

Chapter 1

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.

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

Figure 1-2: Population Growth Rate Since 1970

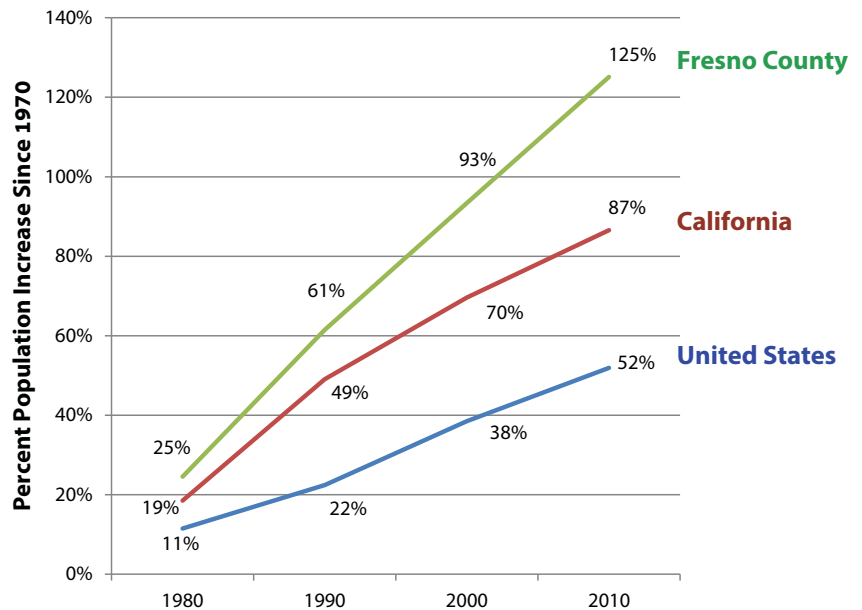


Table 1-1 lists the population shares for each jurisdiction in Fresno County in 1970 and 2013. As shown, the city of Fresno contains over half (53%) of the County's population. Clovis captures 11% of the population. The

remaining 14 jurisdictions each capture 3% or less of the County population.

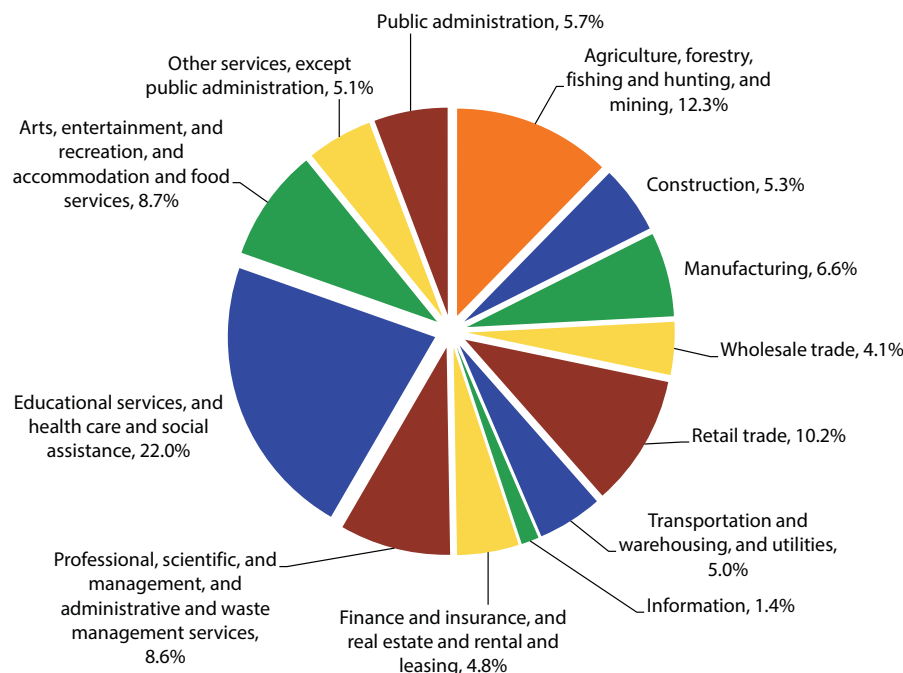
As indicated in the Figure 1-2 above, the population growth rate of Fresno County has outpaced that of California and the United States. During the 40-year period from 1970-2010, Fresno County's population increased by 125% compared to 87% and 52% for the state and nation.

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%).

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 than 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

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%

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

Figure 1-4: Unemployment Rate

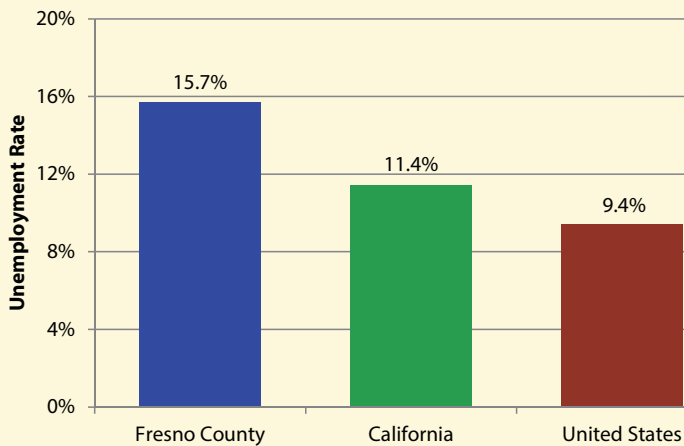


Figure 1-6: Median Household Income

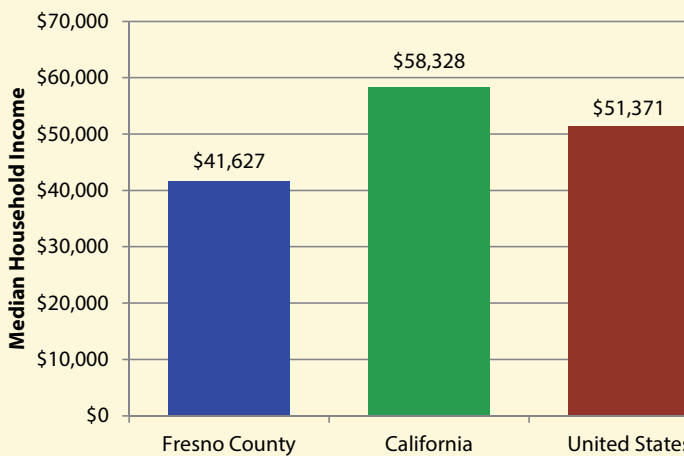


Figure 1-8: Population Under 25 years of age

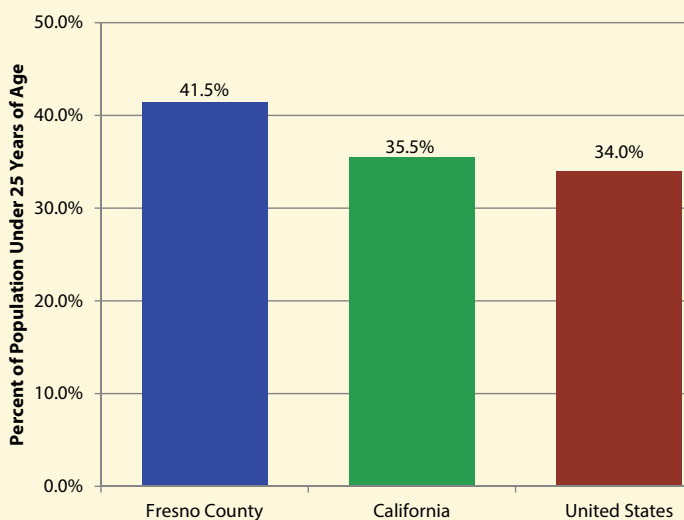
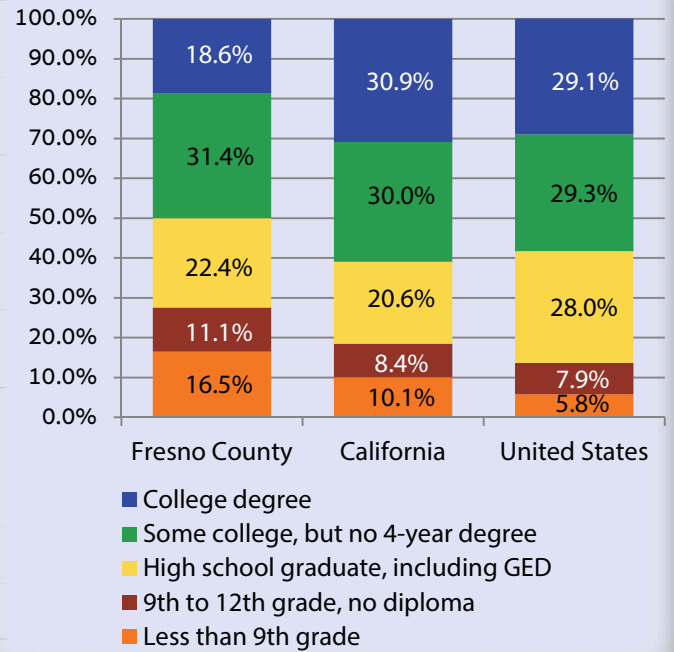
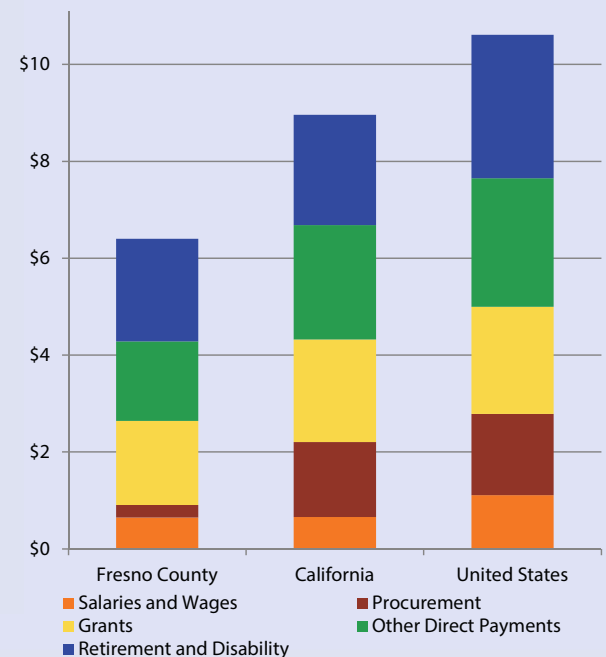


Figure 1-5: Educational Attainment



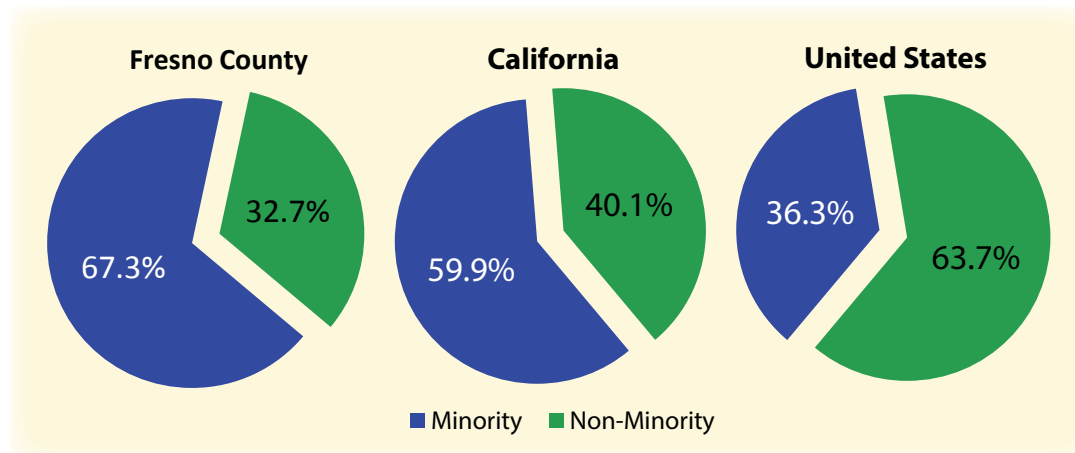
States averaged 40% and 66% more per person. Fresno County has a younger population than California as a whole and the United States. According to the 2010 U.S. Census, 41.5% of County residents were under the age of 25 years compared to 35.5% for

Figure 1-7: Per Capita Federal Government Expenditures



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.

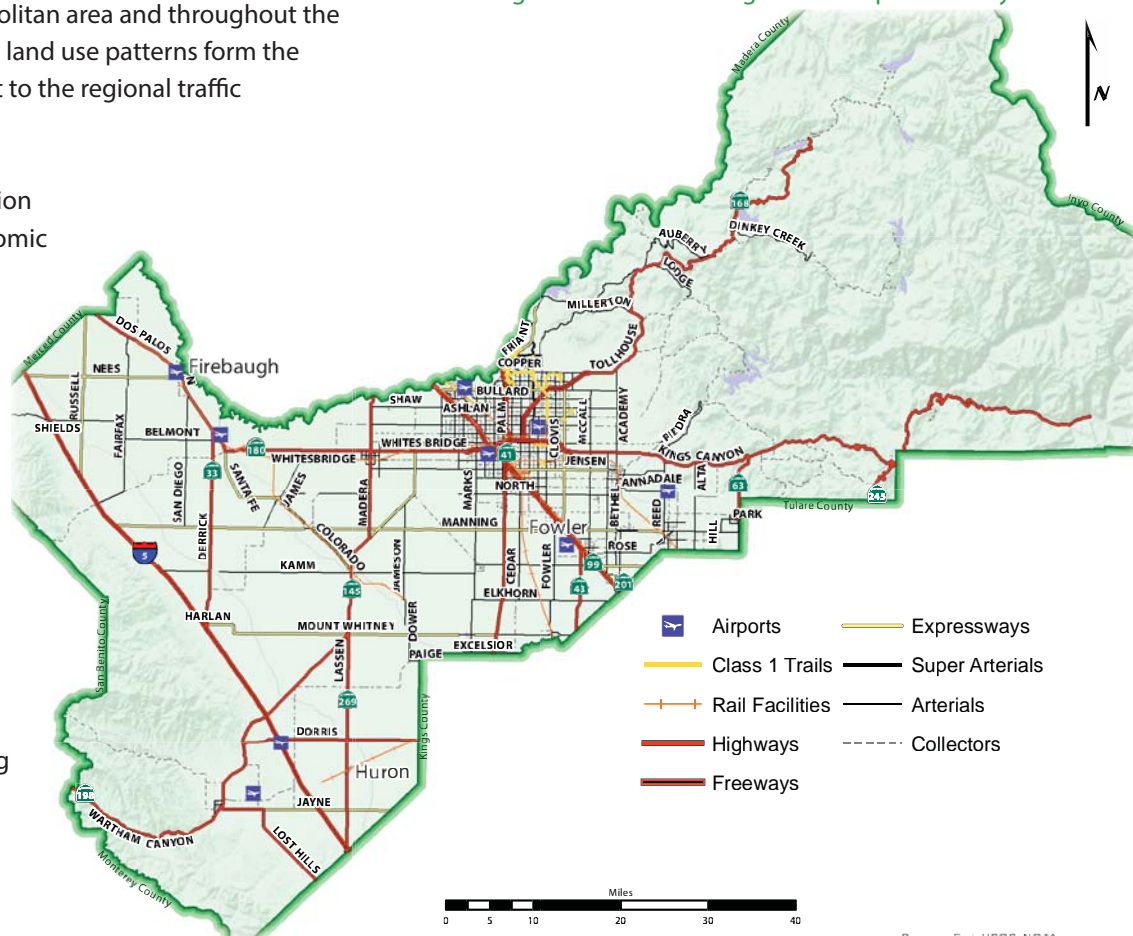
By using future population growth and socio-economic information, The Fresno COG regional traffic model can project the traffic on the regional transportation system as it would exist at a given future time. This information is essential to the transportation planning process. However, as the RTP covers 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



Sources: Esri, USGS, NOAA

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.



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

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

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.