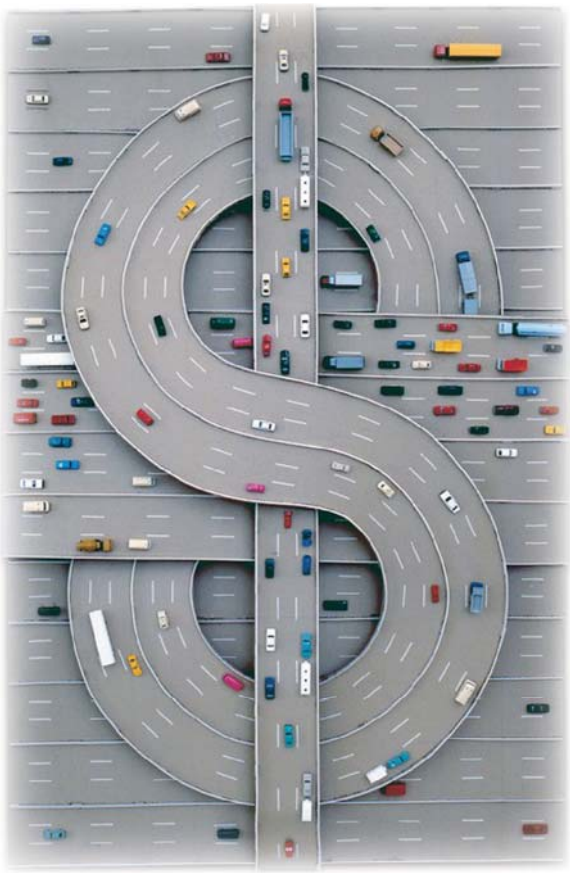
The various jurisdictions within Fresno County have completed numerous projects over the last several years, while highest priority has been given to maintenance of the existing street and road system. Special emphasis has also been given to the optimization of the existing system through traffic signal 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

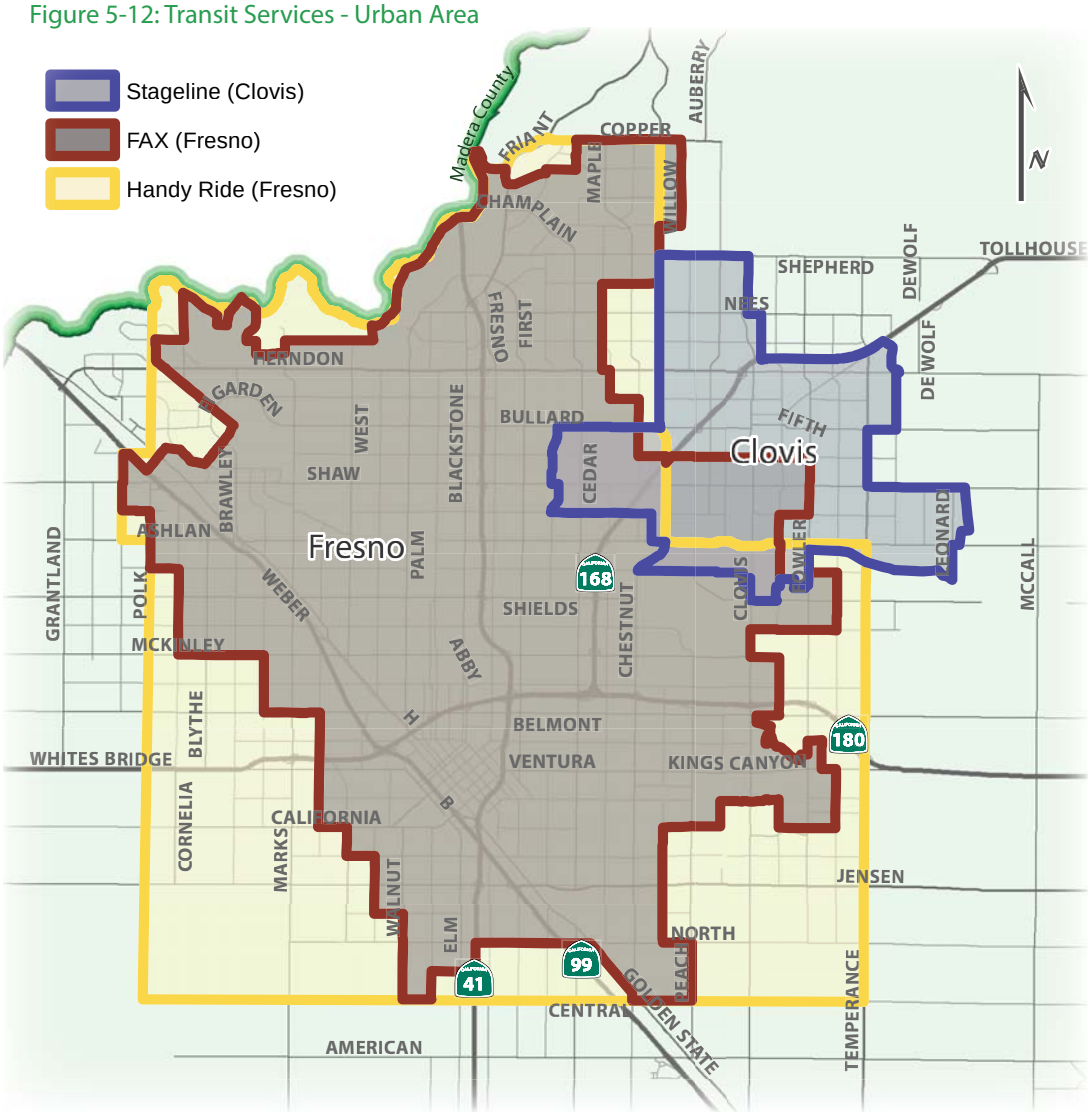
Where appropriate, the discussion will distinguish between the services of Fresno-Clovis Metropolitan Area Public Transportation, the Fresno County Rural Area Public Transportation, and Social Service Transportation.

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

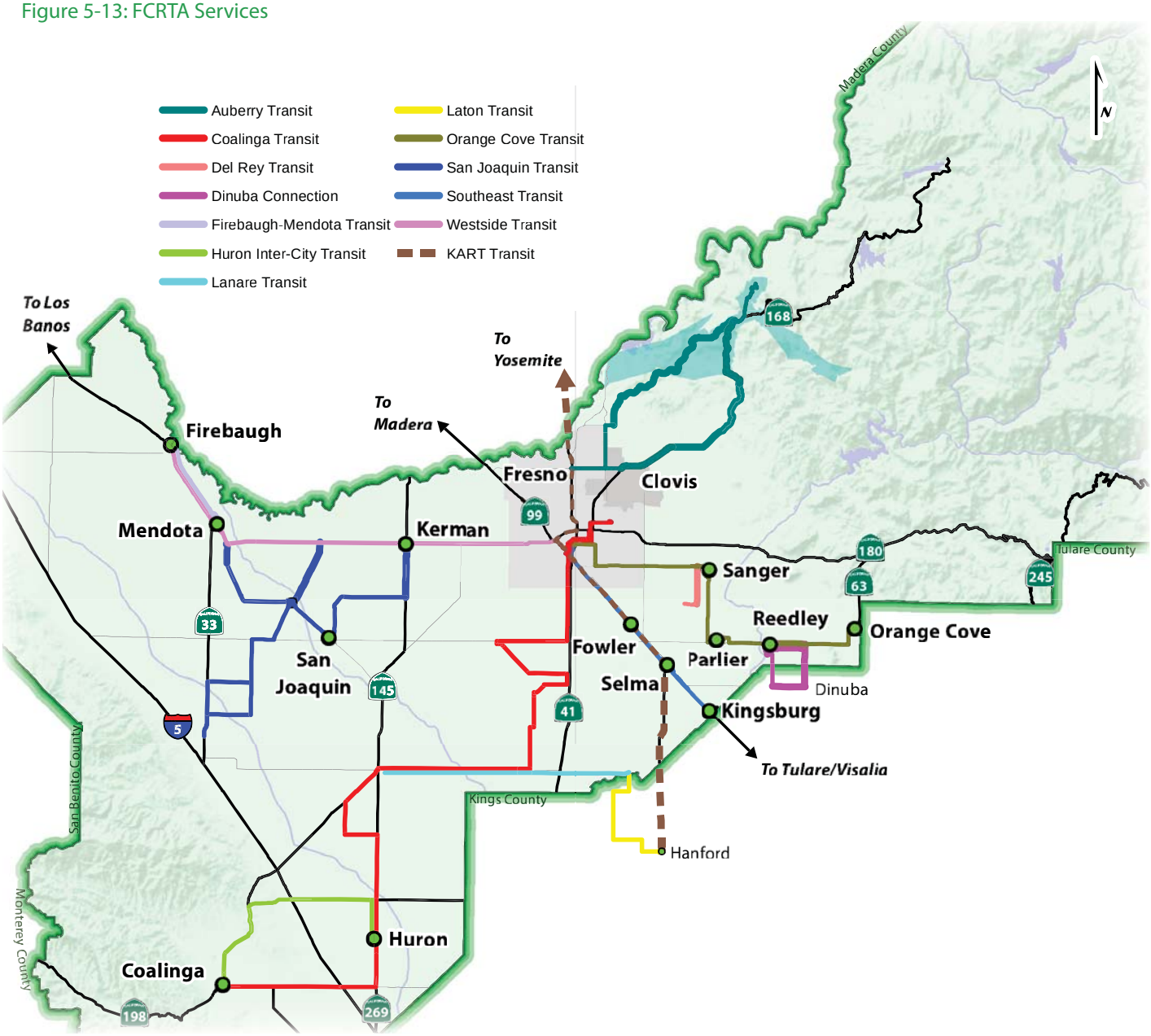
The primary provider of rural general public transportation is the Fresno County Rural Transit Agency (FCRTA). The Joint Powers Agency was formed in 1979 to address transit needs of the rural incorporated cities including: Coalinga; Firebaugh; Fowler; Huron; Kerman; Kingsburg; Mendota; Orange Cove; Parlier;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

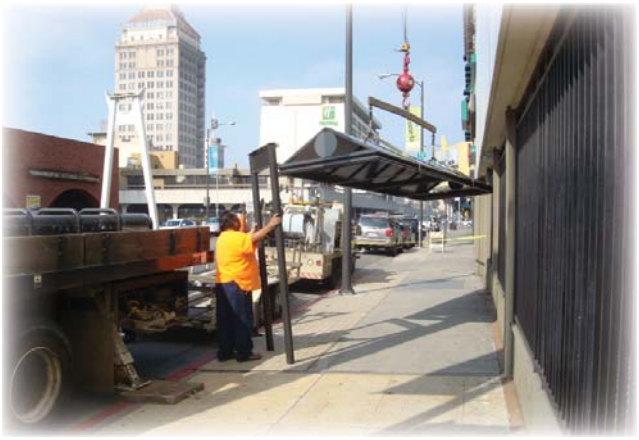
To date, the FCRTA has submitted four Applications for vehicle procurements, electronic fareboxes, and CNG refueling pumps totaling $1,653,394.

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.

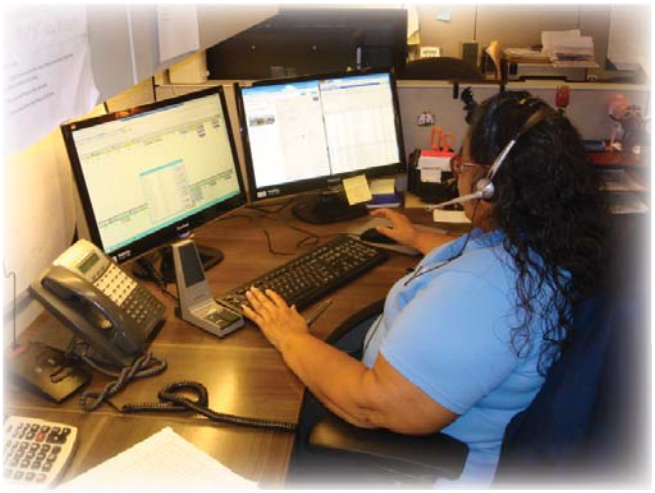
Centralized Dispatch and Route Consolidation

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.

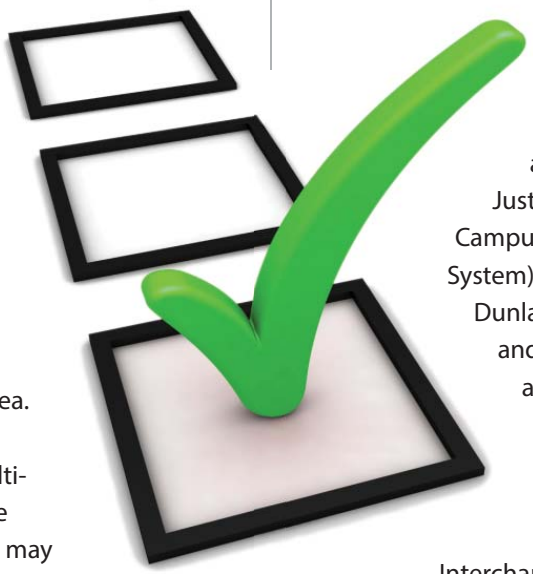
The maintenance component continues to purchase stock inventory that allows the facility to perform most repairs to the Rural CTSA's vehicles. This inventory of stock reduces required services by vendors, eliminates manpower involved in delivering vehicles for these minor

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.

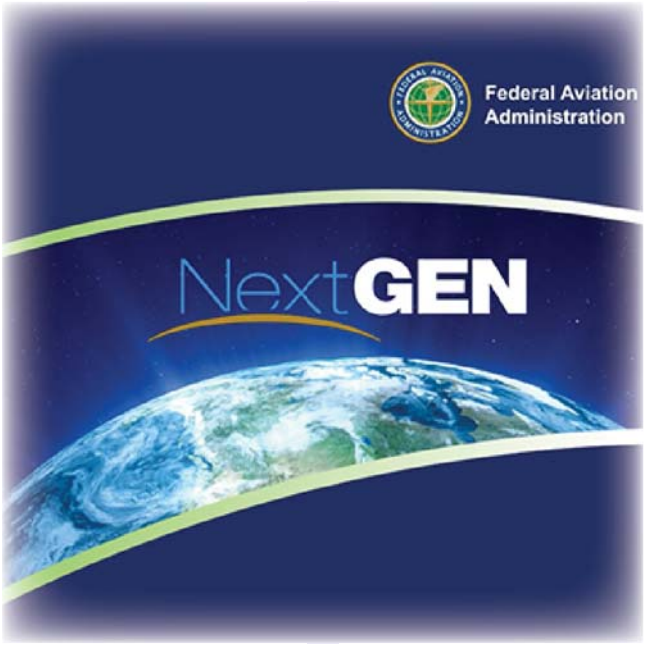
Needs Assessment

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.

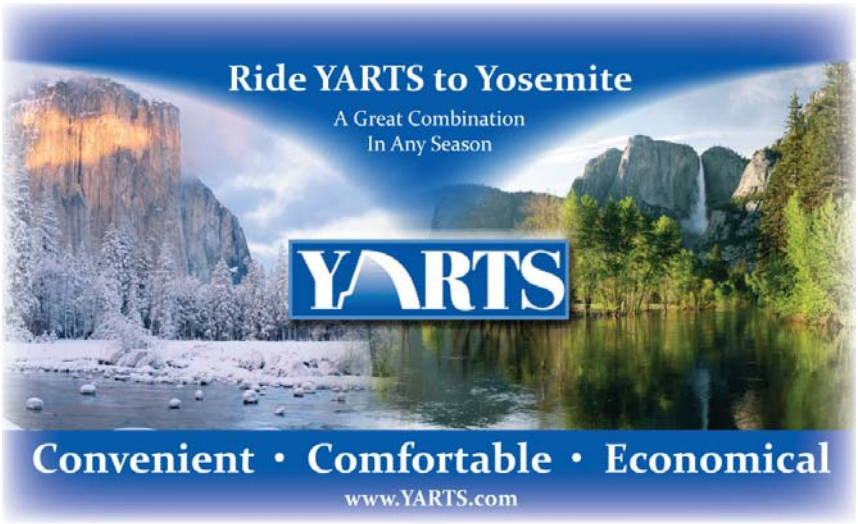
Highway Accessibility

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

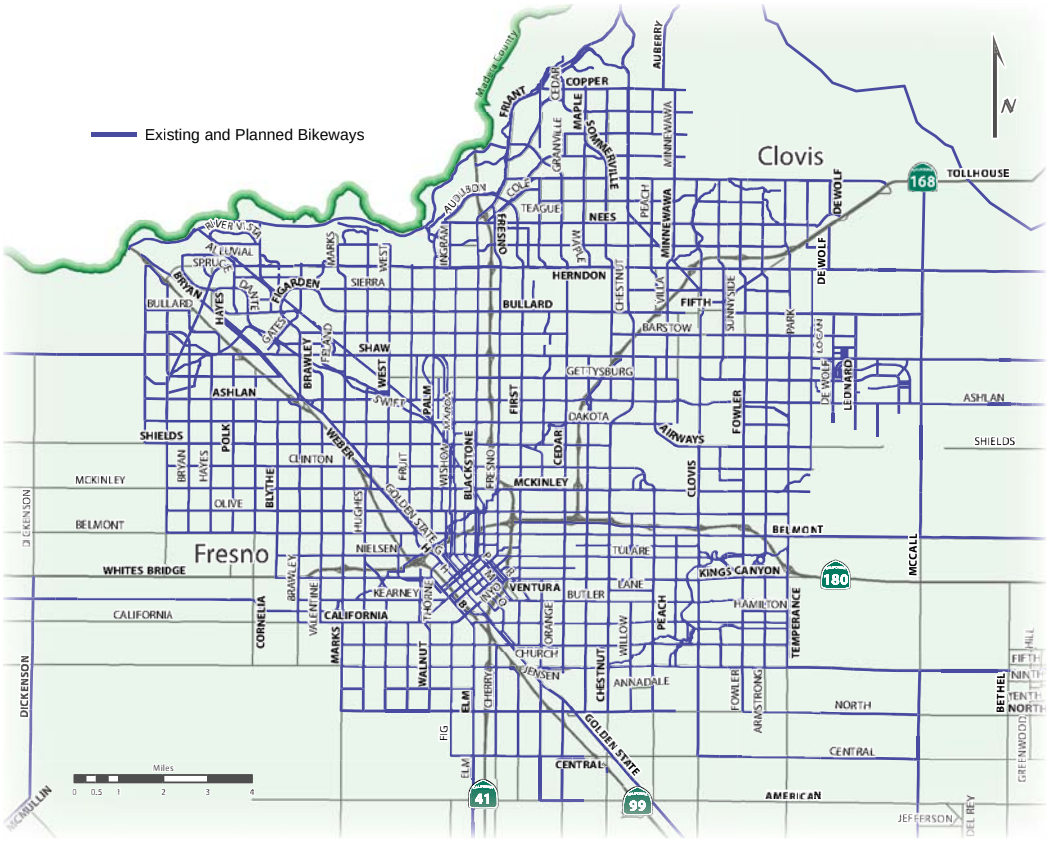
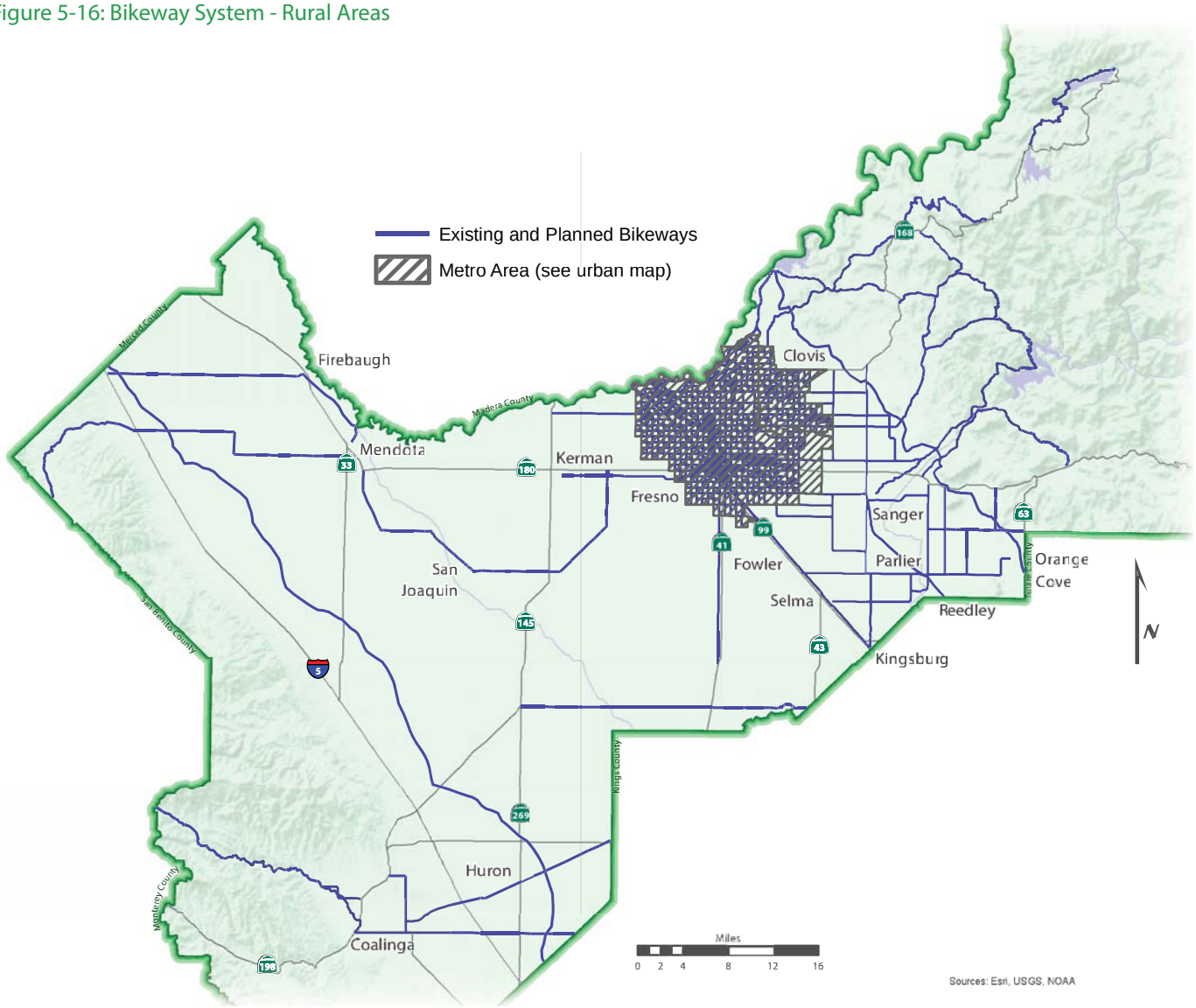


Figure 5-16: Bikeway System - Rural Areas



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.

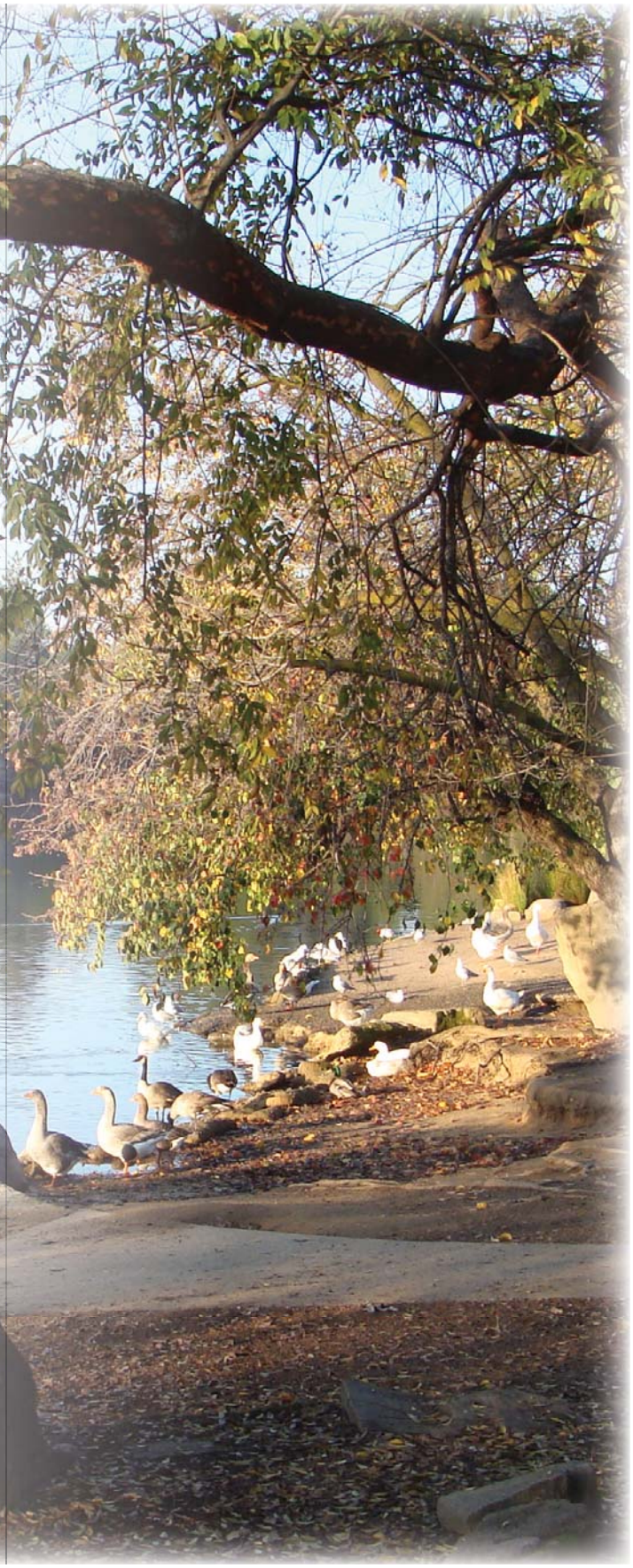
Long-Range Improvement Plan

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

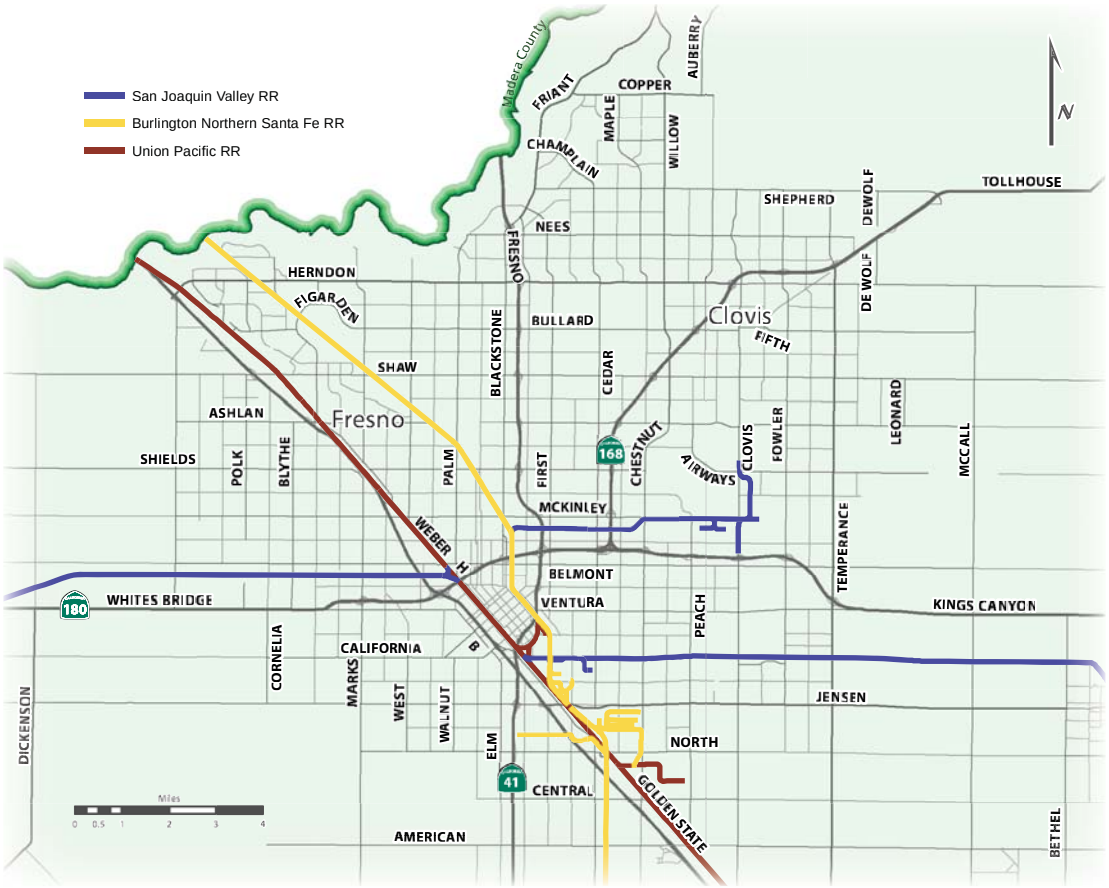
Overview

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

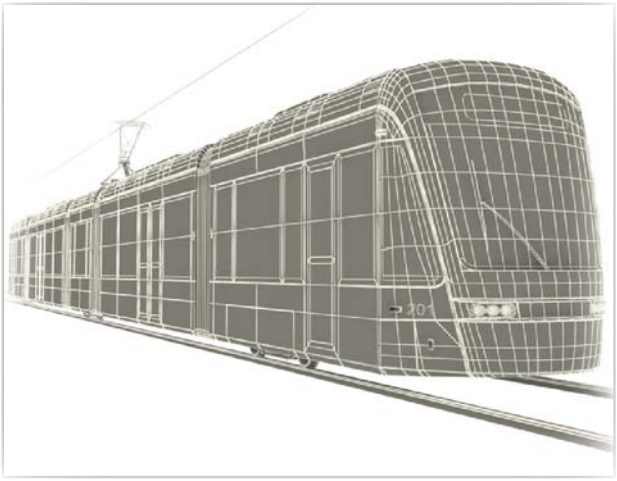
Consolidation Efforts

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)

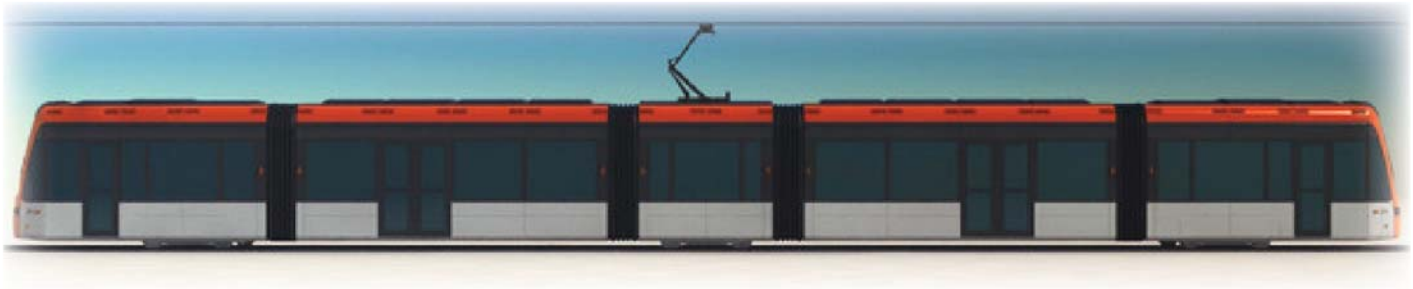
The primary objective of this study was to estimate the market for the California Inter-Regional Intermodal Service (CIRIS), a short-haul rail intermodal service that would connect the San Joaquin Valley with the Port of Oakland. This short-haul rail intermodal service is viewed by many as an alternative 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).

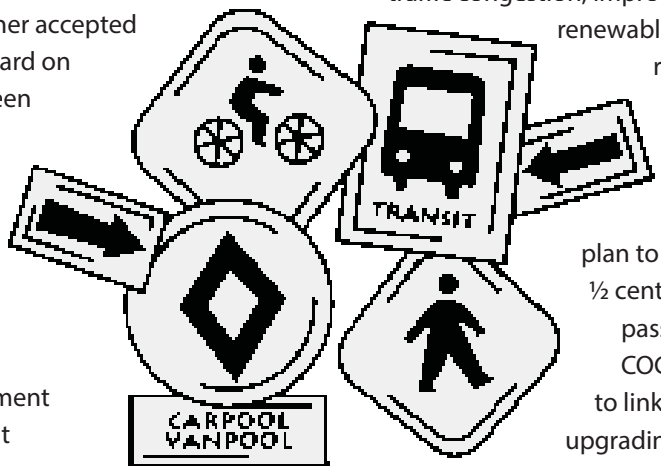
Transportation Demand Management (TDM)

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:

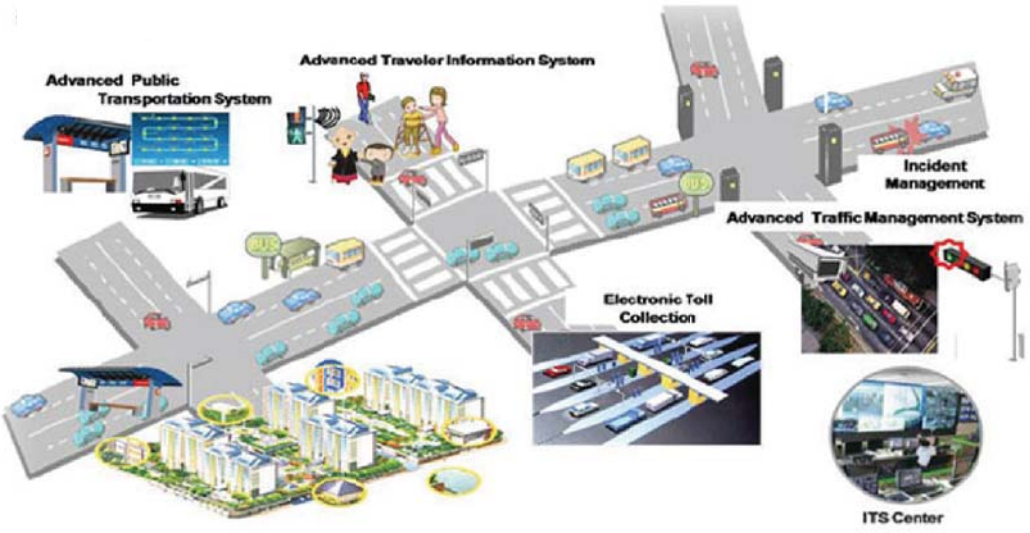
- Participants must travel in a carpool at least twice per week with at least one other person to work or school.
- Participants must be at least 18 years of age and have a valid driver's License.
- Participants must commute to or from Fresno County

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.

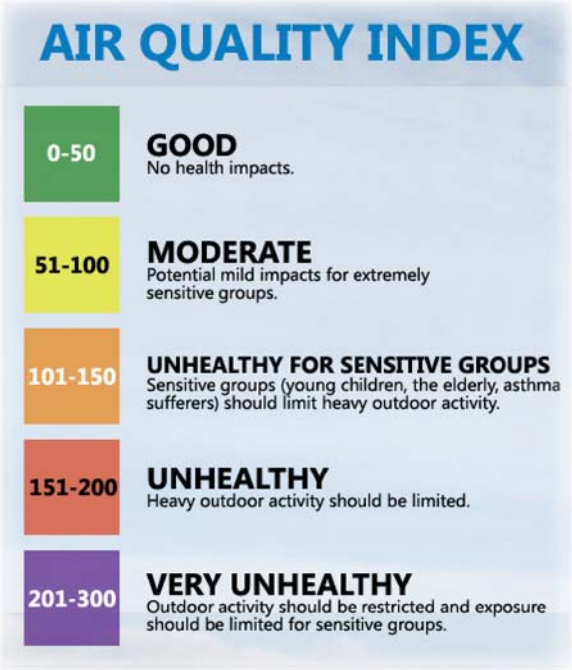
2004 Extreme Ozone Attainment Demonstration Plan (1-hour Ozone)

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.

Chapter 6

Parlier, California Orchards in the Fall

Policies: Foundations of the Plan

The Policy Element for the 2014 RTP supports three broad, overarching themes:

- *Preservation of existing facilities and service*
- *Sound financial leveraging of existing funding*
- *Connecting Transportation needs with land use and air quality impacts*

6.1 Vision:

A region of diverse partners building a progressive future as one voice, as envisioned in the Fresno County Blueprint Principles

Introduction

The Policy Element seeks to identify the transportation goals, objectives, and policies that meet the regional needs. Goals, objectives, and policies are established to direct the courses of action that will provide efficient, integrated multimodal transportation systems to serve the mobility needs of people, including accessible pedestrian and bicycle facilities, and freight, while fostering economic prosperity and development, and minimizing mobile sources of air pollution. The 2014 RTP reflects transportation planning for Fresno County through the year 2040.

Because Fresno County is one of eight MPOs that make up the San Joaquin Valley Air Basin, we are linked for regional transportation planning through air quality guidelines. As such, the Needs Assessment is addressed on the regional Valley level and can be found in the Valleywide Information section (Appendix B); Building the RTP (Chapter 1); and is further developed in the Action Element (Chapter 5). The Action Element describes the programs and actions necessary to implement the Goals of the Policy Element (Chapter 6). The Financial Element (Chapter 7) summarizes the cost of plan implementation constrained by a realistic projection of available revenues.

The Fresno County 2014 RTP Policy Element was developed using the Fresno COG Policy Board approved Policies from the 2011 RTP process. The policies were reviewed, updated, redundancies removed and outdated, or already achieved, goals were removed. Policies have been added to insure consistency with the financial implication of the recession, the intent of SB 375, new projects, and implementation of the Blueprint Principles. Further, the Fresno COG provided updates to the Transportation Technical Committee (TTC), Policy Advisory Committee (PAC), Fresno COG Policy Board, and the 2014 RTP Roundtable Advisory Committee monthly from September 2012 through the adoption of the 2014 RTP. Questions, comments, and suggestions were addressed throughout the committee process. The Preliminary Working Draft of the Policy Element was presented to the all Boards and Committees in January 2013, posted on the Fresno COG's website, and responses received were responded to during the meetings and/or via letter and email. Applicable suggestions/comments/content have been incorporated.

In addition, the 2014 RTP will include the first Sustainable Communities Strategies for Fresno County. As such, a separate committee and public participation process was followed. Performance measures /indicators were developed to evaluate the scenario process and can be located in the Sustainable Communities Strategies section of the 2014 RTP.

In developing the Policy Element for the 2014 RTP, broad overarching themes are evident: preservation of existing facilities, sound financial leveraging of existing funding, and connecting transportation needs with land use and air quality impacts.

The 2014 RTP continues to build upon the Fresno COG Policy Board accepted Blueprint Principles. The 2014 RTP seeks to improve the transportation system to provide for accessibility and mobility to support land use patterns developed by the Sustainable Community Strategies scenarios.

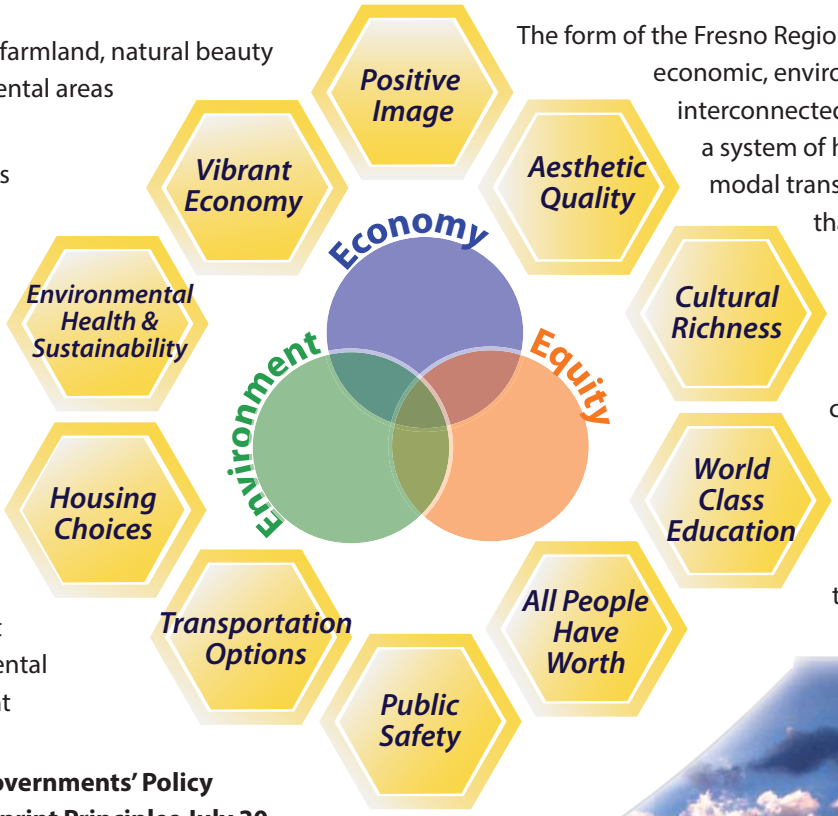
Fresno County Blueprint Principles:

1. Create a range of housing opportunities and choices
2. Create walkable and bikeable neighborhoods
3. Encourage community & stakeholder collaboration
4. Foster distinctive, attractive communities with a strong sense of place
5. Make development decisions predictable, fair and cost effective
6. Mix land uses
7. Preserve open space, farmland, natural beauty and critical environmental areas
8. Provide a variety of transportation choices
9. Strengthen and direct development towards existing communities
10. Take advantage of compact building design
11. Enhance the economic vitality of the region
12. Support actions that encourage environmental resource management

The Fresno Council of Governments' Policy Board accepted the Blueprint Principles July 30, 2009.

- A healthy and sustainable environment where air, aquifers, surface waters, forests, soil, agriculture, open space and wildlife resources are enhanced and protected.
- A focus on Cultural and Community Stewardship where all people enjoy fundamental rights as members of a free society, and where the community takes ownership of problems and their solutions.

Fresno County Blueprint Community Values and Underlying Themes



The form of the Fresno Region recognizes its economic, environmental, and cultural interconnectedness while maintaining a system of high capacity multi-modal transportation corridors that interconnect the metro area to the rural areas and the state while preserving and maintaining the character of individual communities and the vital agricultural and natural resources between and around them.

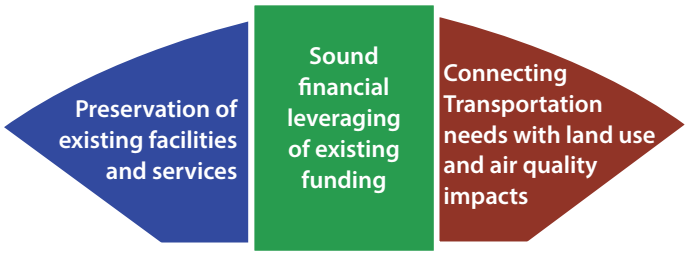
6.2 Fresno County Blueprint

Vision Statement

Fresno County will be composed of unique cities, communities and a diverse population in a connected high quality environment that accommodates anticipated population growth and is supported by:

- A vibrant economy built on competitive strength, and world class education

6.3 The Policy Element for the 2014 RTP supports three broad overarching themes:



Preservation of existing facilities and services:

Maintaining existing facilities and services is a responsibility that is primarily tasked to the local agencies, since the majority of state and federal funds that come to Fresno COG are mainly limited to capital improvements. Fresno COG supports multimodal uses and roadway maintenance and rehabilitation which can be a cost-effective approach to delivering more complete streets. The transit system works to gain efficiency from coordinating diverse services, leading to better customer service and ridership. Potential improvements are investigated to make transit attractive to new users, while enhancing the experience for the transit-dependent population, inclusive of low-income and minority areas. Transportation demand management works to help residents find alternatives to single occupancy driving. Fresno COG continues with a well-developed rideshare and senior taxi script programs.

Sound financial leveraging of existing funding:

The effects of the national recession continue to be felt in Fresno County. With the shortfalls in the county and cities' budgets it continues to be important for Fresno COG to provide support to local planning efforts while seeking additional funding. The decreased jobs and housing growth along with slower rates of population growth projections creates less money forecasted for investment.

Connecting transportation needs with land use and air quality impacts:

The 2014 RTP was developed following Fresno COG member agency input, Transportation Technical Committee, Policy Advisory Committee, Policy Board direction, state and federal requirements, along with input from the 2014 RTP Roundtable Committee and community stakeholder input. While continuing to build on the Blueprint Principles the 2014 RTP Sustainable Communities Strategy integrates the transportation system with land use and more compact development. Mixed use development with better balance of jobs and housing will help meet the changing needs of our communities. Successful incorporation of this future development can lead to shorter commutes, fewer trips overall, and providing more transportation choices including bike/pedestrian and transit availability.

6.4 Goals and Objectives of the RTP

The 2014 Regional Transportation Plan's goals, objectives, and policies have been developed to serve as the foundation for both short and long-term planning. For purposes of the Regional Transportation Plan the following definitions will apply.

Goal:

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

Objective:

An "Objective" provides clear, concise guidance to obtaining the goal. Objectives are successive levels of achievement in movement toward a goal. Individual objectives are capable of being realistically attained.

Policy:

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

Six Transportation Modes:

The goals, objectives and policies are presented below and are organized into six broad transportation mode based categories:

- General Transportation (content applies across all transportation modes)
- Highways, Streets, and Roads
- Mass Transportation
- Aviation
- Non-Motorized (includes bicycle, pedestrian, active transportation)
- Rail

General Transportation Goals

The Goals, Objectives and Policies in this section are general in nature and apply to all transportation modes.

Table 6-1 defines in detail the objectives and policies related to accomplishing the goals, listed here:

- Goal: An efficient, safe, integrated, multimodal transportation system.
- Goal: Improved mobility and accessibility for all regardless of race, income, national origin, age, or disability.
- Goal: Planning outcomes that are consistent with various planning efforts.
- Goal: A regional transportation network consistent with the intent of SB 375 (Senate Bill 375 also known as the Sustainable Communities Protection Act of 2008).
- Goal: Support cooperative efforts between local, state, federal agencies and the public to plan, develop and manage our transportation system.
- Goal: Attainment and maintenance of federal and state ambient air quality standards (criteria pollutants) as set by the Environmental Protection Agency and the California Air Resources Board.

Highways, Streets, and Roads Goals

Table 6-2 defines in detail the objectives and policies related to accomplishing the goals, listed here:

- Goal: An integrated and efficient highways, streets and roads network
- Goal: Efficient use of available transportation funding
- Goal: Acceptable level-of-service (LOS) for the highways, streets and roads network

Mass Transportation Goals

Table 6-3 defines in detail the objectives and policies related to accomplishing the goals, listed here:

- Goal: An efficient and fiscally responsible public transportation mobility system
- Goal: A safe and reliable public transportation service
- Goal: An effective public transportation system
- Goal: Public transit services with a positive public image in communities served
- Goal: An integrated multimodal transportation system which facilitates the movement of people
- Goal: A coordinated policy for public transportation that complements land use and air quality policies

Aviation Goal

Table 6-4 defines in detail the objective and policies related to accomplishing the goal listed here:

- Goal: A fully functional and integrated air service and airport system that is complementary to the regional transportation system

Non-Motorized Goals

Table 6-5 defines in detail the objectives and policies related to accomplishing the goals, listed here:

- Goal: Maximize bicycling and walking through their recognition and integration as valid and healthy transportation modes in transportation planning activities
- Goal: Safe, convenient, and continuous routes for bicyclists and pedestrians of all types which interface with and complement a multimodal transportation system
- Goal: Improved bicycle and pedestrian safety through education and enforcement
- Goal: Increased development of the regional bikeways system, related facilities, and pedestrian facilities by maximizing funding opportunities

Rail Goals

Table 6-6 defines in detail the objectives and policies related to accomplishing the goals, listed here:

- Goal: A safe, efficient and convenient rail system which serves the passenger and freight needs of the region and which is integrated with and complementary to the total transportation system
- Goal: A transportation system that efficiently and effectively transports goods throughout Fresno County

Table 6-1A: General Transportation
Multimodal System - Support and Enhancement of Economy

Goal : An efficient, safe, integrated, multimodal transportation system	
Objective: Develop an integrated multimodal transportation network that supports and enhances the region's economy and serves the needs of a growing and diverse population for transportation access to jobs, housing, recreation, commercial, and community services as well as goods movement.	
Policies:	
Develop a regional streets and highways system that has a balanced mix of high speed and local corridors which are functional and flexible for intermodal use, providing connectivity to the region, state and nation.	Decisions on improvements to the transportation system shall take into account the effective use of all modes and facilities.
Pursue development of strategies and methods to enhance the efficient movement of freight through the multimodal network.	Encourage and support the development of methods to expand and enhance transit services and to increase the use of such services.
Work cooperatively with the private sector to ensure that the collected information accurately reflects existing and forecasted conditions that are of importance from a freight transportation perspective.	Encourage jurisdictions to ensure that the needs of pedestrians, bicyclists, and individuals with disabilities are included in the project review process.
Ensure that public and private transportation providers and other interested parties have an opportunity to provide input into the transportation planning process.	Support the coordination or consolidation (where appropriate) of transit and paratransit services to provide more effective, efficient and accessible transportation services.
Integrate transportation modes through a coordinated transportation systems management process.	Encourage local jurisdictions to provide incentives to promote public transit, walking and bicycling.
Provide for efficient, multi-destination trips through the coordination of urban and rural public transportation.	Encourage and promote ridesharing, including carpooling and vanpooling as an alternative to single-occupancy vehicle use.
Develop bicycle and pedestrian facilities as viable alternatives to single-occupancy vehicle use.	Encourage continued support of local jurisdiction's efforts to facilitate development of housing in all price ranges, to meet the housing needs of the local workforce and population, including low income residents. Fresno COG will develop the required Regional Housing Needs Allocation Plan to guide local agencies' assessments of housing supply and price ranges.
Develop air transportation facilities and services that are complementary to other modes of transportation.	

Table 6-1B: General Transportation
Multimodal System - Future Travel Demands & Financial Resources

Goal : An efficient, safe, integrated, multimodal transportation system.	
Objective: Maintain and improve existing facilities as the basic system which will address existing and future travel demands.	**Objective:** Manage the financial resources which are available from government, the private sector, and users of the transportation system in a cost-effective manner to meet regional needs.
Policies:	**Policies:**
Manage the transportation system in a manner designed to increase operational efficiency, conserve energy and space, reduce air pollution and noise, and provide for effective goods movement, safety, personal mobility and accessibility.	Procure and leverage federal, state and local transportation funding to the maximum degree possible, in order to develop a regional transportation network which serves the residents of the region in the most economical, effective and efficient manner possible.
Continue support for the preservation of existing transportation facilities and, where practical, addressing transportation needs by using existing transportation modes efficiently.	Encourage new or reconstructed facilities to incorporate design standards which extend the life cycle and reduce maintenance costs.
Maintain stringent safety requirements for all transportation modes, and identify problem (hazardous) locations and implement counter measures for anticipated problems wherever possible.	Pursue additional funding sources for development of major transportation programs and projects. Work with all interest groups to reach consensus and initiate an active public information program regarding transportation funds needed.
Identify those transportation problems where transportation systems management can be effective.	

Table 6-1C: General Transportation
Environmental Justice

Goal: Improved mobility and accessibility for all regardless of race, income, national origin, age, or disability
Objective: To incorporate concern for environmental justice into transportation decisions.
Policies:
Seek to ensure fair distribution of the benefits and burdens of transportation projects, and seek to address the transportation needs of the disadvantaged communities through SCS Implementation Programs.
Seek to ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
Encourage local transportation agencies to leverage federal funding to address unique challenges of the low income, disabled and elderly populations.

Environmental Justice is:
The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that:
No group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies.

Meaningful involvement means that:

1. People have an opportunity to participate in decisions about activities that may affect their environment and/or health
2. The publics' contribution can influence the regulatory agency's decision
3. Their concerns will be considered in the decision making process
4. The decision makers seek out and facilitate the involvement of those potentially affected

Table 6-1D: General Transportation Planning Outcomes

Goal: Planning outcomes that are consistent with various planning efforts
Objective: Ensure consistency with emerging planning efforts.
Policies:
Seek to ensure, during planning processes, that planning efforts are as consistent as feasible; such as: the Blueprint Planning Principles, Health in All Policies, the intent of SB375 (Senate Bill 375 also known as the Sustainable Communities Protection Act of 2008), Caltrans' Complete Streets Program, and statewide and federal air quality goals, etc.
Incorporate performance measures and outcomes as integral components in planning and programming processes as feasible.

Table 6-1E: General Transportation Regional Tansportation Network

Goal: A regional transportation network consistent with the intent of SB375 (Senate Bill 375 also known as the Sustainable Communities Protection Act of 2008)
Objective: Development of a regional transportation network which is environmentally sensitive and helps reduce greenhouse gas emissions wherever possible.
Policies:
Under the direction of the Policy Board, identify and coordinate a strategy and methodology to assist member agencies in avoiding or fully mitigating all significant impacts of new transportation facilities on environmentally sensitive areas and natural resources by identifying potential policies and actions to minimize the loss of farmland associated with the construction of transportation facilities.
Encourage infill development in areas that take advantage of remaining capacity in existing transportation facilities.
Encourage energy conservation through alternatives to single occupancy vehicles, increased transportation efficiency and facility design. populations.
Project level decisions should give priority to safety, air pollution, noise and energy considerations.
Support the implementation of Transportation System Management, Transportation Demand Management, and Transportation Control Measures that reduce emissions on the circulation system.
Continue participation in the development of State Implementation Plans (SIP's) to attain the National Ambient Air Quality Standards (criteria pollutants) with the San Joaquin Valley Unified Air Pollution Control District.
Continue to support coordinated transportation planning efforts between the eight Valley Metropolitan Planning Organizations (MPO's) located in the San Joaquin Valley nonattainment air basin.
Endeavor to ensure the consistency of regional transportation planning efforts with applicable Federal, State, and local energy conservation programs, goals, and objectives.

Table 6-1F: General Transportation Intergovernmental Coordination

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

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

Policies:

Coordinate with other public agencies to ensure that the overall social, health, economic, energy and environmental effects of transportation decisions are understood, and given opportunity for input, by the general public and groups that have been traditionally underrepresented in planning processes.

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

Ensure that existing and future land use plans of the communities within the region are recognized in the formulation of transportation decisions.

Work together with the appropriate public agencies to identify and potentially preserve rights-of-way for construction of future transportation projects.

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

Table 6-1G: General Transportation - Air Quality

Goal: Attainment and maintenance of federal and state ambient air quality standards (criteria pollutants) as set by the Environmental Protection Agency and the California Air Resources Board		
Objective: Participate in and support the coordinated transportation and air quality planning efforts between the eight Valley Metropolitan Planning Organizations, Caltrans, the San Joaquin Valley Air Pollution Control District, the Federal Highway Administration, Federal Transit Administration, the California Air Resources Board, and local agencies charged with land use planning.	**Objective:** Implement all appropriate Transportation System Management, Transportation Demand Management, and Transportation Control Measure strategies as technologically and economically feasible.	**Objective:** Integrate land use planning, transportation planning, and air quality planning to make the most efficient use of public resources and to create a more healthy and livable environment.
Policies:	**Policies:**	**Policies:**
Participate in developing the transportation/air quality modeling protocol for State Implementation Plans (SIPs) with the San Joaquin Valley Air Pollution Control District.	Ensure consistency between and among the goals, objectives, policies, and implementation measures of the Regional Transportation Plan, the Transportation Improvement Program, and State Implementation Plans (SIPs).	Consider the air quality impacts of mobile sources when planning transportation systems to accommodate expected growth in the community. Thereby reducing the consumption and dependence upon non-renewable energy resources used by mobile sources of emissions.
Work with community members and organizations, including those that have been traditionally underrepresented, to provide outreach and involvement in relevant air quality policies, programs and issues.	Improve vehicular flow and efficiency of the region's circulation system using intelligent transportation systems where feasible.	Pursue non-single occupancy and lower/zero emission vehicle modes shall be pursued as preferred alternatives where feasible.
Support the efforts of the San Joaquin Valley Air Pollution Control District to integrate appropriate policies and implementation measures identified in the Air Quality Guidelines for General Plans into local general plans.		Support the development of infrastructure required for alternative fueled vehicles as well as zero emission vehicles.
Support the air pollution enforcement and educational efforts of the San Joaquin Valley Air Pollution Control District.		Continue Fresno COG's established policy to fund cost-effective projects that facilitate air quality improvement through emission reductions with Congestion Mitigation and Air Quality Improvement funds.
Continue Fresno COG's partnership with the San Joaquin Valley Air Pollution Control District as a Healthy Air Living Business Partner.		

Table 6-2A: Highways Streets and Roads Integrated Network

Goal: An integrated and efficient highways, streets and roads network
Objective: Develop and implement an integrated highways, streets and roads network that meets mobility needs for both urban and rural residents and the movement of goods.
Policies:
Improve the urbanized area circulation system, including the future urban freeway network.
Prioritize transportation improvements that accommodate travel, while fostering the development of safety, maintenance and operational improvements on the streets and highways network within Fresno County.
Continue work with member agencies to ensure that the inter and intra county movement of agricultural commodities remains a priority.
Preserve and promote the use of existing transportation facilities where feasible.
Promote development of a highways, streets and roads network that provides for connectivity of the metropolitan network with the system outside the metropolitan network.
Preserve rights of way for construction of future street and highway projects where feasible.
Develop a convenient, safe and efficient interface between transportation modes.

Table 6-2B: Highways Streets and Roads Transportation Funding

Goal: Efficient use of avaialble transportation funding
Objective: Pursue all possible federal, state and local transportation funding related to development, maintenance and rehabilitation of the highways and streets network.
Policies:
Track overall transportation financing issues to ensure that Fresno County agencies are aware of, and able to react in a timely fashion to, any new or innovative financial strategies.

Table 6-2C: Highways Streets and Roads Acceptable level-of-service (LOS)

Goal: Acceptable level-of-service (LOS) for the highways, streets and roads network
Objective: Maintenance of acceptable levels-of-service on the highways, streets and roads network that will allow for efficient movement of people and goods.
Policies:
Facilitate communication between Fresno COG and local land use agencies to analyze impacts on the regional transportation system during the decision making process.
Enhance the development of a highways and streets network which will relieve current and future congestion.
Monitor levels of service on the streets and highways network within Fresno County to ensure safe and efficient movement of people and goods.
Work cooperatively with the private sector to ensure that the mobility needs of the business community within Fresno County are addressed.
Continue to coordinate regional transportation network planning with the eight Valley Regional Planning Agencies.
Manage the highways, streets and roads network in a manner designed to increase operational efficiency, reduce air pollution and provide adequate mobility for both people and goods.

Table 6-3A: Mass Transportation - Fiscal Responsibility

Goal: An efficient and fiscally responsible public transportation mobility system
Objective: Continue to pursue expanded federal, state and local funding for both public and social service transportation, to provide mobility opportunities to the maximum number of people in the region.
Policies:
Provide a transit system that meets the public transportation needs of the service area.
Provide transit services that serve low income, elderly, and disabled communities, and include those users in the project review process.
Support the continued coordination and consolidation of social service transportation.

Table 6-3B: Mass Transportation Goals - Safe and Reliable

Goal: A safe and reliable public transportation service
Objective: Encourage and prioritize safety, appropriate frequency of bus service, reasonable fares and the provision of adequate service to satisfy the transit needs which are reasonable to meet.
Policies:
Provide reliable and convenient public transit service.
Provide clean, attractive and comfortable vehicles and facilities.
Provide a safe system.

Table 6-3C: Mass Transportation - Efficient and Effective

Goal: An effective public transportation system
Objective: Consider/evaluate advantages and disadvantages of projects, including economic, environmental and social factors.
Policies:
Maximize public transportation patronage.
Minimize operating and capital expenses.
Encourage the private sector to provide service when economically feasible.

Table 6-3D: Mass Transportation - Public Image

Goal: Public transit services with a positive public image in communities served
Objective: Provide complete and accurate information that makes public transportation "user friendly".
Policy:
Create and produce publications that promote the use of public transportation to all segments of the region.

Table 6-3E: Mass Transportation - Multimodal

Goal: An integrated multimodal transportation system which facilitates the movement of people
Objective: Develop a seamless multimodal transportation network.
Policies:
Coordinate service to facilitate multimodal and inter-system transfers.
Coordinate fare and transfer policies along with service information programs.

Table 6-3F: Mass Transportation Land Use and Air Quality

Goal: A coordinated policy for public transportation that complements land use and air quality policies
Objective: Support transportation investments that work toward accomplishing air quality goals, optimize utilization of land and encourage a stable economic base.
Policy:
Provide incentives to reduce dependency on single vehicle occupancy travel without compromising travel mobility.

Table 6-4: Aviation Goal

Goal: A fully functional and integrated air service and airport system that is complementary to the regional transportation system
Objective: Maintain and improve the airport system in Fresno County.
Policies:
Provide for the orderly and timely development of a system of airports adequate to meet the air transportation needs of the region while minimizing airport-related land use, noise, and other environmental problems.
Encourage air travel as an energy efficient mode of transportation for long-distance travel.
Coordinate airport planning with airport owners and managers, the Airport Land Use Commission, the Federal Aviation Administration, Caltrans Division of Aeronautics and local agencies in the areas of transportation, land use, economic development and resource utilization.
Administer the policies and procedures of the Fresno County Airport Land Use Commission as listed in the California Land Use Planning Handbook.
Participate in efforts to promote airport land use planning such as the California Airport Land Use Consortium.
Adopt the Basic Utility Stage 1 classification, as defined by the Federal Aviation Administration, as the minimum standard for public use airports.
Prepare site selection studies for the location of new airports as appropriate.

Table 6-5A: Non-Motorized Transportation - Health

Goal: Maximize bicycling and walking through their recognition and integration as valid and healthy transportation modes in transportation planning activities
Objective: Increase bicycling and pedestrian trips as a percentage of all trips.
Policies:
Include bicycle and pedestrian transportation planning as integral parts of the Fresno COG's transportation planning program.
Maintain representation of the bicycling community on Fresno COG's Transportation Technical Committee.
Encourage and assist member agencies to develop new or update existing bicycle and pedestrian transportation plans which are integrated with the regional bikeways system and which provide for bicycle use and walking as alternatives to the automobile for shorter trips.
Encourage member agencies to include bicycling and pedestrian sections in all transportation-related documents including, but not limited to, circulation elements of general, community, and specific plans.
Encourage and facilitate interagency cooperation and coordination in the development and implementation of bicycling and pedestrian plans and projects.
Coordinate Fresno County's bikeways system with those of adjoining counties.
Encourage member agencies to provide for bicycle- and pedestrian-friendly development, including bicycle travel and walking in new development plans and projects.
Encourage member agencies to include bicycle parking requirements in all land-use/site development requirements that address automobile parking.
Encourage member agencies to work with COG Staff on the development and implementation of a Regional Active Transportation Plan.

Table 6-5A: Non-Motorized Transportation - Health
Continued

Participate in efforts of member agencies and other groups and organizations to work with irrigation districts, railroads, and other owners of linear rights-of-way that have the potential to accommodate bicycle and pedestrian facilities, the development of which would strengthen the Countywide bicycle transportation system.

Encourage through educational and promotional efforts bicycling and walking as transportation modes which promote cleaner air, ease traffic congestion, conserve nonrenewable sources of energy, and promote health.

Publicize bicycling and walking planning projects through the dissemination of articles, newsletters, reports and other appropriate methods.

Provide information to the public on the regional bikeway system and its support facilities.

Encourage member agencies to work with major employers to provide incentive programs for bicycling including shower facilities, guaranteed ride home programs and mileage reimbursement for work-related bicycling miles.

Table 6-5B: Non-Motorized Transportation - Multimodal

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

Objective: Increase connections between bicycling and pedestrian facilities and other modes of transportation.

Policies:

Support the development of a countywide system of designated bikeways and pedestrian connections that link communities, activity centers (schools, libraries, community centers, colleges, universities, hospitals, medical offices, senior residences, parks, athletic facilities, governments services, employment centers, high-density residential areas, and commercial centers) and to regional and local public transit systems (including rail) at stops, stations and terminals and provides for all types of bicyclists and pedestrians.

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

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

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

Support member agency implementation of AB 1581, effective January 1, 2008, requiring that a traffic-actuated signal be installed and maintained so as to detect lawful bicycle traffic on the roadway.

Table 6-5B: Non-Motorized Transportation - Multimodal *Continued*

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

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

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

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

Encourage member agencies and Caltrans to install, to the extent feasible and practicable, trees along trails, bikeways, and pedestrian facilities that will provide shade on summer afternoons.

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

Assist member agencies to implement the Complete Streets Act by incorporating complete street considerations in the Valley-wide Blueprint Implementation Roadmap.

Table 6-5C: Non-Motorized - Education and Enforcement

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

Objective: Reduce the number of bicycling and pedestrian injuries and deaths.

Policies:

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

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

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

Table 6-5D: Non-Motorized - Maintain and Expand

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

Objective: Maintain and expand bicycling and pedestrian facilities.

Policies:

Identify available and potential new bicycle and pedestrian funding sources and their requirements and provide this information to member agencies and other interested groups.

Work with member agencies to define priorities for, and progress towards, implementation of the regional bikeway system.

Provide favorable comments on reviews of grant applications for projects that seek to enhance bicycling and pedestrian facilities.

Table 6-6A: Rail - Promote Usage

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

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

Policies:

Seek ways to either relocate all mainline Burlington Northern Santa Fe passenger and freight rail traffic to the Union Pacific alignment through the City of Fresno or relocate BNSF and/or UP freight rail traffic to an alignment west of the Fresno Metropolitan Area to assure smoother, faster and safer service.

Consider development of a multimodal transportation terminal facility in, or in close proximity to, the Central Business District.

Give high priority to grade separation construction programs.

Close grade crossings of main lines with minor streets and alleys wherever possible to avoid unnecessary conflict.

Protect grade crossings of main lines with automatic gates.

Seek legislative changes to rail abandonment procedures to require that all lines proposed for abandonment be brought under public ownership as a precondition to abandonment

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

Endorse the following Amtrak San Joaquin Route passenger rail service improvements:

- Additional train service for the San Joaquin Route
- Improved station facilities servicing the San Joaquin Route
- Additional direct train service to Sacramento.
- Additional direct train service to the East Bay Area
- Direct train service to Los Angeles

Incorporate design awareness of multimodal transportation facilities in development of highway systems.

Support planning for rail services at a similar level of detail as is currently done for roads.

Support the planning and construction of a High Speed Rail System in the San Joaquin Valley which directly connects the major population centers within the Valley.

Support the location and development of the High Speed Rail Heavy Maintenance Facility in Fresno County.

Maintain representation of the rail community on Fresno COG's Transportation Technical Committee.

Table 6-6B: Rail - Goods Movement

Goal: A transportation system that efficiently and effectively transports goods throughout Fresno County

Objective: Increase the use of air and rail transportation and the efficiency of the truck transportation system.

Policies:

Encourage the multimodal movement of goods through Fresno County where possible.

Recognize freight rail service in Fresno County as a significant transportation mode, providing service to industry.

Provide special consideration to transportation projects that improve the operational efficiency of goods movement and air quality.

Financing Mobility:

Funding Our Transportation System

The Financial Element of the RTP provides over $4.4 billion in transportation project funding

7.1 Developing a Fiscally Constrained Financial Plan

The Financial Element is fundamental to the development and implementation of the fiscally constrained 2014 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS). This chapter discusses the investment decisions and revenue assumptions contained in the (RTP/SCS). It identifies the current and anticipated revenue sources as well as the financing techniques available for the region's planned transportation investments, ongoing operations, and maintenance. This element addresses the federal, state, regional, and local revenues expected by the region over the next 25 years with currently available revenue sources.

The following is a brief summation of the components of the Financial Element:

1. Provides an estimation of the costs and a projection of the revenues available for transportation system improvements recommended in the Action Element of the RTP. In doing so, it contains financial assumptions and projections that set parameters for the Regional Transportation Improvement Program (RTIP).
2. A description of how revenue projection models were analyzed leading to the selection of a preferred financial scenario. It serves as an inventory of existing and potential new transportation funding sources that can be used for transportation system improvements that are most appropriate for implementation in Fresno County.
3. Identifies potential funding shortfalls along with recommendations for potential revenue sources that the region could pursue to implement the transportation vision over the long term.
4. Includes a financially constrained program as required by federal legislation. Fresno COG worked with partnering agencies and used financial models to forecast how much revenue will be available for transportation purposes over the 25-year duration of the plan. These forecasts are used to plan investments that fit within the "financially constrained" portion of the revenues that are reasonably expected to be available. Also included is a list of projects (financially un-constrained) which are both necessary and desirable should funding become reasonably available.
5. Includes a general discussion of how projects are programmed into the RTP's financially constrained and un-constrained list.
6. Lastly, it discusses how the region will implement the RTP/SCS plan investments through subsequent programming actions.

7.2 RTP/SCS Revenue Projections

As required by federal transportation law (23CFR450.322), the RTP shall be "fiscally constrained". A financially constrained project list identifies a program for which funding has been identified or is reasonably expected to

be available within the RTP planning horizon. A financially unconstrained project list reflects projects that are both necessary and desirable should funds become reasonably available.

Federal statute states that a financial plan must demonstrate how the projects can be implemented while the existing transportation system is being maintained. To meet this requirement, it is necessary to compare revenue projections for the 25 years of the RTP against all projects needed to support the region's surface transportation investments provided by member agencies.

The Financial Element of the RTP is intended to provide the cost and revenue assumptions necessary for decision makers to implement the RTP. These assumptions include revenue estimates for specific governmental funding programs, local contributions and tax initiatives. The purpose of establishing financial assumptions is to provide a level of financial detail adequate for options to be exercised by state and local decision makers. Member agencies submit planned projects for inclusion in the RTP that are expected to be completed within the 25 year life of the RTP and they include the estimated total project costs for those projects. This process then allows Fresno COG the ability to compare the total estimated project costs against the projected revenues to ensure that the program of projects adopted will not exceed the reasonably foreseeable future revenues.

Revenue Assumptions

The estimated revenues in the RTP assume an inflation rate of 2 percent and are reported in year of expenditure dollars. The complete financial assumptions that were used to develop revenue and cost projections for the financially constrained RTP are listed in Appendix C. The funding totals identified reflect an estimated annual average amount from each of the various funding sources for the years 2014 through 2040.

The following financial assumptions were used to develop revenue and cost projections:

- Local Transportation Fund revenues are assumed to be constant throughout the life of the RTP.
- The Regional Surface Transportation Program (RSTP), Congestion Mitigation and Air Quality Improvement (CMAQ) Program, and the Transportation Alternatives (TA) program as part of MAP-21 will continue or be replaced by similar programs throughout the life of the RTP.
- Federal and State Transit funds are assumed to remain at their present levels throughout the life of the plan.
- Transit operator-specific revenue projections have been provided by the respective operators.
- Projected State and Federal Highway revenues reflect the average amounts programmed by the state in the State Transportation Improvement Program (STIP) and are consistent with the five-year STIP Fund Estimate adopted by the CTC.
- Fresno County's local 1/2 cent sales tax, Measure C, with revenues designated for transportation improvements was extended by the voters of Fresno County in 2006 and will expire in 2027. Though the Measure is set to expire within the life of this RTP, it is assumed that it will be renewed and/or augmented.
- Projections of local streets and roads revenue are based on information provided to Fresno COG by local member agencies.

All projects identified in the 2014 RTP are consistent with the Goals, Policies, and Objectives identified in the Policy Element of the RTP.

Existing Major Revenue Sources

MAP-21 restructured core highway formula programs that played a major role in the financial forecasts of the previous RTP's. Activities carried out under some existing formula programs – such as the National Highway System Program, the Interstate Maintenance Program, the Highway Bridge Program, the Transportation Enhancement Program were discontinued, and instead incorporated into the following new core formula program structure:

- National Highway Performance Program (NHPP)
- Surface Transportation Program (STP)
- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Highway Safety Improvement Program (HSIP)
- Railway-Highway Crossings (set-aside from HSIP)
- Metropolitan Planning

MAP-21 also created new formula programs such as the Transportation Alternatives (TA) Program comprised of funds derived from the NHPP, STP, HSIP, CMAQ and Metropolitan Planning programs, encompassing most activities funded under the Transportation Enhancements, Recreational Trails, and Safe Routes to School programs under SAFETEA-LU.

The following federal programs expired or were eliminated (not reauthorized) under MAP-21:

Federal Lands Highway Program	> NO EQUIVALENT
FTA Section 5316 Job Access and Reverse Commute (JARC)	> Public transportation job-access activities are eligible for funding under FTA Section 5307 (urban) and 5311 (rural) transit programs.
FTA Section 5317 New Freedom Program	> Projects are eligible for funding under the FTA Section 5310 program.
Hazard Elimination Safety Program (HES)	> Replaced with the Highway Safety Improvement Program (HSIP).

The following funding programs are considered to be the principal sources anticipated to be available for funding of the RTP projects:

Federal Programs

Congestion Mitigation and Air Quality

The Congestion Mitigation and Air Quality Improvement Program provides a flexible funding source to state and local governments for transportation projects and programs to help meet the requirements of the Federal Clean Air Act. Funding is available for areas that do not meet the National Ambient Air Quality Standards (non-attainment areas), as well as former non-attainment areas that are now in compliance (maintenance areas). Funds are distributed to states based on a formula that considers an area's population by county and the severity of its air quality problems with the non-attainment or maintenance area.

Projects or programs eligible for CMAQ funding are those which will contribute to attainment of National Ambient Air Quality Standards with a focus on ozone and carbon monoxide.

Typical projects are:

- Public transit improvements
- High Occupancy Vehicle (HOV) lanes
- Employer-based transportation management plans and incentives
- Traffic flow improvement programs (signal coordination)
- Fringe parking facilities serving multiple occupancy vehicles
- Shared ride services
- Bicycle and pedestrian facilities
- Flexible work-hour programs
- "PM-10" projects, under certain conditions

High Priority Projects Program

The High Priority Projects Program provides designated funding for specific projects (commonly referred to as demonstration or demo projects) identified by Congress and identified in SAFETEA-LU. The designated funding can only be used for the projects as described in the law. With each new highway act or annual Department of Transportation (DOT) appropriations act, new demonstration projects were authorized or funding was provided for previously authorized projects. However, MAP-21, (P.L. 112-141) contained no new earmarks and sec 1519 repealed 23 U.S.C. 117 (High Priority Projects).

Highway Safety Improvement Program

MAP-21 continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads and roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance.

A highway safety improvement project is any strategy, activity or project on a public road that is consistent

with the data-driven State Strategic Highway Safety Plan (SHSP) and corrects or improves a hazardous road location or feature or addresses a highway safety problem. HSIP funds are eligible for work on any public road or publicly owned bicycle or pedestrian pathway or trail, or on tribal lands for general use of tribal members, that corrects or improves the safety for its users. The twenty-four project categories are broad in nature and are listed under 23 U.S.C. §148(a)(4)(B). Workforce development, training, and education activities are also an eligible use of HSIP funds.

Highway Railroad Grade Crossing Program

This program is funded by contract authority from the Highway Account of the Highway Trust Fund and funds are derived from a set-aside of amounts calculated for apportionment to the Highway Safety Improvement Program (HSIP). This program aims to reduce the number of fatalities and injuries at public highway-rail grade crossings through the elimination of hazards and/or the installation/upgrade of protective devices at crossings. Eligible projects include any at-grade grossing between a road and a railroad track recommended for improvement by the California Public Utilities Commission (CPUC) and where a 10% match funding source is identified. The selection process begins with an investigation of any project identified by Caltrans, a local agency, or a railroad. The investigation usually consists of a field review, discussion between all parties, a jointly developed and recommended improvement, and a preliminary schedule of funding. The final selection is determined when the local agency provides the 10% matching funds to a project or the CPUC list of recommended highway/rail grade crossing projects.

Metropolitan Planning

The purpose of Metropolitan Planning funds is to carry out the requirements of 23 U.S.C. 134 and provide for a continuing, comprehensive, and cooperative (3-C) metropolitan transportation planning process. In accordance with 23 U.S.C. 104 generally, Metropolitan Planning funds shall be made available to each Metropolitan Planning Organization (MPO) designated for an urbanized area with a population of more than 50,000 individuals and responsible for carrying out the 3-C metropolitan planning process.

National Highway Performance Program (NHPP)

The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

NHPP projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with Metropolitan and Statewide planning requirements.

Eligible activities include:

- Construction, reconstruction, resurfacing, restoration, rehabilitation, preservation, or operational improvements of NHS segments.
- Construction, replacement (including replacement with fill material), rehabilitation, preservation, and protection (including scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events) of NHS bridges and tunnels.
- Bridge and tunnel inspection and evaluation on the NHS and inspection and evaluation of other NHS highway infrastructure assets.
- Training of bridge and tunnel inspectors.
- Construction, rehabilitation, or replacement of existing ferry boats and facilities, including approaches that connect road segments of the NHS.
- Construction, reconstruction, resurfacing, restoration,

rehabilitation, and preservation of, and operational improvements for, a Federal-aid highway not on the NHS, and construction of a transit project eligible for assistance under chapter 53 of title 49, if the project is in the same corridor and in proximity to a fully access-controlled NHS route, if the improvement is more cost-effective (as determined by a benefit-cost analysis) than an NHS improvement, and will reduce delays or produce travel time savings on the NHS route and improve regional traffic flow.

- Bicycle transportation and pedestrian walkways.
- Highway safety improvements on the NHS.
- Capital and operating costs for traffic and traveler information, monitoring, management, and control facilities and programs.
- Development and implementation of a State Asset Management Plan for the NHS including data collection, maintenance and integration, software costs, and equipment costs.
- Infrastructure-based ITS capital improvements.
- Environmental restoration and pollution abatement.
- Control of noxious weeds and establishment of native species.
- Environmental mitigation related to NHPP projects.
- Construction of publicly owned intra-city or intercity bus terminals servicing the NHS.

Surface Transportation Program (RSTP)

The Surface Transportation Program (STP) provides flexible funding that may be used by states and localities for projects on any federal-aid highway, including the National Highway System (NHS), bridge projects on any public road, transit capital projects, and public bus terminals and facilities. Funds are distributed among the states based on lane miles of Federal-aid highways, (including on the NHS), total vehicle-miles traveled on those Federal-aid highways, and estimated contributions to the Highway Account of the Highway Trust Fund. A portion of the STP is set aside for TAP and State Planning and Research. The State sub-allocates the Federal STP funds to the regions based on population and serves as Fresno COG's Regional Surface Transportation Program (RSTP). MAP-21 permits a portion of funds reserved for rural areas to be spent on rural minor collectors.

Eligible projects include but are not limited to:

- Highway projects
- Bridges (including construction, reconstruction, seismic retrofit and painting) on all public roads
- Transit capital improvements
- Carpool, bicycle and pedestrian facilities
- Safety improvements and hazard elimination
- Research and traffic management systems
- Planning
- Transportation enhancement activities and control measures
- Safety improvements and bridge replacement projects on local roads and rural minor collectors.

Transportation Alternatives Program (TAP)

TAP was authorized under Section 1122 of Moving Ahead for Progress in the 21st Century Act (MAP-21) and is codified at 23 U.S.C. sections 213(b), and 101(a)(29). Section 1122 provides for the reservation of funds apportioned to a State under section 104(b) of title 23 to carry out the TAP. The national total reserved for the TAP is equal to 2 percent of the total amount authorized from the Highway Account of the Highway Trust Fund for Federal-aid highways each fiscal year.

The TAP provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for

planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

Transportation Investment Generating Economic Recovery (TIGER)

The Transportation Investment Generating Economic Recovery, or TIGER Discretionary Grant program, provides a unique opportunity for the U.S. Department of Transportation to invest in road, rail, transit and port projects that promise to achieve critical national objectives. Congress dedicated $1.5 billion for TIGER I, $600 million for TIGER II, $527 million for FY 2011, $500 million for the FY 2012, $474 million for the FY 2013 and $600 million for the FY 2014 round of TIGER Grants to fund projects that have a significant impact on the nation, a region or a metropolitan area.

Federal Transit Administration Section 5307 (Urbanized Area Formula Grants)

This program provides financial operating and capital purchase assistance to operators of urban public transportation services. Funds are apportioned to urbanized areas with populations over 50,000 based on a formula using population and population density.

Federal Transit Administration Section 5309 (Fixed Guideway Capital Investment Grants)

This is FTA's primary grant program for funding major transit capital investments, including rapid rail, light rail, bus rapid transit, commuter rail, and ferries. The 5309 grant program provides grants for new and expanded rail, bus rapid transit, and ferry systems that reflect local priorities to improve transportation options in key corridors. This program defines a new category of eligible projects, known as core capacity projects, which expand capacity by at least 10% in existing fixed-guide way transit corridors that are already at or above capacity today, or are expected to be at or above capacity within five years. The program also includes provisions for streamlining aspects of the New Starts process to increase efficiency and reduce the time required to meet critical milestones.

Federal Transit Administration Section 5310 (Enhanced Mobility of Seniors and Individuals with Disabilities)

This program provides funding to private non-profit corporations for capital expenses to support the provision of transportation services to meet the needs of elderly and disabled persons. Capital assistance is provided for up to 88.53% of the net project cost.

Federal Transit Administration Section 5311 (Rural Area Formula Grants)

This program provides formula-based funding through the State to urban areas with a population fewer than 50,000. The funds are for capital and/or operating assistance. Capital assistance is provided for up to 88.53% of the net project cost. Operational assistance has a 50% federal participation ceiling.

State Programs

Transportation Development Act (TDA)

The Transportation Development Act (TDA) of 1971, enacted by the California Legislature to improve existing public transportation services and encourage regional transportation coordination, provides funding to be allocated for transit and non-transit related purposes that comply with regional transportation plans. The TDA provides two funding sources:

Local Transportation Funds

Local Transportation Funds (LTF) are derived from the 1/4 cent of the statewide sales tax. LTF revenue is returned to local governments for transportation purposes with public transportation being the primary focus. This money comes back to local governments for funding of bicycle and pedestrian facilities, public transportation, or streets and roads. The LTF is distributed to each city and unincorporated areas based on population.

In the San Joaquin Valley, LTF funds may be used for both transit and streets and roads purposes as long as all reasonable transit needs are addressed. The City of Fresno currently uses all of its LTF funds for public transit, although Fresno County and the remaining cities in the county use some LTF funds for roads. LTF is one of the principle sources of public subsidies for Fresno Area Express (FAX).

State Transit Assistance Fund

The State Transit Assistance fund (STA) is derived from a portion of the Motor Vehicle Fuel Tax. The STA supports public transportation services, and is apportioned through the Regional Transportation Planning Agencies (RTPA) to their member agencies on a population basis, although some funds are apportioned directly to transit operators based on their fare box revenues.

STA funds may be used for mass transit (capital or operating expenses) or transportation planning. Passage of Proposition 116 disallows use of STA funds for streets and roads.

Active Transportation Plan (ATP)

The Active Transportation Plan (ATP) was created by Senate Bill 99 (Chapter 359, Statutes of 2013) and Assembly Bill 101 (Chapter 354, Statutes of 2013) to encourage increased use of active modes of transportation, such as biking and walking. The ATP consolidates various federal and state transportation programs, including the Transportation Alternatives Program, Bicylcle Transportation Account, and State Safe Routes to School, into a single funding program.

Coalinga Plaza Beautification Project Completed in 2014

The goals of the ATP are to:

- Increase the proportion of trips accomplished by biking and walking.
- Increase safety and mobility of non-motorized users.
- Advance the active transportation efforts of regional agencies to achieve greenhouse gas reduction goals.
- Enhance public health, including reduction of childhood obesity through the use of programs including, but not limited to, projects eligible for Safe Routes to School Program funding.
- Ensure that disadvantaged communities fully share in the benefits of the program.
- Provide a broad spectrum of projects to benefit many types of active transportation users.

State and federal law segregate program funding into three components and is distributed as follows:

- 50% to the state for a statewide competitive program
- 10% to small urban and rural regions with populations of 200,000 or less for the small urban and rural area competitive program, and
- 40% to Metropolitan Planning Organizations in urban areas with populations greater than 200,000 for the large urbanized area competitive program.

Prop 1B: The Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006

As approved by the voters in the November 2006 general elections, Proposition 1B enacts the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 to authorize $19.925 billion of state general obligation bonds for specified purposes, including high-priority transportation corridor improvements, State Route 99 corridor enhancements, school bus retrofit and replacement purposes, state transportation improvement program augmentation, transit and passenger rail improvements, state-local partnership transportation projects, transit security projects, local bridge seismic retrofit projects, highway-railroad grade separation and crossing improvement projects, state highway safety and rehabilitation projects, and local street and road improvement, congestion relief, and traffic

safety. It is important to note that this 5-year program is now coming to an end; the funds have all been allocated and fund recipients are closing out all Prop 1B projects.

State and Local Partnership Program (Prop 1B)
Proposition 1B authorized $1 billion to be deposited in the State-Local Partnership Program (SLPP) Account to be available, upon appropriation by the Legislature, for allocation by the California Transportation Commission over a five-year period to eligible transportation projects nominated by an applicant transportation agency. The Bond Act required a dollar for dollar match of local funds for an applicant agency to receive state funds under the program. The Commission adopted an annual program of projects for the SLPP in 2009 for 2008-09 and by October

Coalinga Plaza Beautification Project
Completed in 2014

for each fiscal year thereafter. The program consists of projects nominated by eligible applicants for the formula program and projects selected by the Commission under the competitive grant program to match uniform developer fees. SLPP project funding matches eligible local funding for project construction or equipment acquisition, consistent with Section 8879.70.

The Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA)
Proposition 1B authorized $4 billion for the PTMISEA. Of this amount, $3.6 billion is designated for allocation over a ten year period for public transportation projects that protect the environment and public health, conserve energy, reduce congestion, and increase mobility and access. The $3.6 billion is to be distributed by formula based on population or revenue to transit operators for capital projects Funds shall be available for rehabilitation, safety or modernization improvements, capital service enhancements or expansions, new capital projects, bus rapid transit improvements, or for rolling stock procurement, rehabilitation or replacement.

State Route 99
Proposition 1B authorized $1 billion to be available to the Department of Transportation, upon appropriation in the annual Budget Bill by the Legislature, for safety, operational enhancements, rehabilitation, or capacity improvements necessary to improve the State Route 99 Corridor in the San Joaquin and Sacramento Valleys.

Regional Choice Program (STIP)
The STIP is split into two programs: the Regional Transportation Improvement Program (RTIP) and the Interregional Transportation Improvement Program (ITIP). Pursuant to SB 45, 75% of the overall STIP funding goes to regional authorities to pay for accepted RTIP projects, and the remaining 25% of the overall STIP funding is used to pay for ITIP projects, as determined by Caltrans. Once the Fresno County region has selected the projects for the RTIPs, the California Transportation Commission (CTC) must allocate funds for the projects based on estimated construction costs. The funds are programmed in the Federal Transportation Improvement Programs (FTIP) for inclusion in the State Transportation Improvement Program (STIP). Pursuant to SB 45, allocations of Regional Choice funds are known as "County Shares" and replace the previous "County Minimums."

Eligible projects include:

- Local streets and roads
- Public transit
- Intercity transit
- Pedestrian and bikeway facilities
- State highway improvements
- Grade separations
- Intermodal facilities
- Safety projects
- Transportation System Management projects
- Soundwalls

Interregional Improvement Program (IIP)
IIP funds represent 25% of available State Highway Account funding. The funds are programmed by Caltrans on a statewide priority basis, for use primarily on the State highway system (outside urbanized areas). Regional agencies may also nominate projects that generate economic development (may be inside metropolitan areas). Regional agencies may nominate projects if they can show better cost-effective use of funds.

Eligible projects include:

- Interregional roads (outside of metropolitan areas)
- Interstate 5
- State Highways 41, 99, 168, 198 and 180 east
- Intercity rail
- "Flex" projects which promote economic development

State Highway Operation and Protection Program (SHOPP)
The purpose of the State Highway Operation and Protection Program is to maintain the operational integrity and safety of the State highway system. It includes State highway safety and rehabilitation projects, seismic retrofit projects, land and building projects, landscaping, some operational improvements, bridge replacement, and the Minor Program - generally those types of projects that Caltrans as the owner-operator of the system must do to maintain the integrity of the system. Unlike STIP projects, SHOPP projects may not increase roadway capacity. There is no formula for allocating SHOPP revenues, which presents a degree of uncertainty. The Fresno County region could receive a large share of revenues in one cycle, then much less in future cycles.

Eligible projects include State highway safety and rehabilitation projects, seismic retrofit projects, land and building projects, landscaping, some operational improvements, bridge replacement, and Minor Programs.

Local Programs
Fresno County Local Sales Tax--(Measure C Funds)
In 2006 voters of Fresno County approved a 20 year extension of a 1/2 percent local sales tax (Measure C) for transportation purposes. The twenty-year tax is projected to generate approximately $1.4 billion in funding to be expended through the Fresno County Transportation Authority (FCTA). As the designated Regional Transportation Planning Agency (RTPA) for Fresno County, Fresno COG is legislatively responsible for preparing an expenditure plan for use of the highway revenues.

Of the approximately $1.4 billion total to be collected over 20 years at least 34.6% of the tax will be allocated to local agencies for a wide variety of transportation programs and projects on their respective local transportation networks. The FCTA's oversight of these funds involves identifying the amount of funding to be made available to the local agencies, managing the claims process, and annually auditing to ensure that the funds were used for eligible transportation purposes. The Measure C Extension Plan funding breakdown is referenced in Appendix C.

Regional Transportation Mitigation Fee (RTMF)
The Regional Transportation Mitigation Fee (RTMF) is an important part of the Measure C Extension approved by Fresno County voters in 2006. The RTMF is intended to ensure that future development contributes to its fair share towards the cost of infrastructure to mitigate the cumulative, indirect regional transportation impacts of new growth in a manner consistent with the provisions of the State of California Mitigation Fee Act. The fees will help fund improvements needed to maintain the target level of service in the face of higher traffic volumes brought on by new developments.

City/County Revenue Funds
There are a number of transportation funding sources which have their origins in city sources. These include general fund revenues used for street purposes, revenues derived from use of gas tax, proceeds from bond sales for street purposes, street assessment levies and traffic safety fund revenues used for street purposes.

7.3 Revenue Projection Scenarios

In previous RTP's, Fresno COG would use one revenue projection and one project list to develop the RTP. In the 2014 RTP; however, Fresno COG strived to analyze four alternative revenue projections which would produce four alternative project lists to be incorporated into the Sustainable Communities Strategy (SCS) analysis. Each revenue projection alternative was developed differently by taking into consideration various funding options; however, it was agreed upon that ALL four alternatives would be manipulated by fluctuating three main flexible funding sources. That is, "flexible" meaning that the funds can be used for different eligible project types such as streets and roads, bike and pedestrian, and transit.

The flexible funding sources used for the development of the revenue projection scenarios were:

- Regional Surface Transportation Program (RSTP)
- Congestion Mitigation and Air Quality Program (CMAQ)
- Transportation Alternatives Program (TAP)

Revenue Projection 1: *Traditional*

Fresno COG summed up the total programmed funds in the 2013 Federal Transportation Improvement Program (FTIP) based on current expenditure dollars. The total programmed funds were then broken out by mode percentage. This was done in effort to display what the status quo of project programming would look like as a whole if current planning practices continue unchanged. See Appendix C.

Revenue Projection 2: *Increased Active Transportation*

The second revenue projection was created by the RTP Financial Element Technical Working Group. This group was comprised of members from the local agencies with expertise in the areas of engineering, planning and programming. The group manipulated the "Traditional" scenario by adjusting the percentages per mode within each of the three flexible funding sources. See Appendix C.

Fresno COG staff presented the two Revenue Projection Scenarios to the RTP Roundtable for their approval, which is comprised of more than 30 stakeholders ranging from interested citizens representing the general public, local member agency staff, and members from community based organizations. The RTP Roundtable recommended that Fresno COG staff develop a third revenue projection that distributed the majority of the "flexible" funds into active transportation projects such as bicycle, pedestrian and transit.

Revenue Projection 3:
Emphasis on Active Transportation

As recommended by the RTP Roundtable, Fresno COG staff developed a third projection scenario which made a significant commitment to increase the convenience and safety of walking and bicycling by directing "flexible" funds toward projects that would deliver complete streets for all users, stand-alone bicycle and pedestrian paths, bicycle lanes, lighting, new sidewalks, and Safe Routes to Transit and Safe Routes to Schools. See Appendix C.

Fresno COG staff presented all three Revenue Projections Scenarios to the Technical Transportation Committee (TTC) and the Policy Advisory Committee (PAC) for approval and/or direction. The PAC assists the Policy Board in making decisions and is comprised of the Chief Administrative Officer of each member agency or a designated representative. The Board and PAC are assisted in the decision making process by staff from their agencies, citizen and interest groups, and various technical advisory committees who comprise the TTC. After receiving recommendation to approve the three revenue projection scenarios, the PAC requested that road maintenance receive a much greater emphasis due to the importance of fixing and maintaining the system early on instead of waiting until the conditions of the local system are extremely severe.

Revenue Projection Number 4:
Emphasis on Maintenance

As recommended by the PAC, Fresno COG staff developed a fourth revenue projection scenario. This revenue scenario redirected all flexible funds, that were available and eligible for rehabilitation and maintenance, to support the "fix it first" emphasis in order to ensure that the region directs a majority of the funding to maintaining the existing transportation assets in the RTP for the

purpose of preserving the existing local street and road network. See Appendix C. A comparison of each revenue projection by transportation mode is shown in Table 7-1 below.

Table 7-1: Revenue Projection by Transportation Mode

Mode	Revenue Projection 1: *Traditional*	Revenue Projection 2: *Increased Active Transportation*	Revenue Projection 3: *Emphasis on Active Transportation*	Revenue Projection 4: *Emphasis on Maintenance*
Bicycle & Pedestrian	3.59%	4.89%	9.03%	3.26%
Streets & Roads Capacity Increasing	24.06%	24.00%	22.96%	22.96%
Streets & Roads Operations and Maintenance	24.91%	23.02%	17.54%	26.45%
Streets & Roads - Any Type	8.53%	8.53%	8.53%	8.53%
Transit	30.56%	31.56%	34.07%	30.45%
Other/Multiple Modes	8.34%	7.99%	7.87%	8.34%

7.4 RTP Call for Projects

Fresno COG initiated a Call for Projects for the 2014 RTP in January 2013 where the 16-member agencies had the opportunity to submit projects that are expected to be completed in the 25 year life of the RTP, including streets and roads projects, bike and pedestrian projects, and transit projects.

These projects were scored using the Project Evaluation Criteria developed by the Financial Element Technical Working Group through a series of meetings and approved by the Fresno COG Policy Board on January 31, 2013 (see Appendix C). The Financial Element Technical Working Group felt that it was important to have separate criteria per mode of transportation so that only similar projects were being compared against each other. A set of criteria was developed for each of the four modes; bike and pedestrian, capacity increasing road projects, operations and maintenance road projects and transit. Another goal of the criteria was to be very objective; with the large number of projects submitted scoring criteria questions had to be clear and easy to answer. The scoring criteria were used to score all of the projects submitted during the call for projects and the projects were then placed in order by score.

Once the project list was organized by mode and by scores it was compared with the revenue projections that were discussed above. Due to financial constraints, it was anticipated that there would be a greater project need in comparison to the total revenues available in each of the four revenue projection scenarios. The projects were prioritized by scores and only analyzed within each respective mode which ultimately provided an output of four different alternative project lists. However, when the projects (by transportation mode) were compared against the revenue projection scenarios (by transportation mode), it was discovered that Revenue Projection 1 and Revenue Projection 2 produced the same exact project list (List A) because the amount of eligible flexible funds was adequate to support the amount of planned projects, meaning all projects submitted for inclusion in the RTP were financially constrained.

Revenue Projection 3 and Revenue Projection 4 also produced the exact same project list (List B). Furthermore, it was determined that project list A and B were also very similar to each other. The only variance between project list A and project list B were 5 capacity increasing projects that could not be financially constrained in project list B, therefore, making those projects unconstrained. All other mode projects submitted for inclusion in the RTP were successfully financially constrained. Based on this analysis, the Policy Board accepted Project List A which was most inclusive, cost-effective and financially constrained. Project List A and B are referenced in Appendix C and the 2014 RTP financially constrained and unconstrained project lists are also referenced in Appendix C.

The 2014 RTP financially constrained listing reflects a total project amount of $4,463,929,000. The amount per mode is shown in Table 7-2 below.

Though the largest amount of revenues are allocated to Streets & Roads-Capacity Increasing projects, it is important to highlight a few key elements associated with project costs. For example, there are 95 fewer bike and pedestrian projects than capacity increasing projects.

Table 7-2: Revenues Programmed by Transportation Mode

	Total Dollars		Number of Projects	
Project Type	*Dollar Amount*	*Percentage*	*Number*	*Percentage*
Bicycle & Pedestrian	$91,858,000	2.06%	202	13.75%
Streets & Roads Capacity Increasing	$1,756,245,000	39.34%	297	20.22%
Streets & Roads Operations and Maintenance	$1,023,948,000	22.94%	894	60.86%
Transit	$1,591,878,000	35.66%	76	5.17%
TOTAL	$4,463,929,000	100%	1469	100%

Though capacity increasing projects make up close to 40% of the funding allocation, it is important to note that they also cost significantly more than standalone bike and pedestrian projects, and it is very likely that those projects will also include a bike and pedestrian component which is integrated into the overall cost of the project. Many of Fresno COG's member agencies have a Complete Streets policy; which means when a widening project is constructed or a maintenance project is implemented-such as a road paving; a sidewalk and/or bike lane is also added.

To properly illustrate the Complete Streets policies and bike and pedestrian components, further analysis was done on the project list and it was determined that aside from the standalone bike and pedestrian projects there are about 164 miles of bike and/or pedestrian components within the Capacity Increasing and Operations and Maintenance road projects, totaling approximately $20,850,000. Table 7-3 below, shows the updated programmed dollar amounts per mode based on this further analysis. The details of the calculations can be found in Appendix C.

The 2014 RTP Transportation Project List represents an increase in active transportation and transit spending compared to the 2011 RTP. A comparison of the two RTPs can be found in the SCS discussion in Chapter 4.

Table 7-3: Updated Dollar Amounts by Transportation Mode

	Total Dollars		Number of Projects	
Project Type	*Dollar Amount*	*Percentage*	*Number*	*Percentage*
Bicycle & Pedestrian	$112,708,000	2.52%	202	13.75%
Streets & Roads Capacity Increasing	$1,747,945,000	39.16%	297	20.22%
Streets & Roads Operations and Maintenance	$1,011,398,000	22.66%	894	60.86%
Transit	$1,591,878,000	35.66%	76	5.17%
TOTAL	$4,463,929,000	100%	1469	100%

7.5 Transportation Projects in the SCS

The Sustainable Communities Strategy (SCS) (Chapter 4) is a new and important part of the RTP. The goal of the SCS is to create a more sustainable future by integrating land use and transportation. The SCS uses the transportation project list that was discussed above to model Greenhouse Gas Emissions, criteria pollutants emissions, active transportation and transit travel and daily vehicle miles traveled. Other factors that are more related to land use are also modeled and analyzed in the SCS. As was discussed in Chapter 4, there were four scenarios compared against each other before Scenario B was selected; while each scenario modeled different land use patterns, the same transportation project list was used in each of the four.

7.6 Maintenance & Rehabilitation:

Current Conditions and Needs

Fresno County and its incorporated cities are much like other areas in the State of California when it comes to unmet needs within the rural, metropolitan and regional transportation networks. As the region continues to experience significant population growth, additional demands will be placed on the transportation system. Fresno County's economic vitality in the coming years is dependent upon the investments that are made today in the region's transportation infrastructure network. Currently, the local transportation networks within Fresno County are struggling to cope with increased population growth, deferred maintenance, and lack of investment in necessary improvements. Clearly, if Fresno County is to remain economically competitive, solutions (construction of new facilities, increase in active transportation, transit, maintenance, preservation and rehabilitation of the existing system) will need to be addressed.

In the Fresno-Clovis Metropolitan Area of Fresno County and in the smaller outlying rural communities as well, the demands on the urban transportation networks has been increasing as population continues to grow and urban development takes place. Increased growth inevitably brings with it increased demands on the transportation network and a subsequent requirement for capacity enhancements and increased maintenance and rehabilitation.

The Fresno County road system with approximately 3,600 miles of roads and approximately 550 bridges has the largest county road network (in terms of mileage) of any county within the State of California. This current extensive road system represents approximately one billion dollar infrastructure investment on the part of the citizens of Fresno County. The county road system provides for the majority of intra-county travel in terms of the movement of both people and goods within the 6,000 square mile county and also plays a vital role in the multi-billion dollar agricultural economy of Fresno County. As the number one agricultural county in the world ($6 billion+ annually), a great deal of the region's economy is dependent upon the efficient movement of goods from farm to market. In addition, the county road system serves the entire business community of Fresno County and provides public mobility to the far reaching corners of Fresno County. Clearly, if Fresno County strives to maintain its number one ranking in agriculture and remain economically competitive on a global scale, it must (in addition to construction of new transportation facilities) maintain its existing transportation system in good operating condition, in order to serve the public and maximize the return on its existing one billion dollar transportation infrastructure investment. The lack of adequate funding to protect the millions of dollars worth of improvements completed on the county road system over the past forty

years is probably the single greatest unmet need that currently faces Fresno County road system providers.

Fresno County estimates that the current shortfall to provide preventative maintenance service to the County road system is upwards of $31 million dollars annually. Fresno County is also responsible for road reconstruction, safety and capacity improvements on the County road system when funds are available. The current shortfall on County-maintained roads that need reconstruction and system safety and congestion management improvements is estimated to be upwards of $20 million dollars annually. Preventive maintenance expenditures are essential for the efficient use of the available funds in order to avoid significant costly repairs or reconstruction when the pavement deteriorates beyond a maintainable level. Studies show that reconstruction costs are approximately five times the cost per mile of preventative maintenance. There are two primary factors which contribute to the degradation of the road system, auto traffic increases and truck traffic increases. In recent years, the amount of average daily traffic (ADT) on the

Fresno County road system has increased dramatically. As an example, in less than twenty years, Fresno County roads have experienced traffic volumes that have almost doubled. Projections by the State Department of Finance indicate that Fresno County's population will continue to increase, which will lead to large increases in traffic and frequent loads, both of which cause damage to the road system and shorten its useful life.

In recent years, truck traffic has increased at a faster rate than automobile traffic on many miles of County roads. This is especially troubling considering that truck traffic is far more destructive to roads than automobile traffic. Engineering studies show that typical 18-wheel semi-trailer trucks have the equivalent loading effect of between 3,000 and 6,000 passenger vehicles. Due to economic growth in the agricultural industry it is predicted that "farm to market" trips on the road system will continue to grow. As many of the rural, less structurally sound roads are exposed to increases in heavy truck traffic, "exponential" damage to the road system may occur. The urban communities within Fresno County also face difficult revenue shortfalls. Within the city of Fresno, there is an existing circulation system which consists of over 1,600 miles of local and major streets, i.e. expressways, super arterials, arterials, and collectors. Like the county road system, the metropolitan circulation system is also facing extensive maintenance and rehabilitation needs in order to keep the system functioning at maximum capacity and efficiency. These maintenance needs consist of repairing potholes, sealing cracks in the pavement, asphalt concrete overlays, maintenance of drainage pipelines and inlets and other routine maintenance.

7.7 Other Potential Revenue and Funding Opportunities

As stated throughout this planning document, even with the increased sources of local, state, and federal funds that have materialized throughout the last decade, the current transportation funding situation for regional and local agencies results in a revenue shortfall for the expansion of the system. It is anticipated that this shortfall will continue for two very basic reasons: (1) the revenues to support the maintenance and improvement of the transportation network are not increasing enough to keep pace with inflation, and (2) the demands for higher levels of maintenance and improvements have expanded above the normal rate of inflation.

In 2013 the Congressional Budget Office reported that "the current trajectory of the Highway Trust Fund is unsustainable. Starting the fiscal year 2015, the trust fund will have insufficient amounts to meet all of its obligations, resulting in steadily accumulating shortfalls." Originally, transportation funding was established with a strong connection between revenue measures and use. Unfortunately, because of the increased auto fuel efficiency, fuel taxes not indexed for inflation, and a new reliance on sales taxes, the previously strong connection to revenue sources and use has deteriorated. The following text provides a listing of a variety of financing mechanisms being explored, that offer potential relief for the transportation revenue shortfall that currently faces Fresno County and the State of California.

Environmental Enhancement and Mitigation Program
Applicants may apply for these funds to undertake environmental enhancement and mitigation projects which are directly or indirectly related to the environmental impact of modifying existing transportation facilities, or for the design, construction or expansion of new transportation facilities. The EEM project must be over and above the required mitigation for the related transportation project.

All participating cost incurred on a project are funded in arrears on a reimbursement basis of the state's proportionate share of actual costs. No matching funds or cost shares from the applicant or other funding sources are required to apply for an EEM grant. However, projects that include the greatest proportion of other monetary sources of funding will be rated highest. Grants are generally limited to $350,000.00.

"Additional" Local Dedicated Sales Tax
Currently Fresno County collects a 1/2 percent local sales tax (Measure C) for transportation purposes. The recently reauthorized twenty-year tax is projected to generate approximately $1.4 billion over the 20 year life span of

The Pacific Crest Trail - John Muir Wilderness is accessible in eastern Fresno County

the tax (2007/08 - 2027/28). Sales tax revenues are always susceptible to revenue fluctuations which coincide with the region's economic health over the life span of the tax. It is reasonable to assume that tax-payers will vote to extend the ½ percent sales tax after 2027, extending through the life of the RTP.

Benefit Assessment District Fees

An assessment district is an area of land specifically benefiting from a public improvement. An assessment is levied against each parcel benefited by the improvement, in proportion to the benefit. Bonds are then sold to finance the improvements, and the land owners in the assessed districts repay the bonds over time. Traditionally this approach has been used to finance urban public improvement projects (i.e. sewer, water, curbs, gutters, etc.) on a community or neighborhood level. One of the difficulties in utilizing this approach on a "regional" basis is that there are multiple legislative bodies (i.e. City Councils, Boards of Supervisors, etc.) which may likely cause difficulty in achieving political consensus. In addition, there could be great difficulty in establishing a zone of benefit on a regional level.

Cap and Trade Funds

AB 32 requires California to return to 1990 levels of greenhouse gas emissions by 2020. All programs developed under AB 32 contribute to the reductions needed to achieve this goal, and will deliver an overall 15% reduction in greenhouse gas emissions compared to the 'business-as-usual' scenario in 2020 if we did nothing at all.

The cap and trade program is a key element in California's climate plan. It sets a statewide limit on sources responsible for 85 percent of California's greenhouse gas emissions, and establishes a price signal needed to drive long-term investment in cleaner fuels and more efficient use of energy. The program is designed to provide covered entities the flexibility to seek out and implement the lowest-cost options to reduce emissions.

Congestion Pricing Strategies

Congestion-pricing (also known as peak-hour pricing) involves charging higher fees or fares to transportation system users during peak hours. Often the demand for a service exhibits a peaking system characteristic related to time of day or seasonal time of the year. For instance, the twice daily journey-to-work trip places significant demand peaks on the region's transportation network. The impact on the system to provide for peak period system capacity can be recovered from peak period users rather than the system users as a whole, by charging a higher fare during the peak period. Currently there are few, if any, facilities in this region which operate consistently at level of services which would warrant congestion pricing.

"Local" Motor Vehicle Fuel Tax

SB 215 gives counties the ability to hold general elections to determine if taxing "local" sales of motor vehicle fuel (gasoline, diesel) is a desired local option to finance their regional transportation network. The uses, method of implementing, advantages and disadvantages are similar to that of a sales tax. One advantage of this type of charge is that it is user oriented. Fuel consumption is related to road use, thus heavier users bear a higher burden of the cost commensurate with actual use.

As a user fee, instituting a local gas tax is a relatively equitable local financing option. Motor fuel taxes are easily administered, and since they are tied to fuel prices that tend to rise with inflation.

Some of the issues relating to this type of program include:

- Placement on the ballot requires approval of a majority of the cities having the majority of the population within the county.
- Majority of the cities within the county representing a

majority of the population and the county must agree on a distribution formula before the Measure can be placed on the ballot.

- Two thirds majority required for approval
- Statutes do not limit the amount of tax increase that may be voted upon.

Motor Vehicle Taxes and Fees (Statewide, Regionally or Locally)

There is an array of fees and taxes on motor vehicles which could be increased and implemented statewide, regionally or locally to generate transportation funds. Examples include vehicle registration surcharges (similar to the Air District's AB 2766 fees currently collected), increased surcharges on driver's license fees, mileage taxes, parts and repair excise taxes, heavy vehicle taxes, fees for "vanity plates," tire taxes, and personal property taxes on motor vehicles. One of the drawbacks to this approach involves the need for enabling legislation (statewide, regionally or locally).

Public and Private Parking Fees

This mechanism includes increasing public and private parking charges and instituting parking fees where parking is now free. Most cities in California have become more aggressive in pricing downtown parking, both at meters and in lots in the post-Proposition 13 financial environment. In some cities, extended hours of parking lot operation and substantially increased enforcement have increased revenues from parking fees. Often these funds are treated as a general fund source rather than tied to specific transportation expenditures.

If public parking fees were to be initiated, several issues would need to be addressed. For example, the fees would probably have to be implemented on a countywide or region wide basis in order to address issues of equity and consistency among the local jurisdictions. In addition to representing a potential source of revenue, parking pricing have also been shown to be one of the most significant factors in reducing drive-alone trips and is used as a common transportation demand management strategy.

Strategic Growth Council (SGC) Sustainable Communities Planning Grants

The principal goal of this grant program is to fund the development and implementation of plans that lead to significant reductions in greenhouse gas emissions (GHGs) in a manner consistent with the State Planning Priorities, AB 32: The California Global Warming Solutions Act of 2006 and the current Environmental Goals and Policy Report (EGPR), if available.

This grant program is meant to foster the development of sustainable communities throughout California. It is designed to help local governments meet the challenges of adopting land use plans and integrating strategies to transform communities and create long-term prosperity. Sustainable communities shall promote equity, strengthen the economy, protect the environment, and promote healthy, safe communities.

Recreational Trails Program

The Recreational Trails Program (RTP) provides funds annually for recreational trails and trails-related projects. The RTP is administered at the federal level by the Federal Highway Administration (FHWA). It is administered at the state level by the California Department of Parks and Recreation (DPR). Non-motorized projects are administered by the Department's Office of Grants and Local Services and motorized projects are administered by the Department's Off-Highway Motor Vehicle Recreation Division. Eligible applicants include; cities and counties, districts, state agencies, federal agencies, and non-profit organizations with management responsibilities of public lands.

Regional Transient Occupancy Tax (Hotel/Motel)

The Transient Occupancy Tax is a tax on visitor accommodations. These visitor-based taxes can be imposed on hotel/motel establishments in two different ways. One method is to tax each lodging establishment annually on a per unit basis. Another method is a tax charged directly to the patron for each night of lodging. An advantage is the fact that the tax does not directly affect local residents. Its major disadvantages are its susceptibility to fluctuations in the tourist economy and the need to have the fees implemented on countywide or region wide basis in order to address issues of equity and consistency among the local jurisdictions.

Regional Transportation Facilities Impact Fee

A regional transportation facilities impact-fee would distribute the costs of regional transportation facilities among all new development within the region, using the size of a proposed development or estimates of a project's trip generating capacity as criterion. This type of development impact fee would be required to meet AB 1600 nexus findings in order to be implemented. The reauthorization of Measure C required that all local agencies adopt a regional transportation impact fee by January 1, 2009 or risk losing their local street maintenance and rehabilitation funding authorized by the Measure. A Regional Transportation Mitigation Fee (RTMF) was adopted by the COG Policy Board on October 29, 2009 and became effective January 1, 2010. The current RTMF policy will expire with the Measure C program in 2027 but it is reasonable to assume that the voters will extend the Measure C ½ cent sales tax through the year 2040.

A similar mechanism is for developers to make dedications in lieu of paying development fees, such as land dedications, construction of public utility infrastructure, local roads or whatever type of public improvement is needed. The dedications must be linked to the impacts of the development on the regional transportation network in order to meet AB 1600 requirements. The use of development assessments with land use incentives can be used to encourage more transit-oriented and pedestrian-oriented development, which would reduce the demand, and subsequent need for extensive highway and road construction.

Toll Facilities

Tolls allow the financing of the construction, operation or maintenance of roadway facilities. This is a familiar source of funding for bridges, tunnels, and turnpikes primarily in the eastern portion of the United States; however, more and more toll facilities are beginning to be constructed in California. For new facilities, it provides a means of generating up-front debt funding to construct transportation facilities without disturbing existing governmental agency budgets and programs, or requiring new or additional taxes. The financing costs in terms of interest on debt over the period that bonds are outstanding can be substantial. After the toll facility is completed, tolls usually provide income to operate and maintain the facility, as well as amortize the outstanding debt.

With the new emerging electronic technologies of toll collection, toll roads may be more feasible than before. Federal Highway officials are reconsidering the merits of toll roads to supplement urban transportation facilities. The 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) abolished the restraints against tolls on interstate facilities and allowed federal agencies to support toll roads and to participate in their financing. Problems that may face this region are the limited number of high volume facilities in this region which would justify toll collection, and the direct and indirect costs involved in collecting tolls.

Vehicle Miles Traveled Fee

This financing mechanism is a vehicle use fee based on the number of miles driven. This type of fee generates substantial revenues, implements policy goals of increased mobility and is strongly related to transportation demand

and congestion. Vehicle Miles Traveled (VMT) fees would appear to be a stable and a growing source of revenue given Californians' propensity to use their automobiles. VMT fees also would maintain an ability to capture revenues from a growing fleet of alternative fuel vehicles within the state.

Emissions Fee

An emissions fee could work in a manner similar to the Vehicle Miles Traveled fee program except that user charges could be based on the levels of emissions rather than miles traveled. The measure would be recorded at the time the vehicle is smog checked and the driver would pay a fee based on a sliding scale. Revenue formulas would have to be adjusted due to the fact that the California vehicle fleet is becoming "cleaner" as older polluting vehicles are retired and replaced with vehicles that have improved emission technology.

A VMT fee program could be linked to the vehicle smog certification program. Although the mileage data is currently not collected by the Department of Motor Vehicles, the state is moving toward improved data bases and auto manufacturers are making vehicles with sealed, "tamper resistant" odometers. Proposals to implement VMT fees could also be adjusted for low income and rural drivers.

FTA Section 5312

The National Research and Technology Program (49 U.S.C. 5312) seeks to improve public transportation by funding research, development, demonstration and deployment projects. Eligible recipients are determined for each competition, and may include: universities, public transportation systems, state DOTs, non-profit and for-profit entities, amongst others. Eligible activities include; research, development, demonstration and deployment projects, and evaluation of technology of national significance to public transportation.

FTA Section 5313

The Transit Cooperative Research Program (49 U.S.C. 5313; TCRP) is an applied, contract research program that develops near-term, practical solutions to problems facing transit agencies. The transit industry driven program, TCRP, promotes operating effectiveness and efficiency in the public transportation industry by conducting practical, near-term research designed to solve operational problems, adopt useful technologies from related industries and introduce innovation that provides better customer service. The industry driven program serves as one of the principal means by which the transit industry can develop innovative short-term solutions to meet demands placed on it.

Transportation Infrastructure Finance and Innovation Act (TIFIA)

The Transportation Infrastructure Finance and Innovation Act (TIFIA) program provides credit assistance for qualified projects of regional and national significance. Many large-scale, surface transportation projects - highway, transit, railroad, intermodal freight, and port access - are eligible for assistance. Eligible applicants include state and local governments, transit agencies, railroad companies, special authorities, special districts, and private entities. The TIFIA credit program is designed to fill market gaps and leverage substantial private co-investment by providing supplemental and subordinate capital. Each dollar of Federal funds can provide up to $10 million in TIFIA credit assistance and support up to $30 million in transportation infrastructure investment. MAP-21 reforms included included a 10 percent set-aside for rural projects; an increase in the share of eligible project costs that TIFIA may support; and a rolling application process.

Public-Private Partnerships

A public-private partnership (PPP or P3) represent a broad category of financing mechanisms that are being used to harness public sector participation. PPPs have been used with mixed success in several states nationwide. The State of California has enacted legislation to permit PPP approaches for transportation infrastructure development (Caltrans, 2013c).

7.8 Sustainable Planning and Infrastructure Grant Program

During the 2014 RTP planning process, interested members of the community discussed the need for a Sustainable Planning and Infrastructure Grant Program to further complement the goals of the RTP/SCS. The purpose of such a program would be to support and enhance the implementation of the SCS across Fresno County. The implementation of such a program would be of great value for the Fresno County region; however, in order to undergo such a process to create a new regional program, extensive coordination between stakeholders, local member agencies, project sponsors and the COG Policy Board is needed to allow for a transparent and equitable approach. In addition, a funding structure is needed to fully implement this type of program, and Fresno COG staff as well as members from interested community based organizations, are exploring possible funding streams. Fresno COG is committed to continuing to work with member agencies and other stakeholders to develop and implement a new funding program in the near future. The development of an SCS infrastructure grant program is reflected in the Policy Element, Table 6-1C, General Transportation, Environmental Justice.

7.9 From Planning to Programming

The programming of local, state, and federal funds is a complicated but necessary process that ensures that local agencies receive funds for projects that have either been allocated or awarded to them. In order to explain this complicated process, what follows is an example of how a project moves from inception to completion within the Fresno COG programming system. A sample transportation funding flow chart is also included in Figure 7-2.

A. A city submits Main Avenue from A Street to D Street; Reconstruction during the 2014 RTP Call for Projects

B. The total project cost (for all projects submitted) is compared against the Revenue Projections and it is determined that somewhere within the 25 year life of the RTP there will be funding to complete the project; Main Avenue from A Street to D Street: Reconstruction

C. Project is given a metropolitan planning organization (MPO) number and placed on the financially constrained project list within the 2014 RTP

D. During the 2015 Federal Transportation Improvement Program (FTIP) update Fresno COG holds a Regional Surface Transportation Program (RSTP) Call for Projects. **RSTP is just one of the many fund sources listed in the RTP and is being listed here as an example only*

E. A city submits Main Avenue from A Street to B Street; Reconstruction to be considered for $100,000 in eligible funding

F. The entire length of the project was previously included in the 2014 RTP so it is scored by the RSTP scoring committee and awarded $100,000

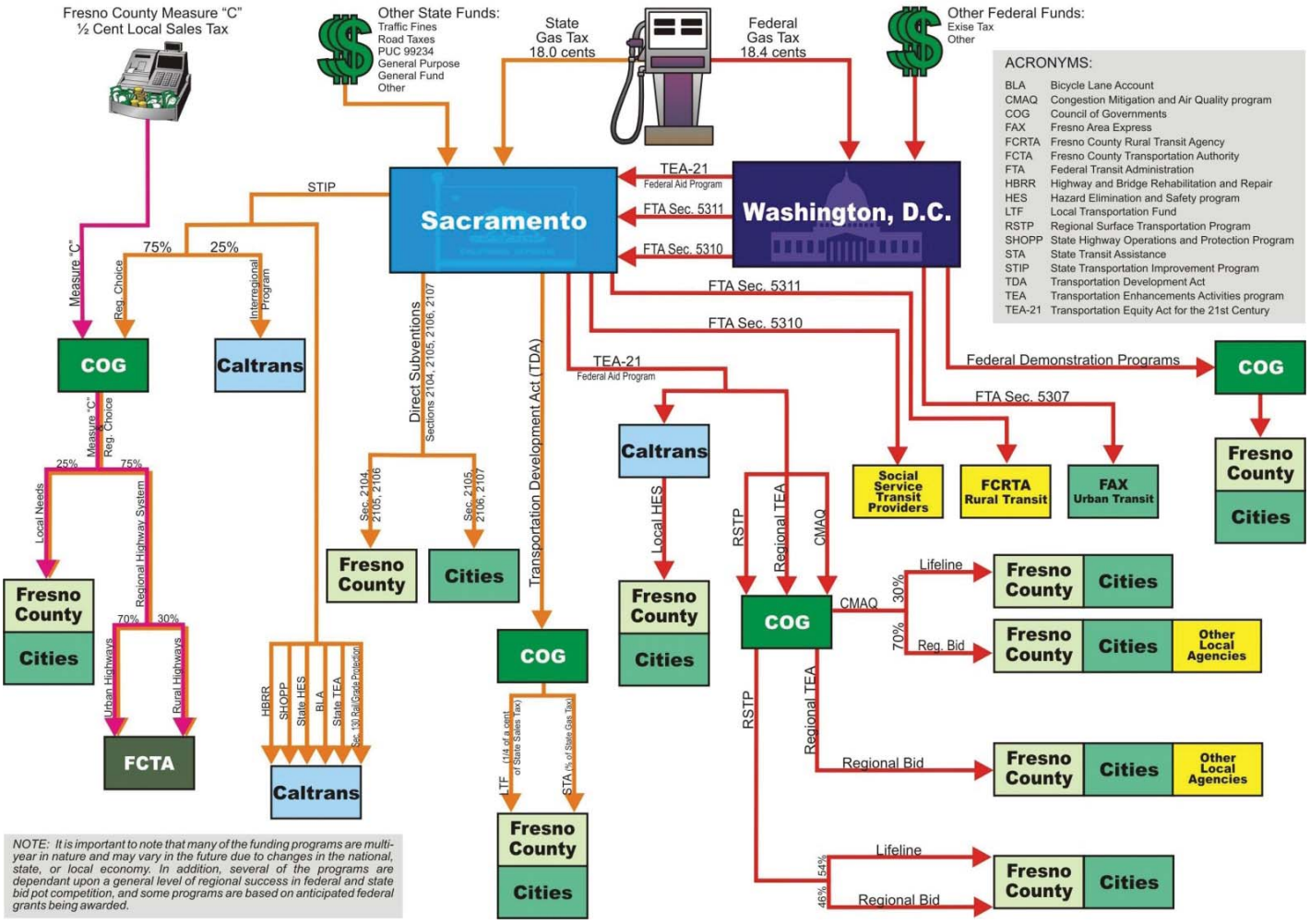
G. Main Avenue from A Street to B Street; Reconstruction is programmed in the 2015 FTIP with $100,000 and the project listing in the RTP is updated to Main Avenue from C Street to D Street; Reconstruction now that the first segment has been fully funded

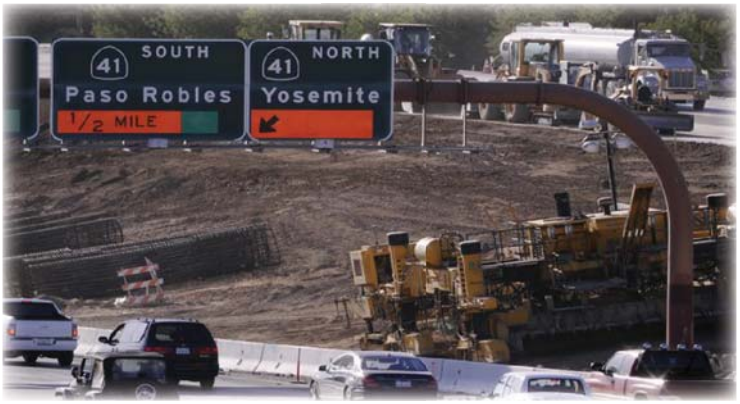
H. When the city is ready to begin work on Main Avenue from A Street to B Street; Reconstruction they submit a Request for Authorization (RFA) to Caltrans Local Assistance

I. Caltrans Local Assistance and Caltrans Headquarters approve the request and the funds are allocated to the city to implement the project

J. Once the funds are expended the city must continue to submit invoices to Caltrans, in order to receive federal highway reimbursement and in order to maintain active status, until the last dollar is spent and the project is closed out

Figure 7-1: Transportation Funding Flow Chart





Fresno Council of Governments

Cares about the Environment

In accordance with our continued efforts to minimize the environmental impacts of printing, we have placed all 2014 RTP/SCS Documents, including Appendix files, on the disk that accompanied this document.

Each of these documents may also be found on-line at fresnocog.org

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