

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 2042*

1.1 Building the RTP

The Fresno Council of Governments' (COG) 2018 Regional Transportation Plan (RTP) comprehensively assesses all forms of transportation available in Fresno County as well as travel and goods movement needs through 2042. Fresno COG's first RTP was adopted in 1975. Updated editions have been published every four years per federal statutes refinements of the original and subsequent plans, making this the 19th edition. Federal and state legislation mandates that these long-range transportation plans extend at least 20 years into the future.

As the federally-designated Metropolitan Planning Organization (MPO) and state-designated Regional Transportation Planning Agency, Fresno COG has developed the 2018 RTP update through a continuous, comprehensive and cooperative framework. This process has involved the region's 15 cities, the County of Fresno, staff from related local public agencies, the San Joaquin Valley Air Pollution Control District (SJVAPCD), Caltrans, other state and federal agencies and the public.

Sustainable Communities Strategy

The 2018 RTP is the second plan to contain a Sustainable Communities Strategy (SCS) as required by California's Senate Bill 375. Enacted in 2008, SB 375 requires that each MPO include an SCS that provides an integrated land-use and transportation plan for meeting the California Air Resources Board's (CARB) greenhouse gas emission reduction targets.

Federal Directives - Funding

The 2018 RTP reflects the federal directives embodied in both the Fixing America's Surface Transportation Act (FAST Act) and the Clean Air Act Amendments of 1991. These acts require that projects in RTPs be "constrained" to only those that can actually be delivered with reasonably expected funds, and that those projects help attain and maintain air quality standards. Approved in December 2015, the FAST Act funds surface transportation programs at more than \$305 billion for fiscal years 2016 through 2020.

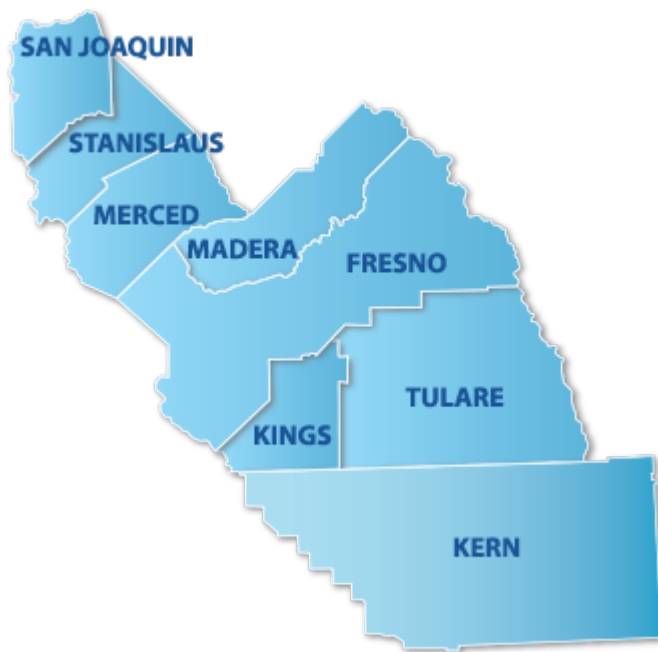
The plan's financial element advocates for a stable and equitable approach to statewide funding, so that the

entire San Joaquin Valley can respond appropriately to a growing population, environmental quality and continuing innovations.

Air Quality Planning

In 1991, Fresno County helped form a new regional agency, the San Joaquin Valley Air Pollution Control District (SJVAPCD or "District") which covers the eight county San Joaquin Valley region (San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare and the San Joaquin Valley portion of Kern) shown in [Figure 1-1](#) below. Because of the federal government's approach to keeping the nation's air clean and the Valley air basin's non-attainment status, the District and local agencies are working together even more closely on various traffic management systems specified in federal legislation. The RTP's major air quality task will be to demonstrate that its projects collectively help attain and maintain federal air quality standards. Failure to do so is to risk losing federal transportation funding.

Figure 1-1: The San Joaquin Valley's eight county region.



Computer Modeling

This plan specifies those projects and programs that will be funded throughout the RTP's planning horizon and evaluated using computer modeling to determine their impacts on air quality. This process demonstrates "conformity" with adopted air quality targets. Projects will

only be evaluated for conformity if they have a strong likelihood of being funded. See Chapter 3 and [Appendix I](#) for more details on the computer modeling.

Multi-Agency Coordination

Working with technical advisory committees, interested citizens, community-based organizations and other government agencies, Fresno COG has coordinated a planning approach to develop a multimodal regional transportation system plan for Fresno County.

Transportation planning in Fresno County is considered a continuous, comprehensive and cooperative process, involving all local governments, the California Department of Transportation (Caltrans), other transportation providers such as urban and rural transit agencies, additional state and federal agencies, the SJVAPCD and the public.

1.2 Scope of the Plan

The RTP contains four main required elements that are discussed below. However, Fresno COG's RTP includes additional elements or chapters regarding the regional context of Fresno COG's RTP, public participation, environmental justice analysis and transportation performance management.

The **Policy Element** sets forth Fresno COG's transportation goals, objectives and policies for each transportation mode.

The **Sustainable Communities Strategy** integrates land-use and transportation planning efforts to meet Fresno County's greenhouse gas emission reduction targets.

The **Action Element** introduces the multimodal system by transportation mode. Each section describes the existing system, discusses recent accomplishments, provides a needs assessment, and proposes short-term and long-term actions for both planning and actual project improvements.

The **Financial Element** identifies both existing 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 approximately 3,000 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. [Appendix C](#) includes a comprehensive list of member agency-identified candidate projects.

1.3 The Region

Fresno County is located in the heart of California. See [Figure 1-2](#). Along its western boundary are the arid foothills of the Coastal Range. The County's western and central areas are part of the fertile San Joaquin Valley where agricultural production serves as the region's No. 1 industry. To the east, are 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 third highest-grossing agricultural county, Fresno County's gross value of agricultural products was \$6.6 billion in 2015 and \$6.2 billion in 2016. The estimated population as of January 1, 2017 was 995,975 placing Fresno as the tenth most populous

[Figure 1-2: Fresno County is located in the heart of California](#)



Table 1-1: Population shares of county

Jurisdiction	1970 Population	Percent Share of County	2017 Population	Percent Share of County
Clovis	13,856	3.4%	110,762	11.1%
Coalinga	6,161	1.5%	16,982	1.7%
Firebaugh	2,517	0.6%	8,202	0.8%
Fowler	2,239	0.5%	6,091	0.6%
Fresno	165,972	40.2%	525,832	52.8%
Huron	1,525	0.4%	7,186	0.7%
Kerman	2,667	0.6%	14,614	1.5%
Kingsburg	3,843	0.9%	12,338	1.2%
Mendota	2,705	0.7%	11,828	1.2%
Orange Cove	3,392	0.8%	9,369	0.9%
Parlier	1,993	0.5%	15,500	1.6%
Reedley	8,131	2.0%	26,152	2.6%
Sanger	10,088	2.4%	26,412	2.7%
San Joaquin	1,506	0.4%	4,070	0.4%
Selma	7,459	1.8%	26,156	2.5%
Unincorporated Fresno County	179,275	43.4%	175,481	17.6%
Totals	413,329	100.0%	995,975	100%

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 636,594. The City of Fresno is now the fifth largest city in the state, with a population of 525,832.

Table 1-1 lists the population shares for each jurisdiction in Fresno County in 1970 and 2017. 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 1-3, 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 Figure 1-4, agriculture accounts for 12.4% 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 federal, state, and local government (18.6%), education and health services (16.8%), and retail trade (10.1%).

Fresno County ranks as the third top agricultural-producing county in California. In 2015, the County produced \$6.6 billion in agricultural projects, only 5% less than the top-ranking county which was Tulare at \$7.0 billion. In fact, Fresno County has been the top agricultural-producing county in the United States for 57 of the past 62 years.

Fresno County has been plagued with high unemployment. As indicated in Figure 1-5, the County's 2016 unemployment rate was 9.4% in contrast to 5.4% for the state and 4.9% for the nation.

Education levels for Fresno County residents lag behind those of California and the United States (See Figure 1-6). Only 19.8% of persons 25 years of age and older in Fresno County have a bachelor's degree or higher, compared with 32% for the state and 30.3% for the nation. 15.2% of the residents have less than a 9th grade education in contrast to 9.9% for the state and 5.6% for the nation.

Figure 1-3: Population Growth Rate Since 1970

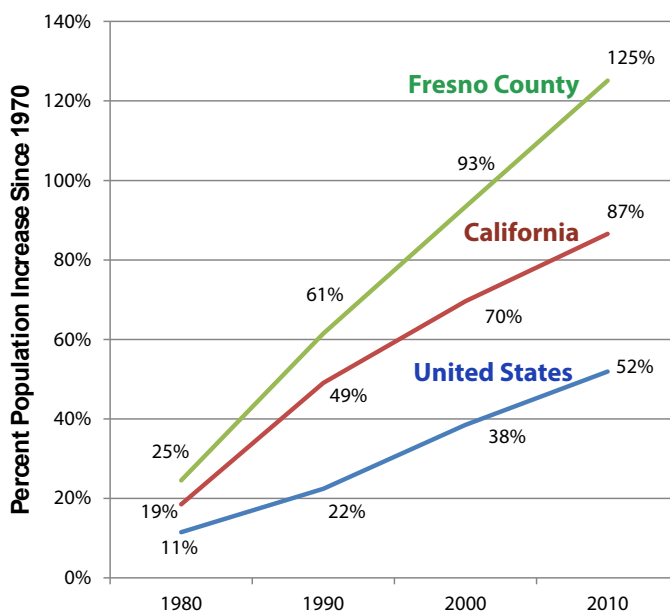


Figure 1-4: Employment by Industry

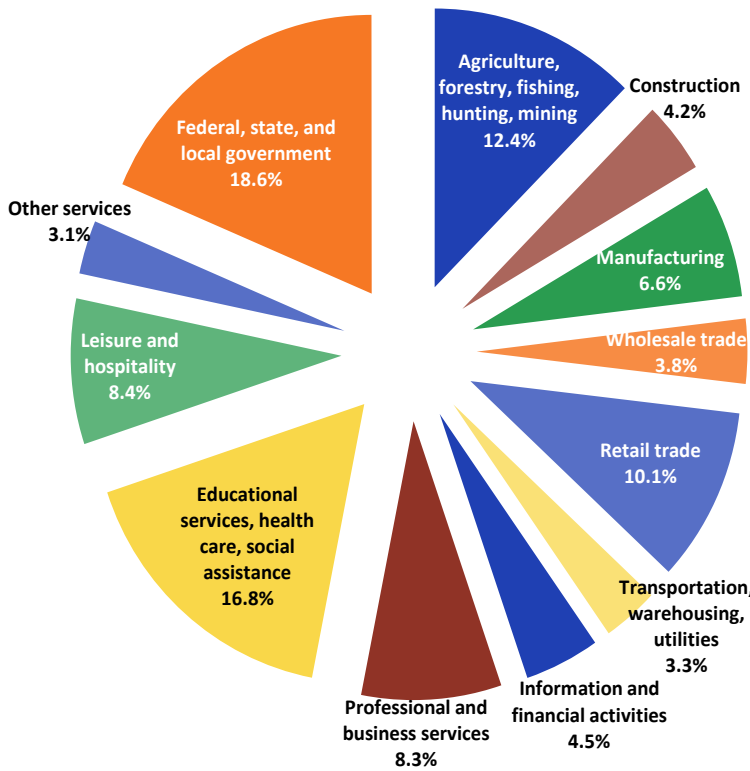


Figure 1-5: Unemployment Rate

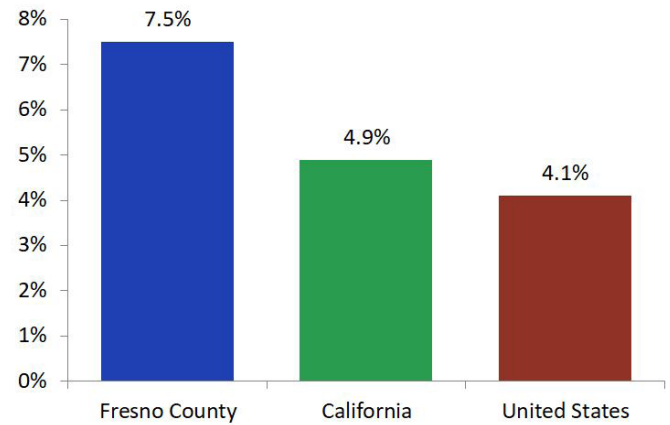


Figure 1-6: Educational Attainment

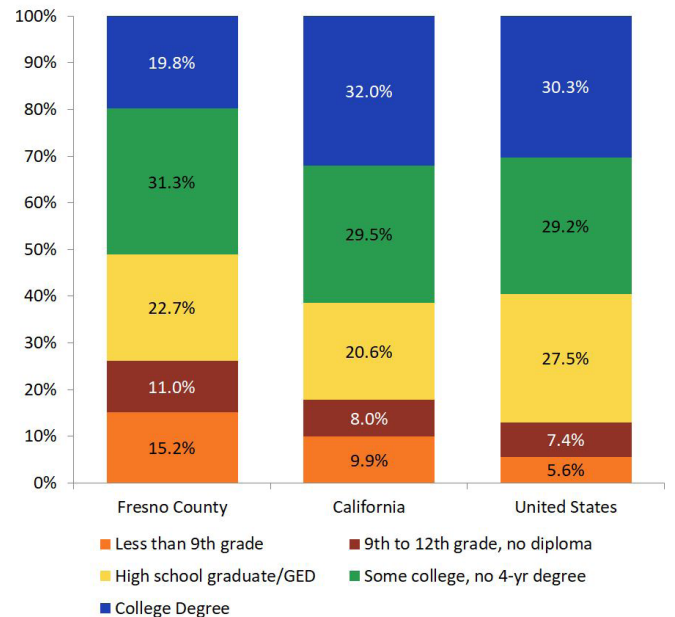
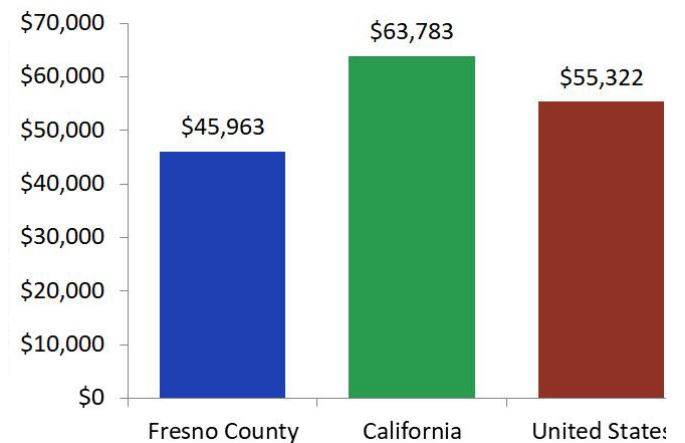


Figure 1-7: Median Household Income



Figures 1-6 and 1-7 source: American Community Survey 2012-2016

Figures 1-4 and 1-5 source: 2016 US Bureau of Labor Statistics
Figures 1-6 and 1-7 source: American Community Survey 2012 - 2016

With high unemployment and low educational attainment, Fresno County is plagued with a low median household income. As Figure 1-7 indicates, Fresno County's median household income of \$45,963 is far below the state and nation's incomes of \$63,783 and \$55,322, respectively. Figure 1-10 maps the concentration of poverty levels throughout Fresno County.

Fresno County has a younger population than California as a whole and the United States. According to the 2012-2016 American Community Survey, 19.1% of County residents were under the age of 25 years compared to 19.7% for California and 24.2% 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 2016, 69.2% of the County's inhabitants were minority (non-white) compared to 61.6% for the State of California and 38% for the nation as shown in Figure 1-9. Figure 1-11 shows the concentration of minority populations throughout Fresno County.

Figure 1-8: Population Under 25 years of age

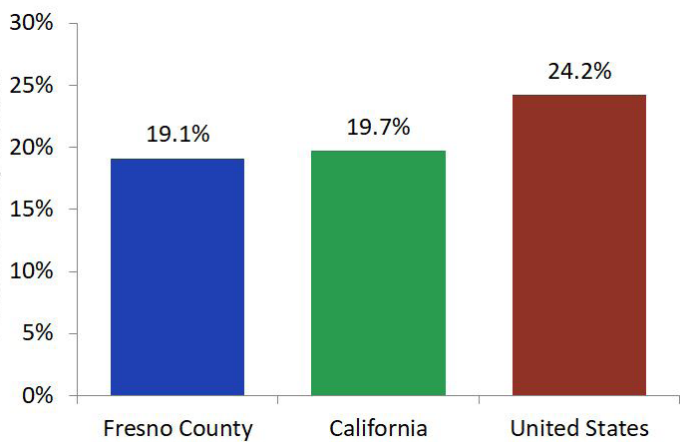


Figure 1-9: Percent of Minority Population

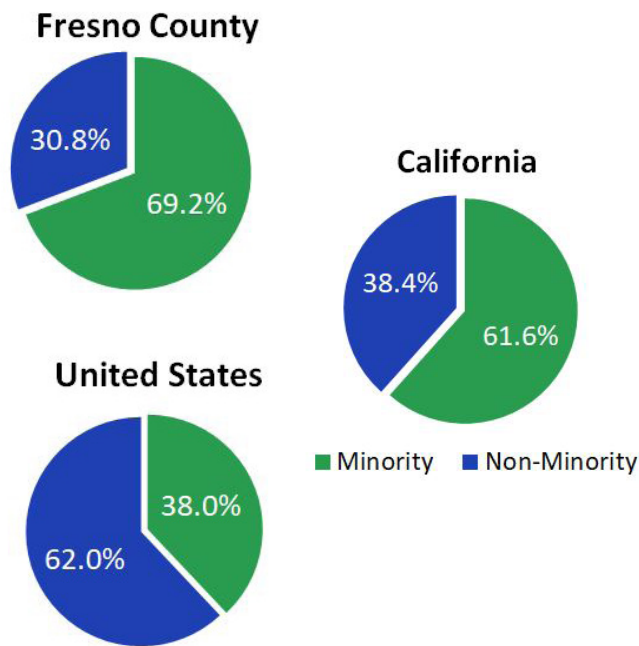


Figure 1-10: Fresno County Poverty Concentration

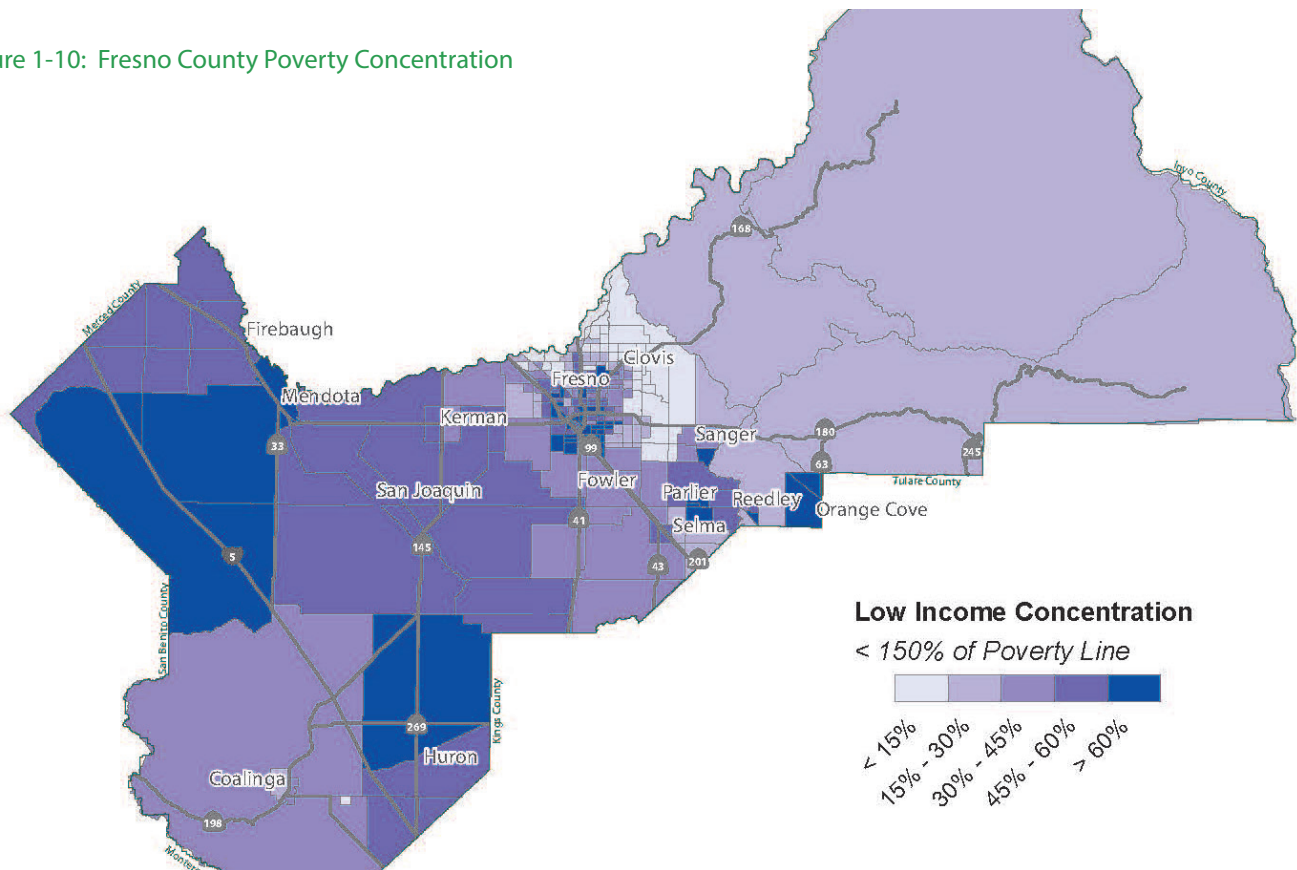
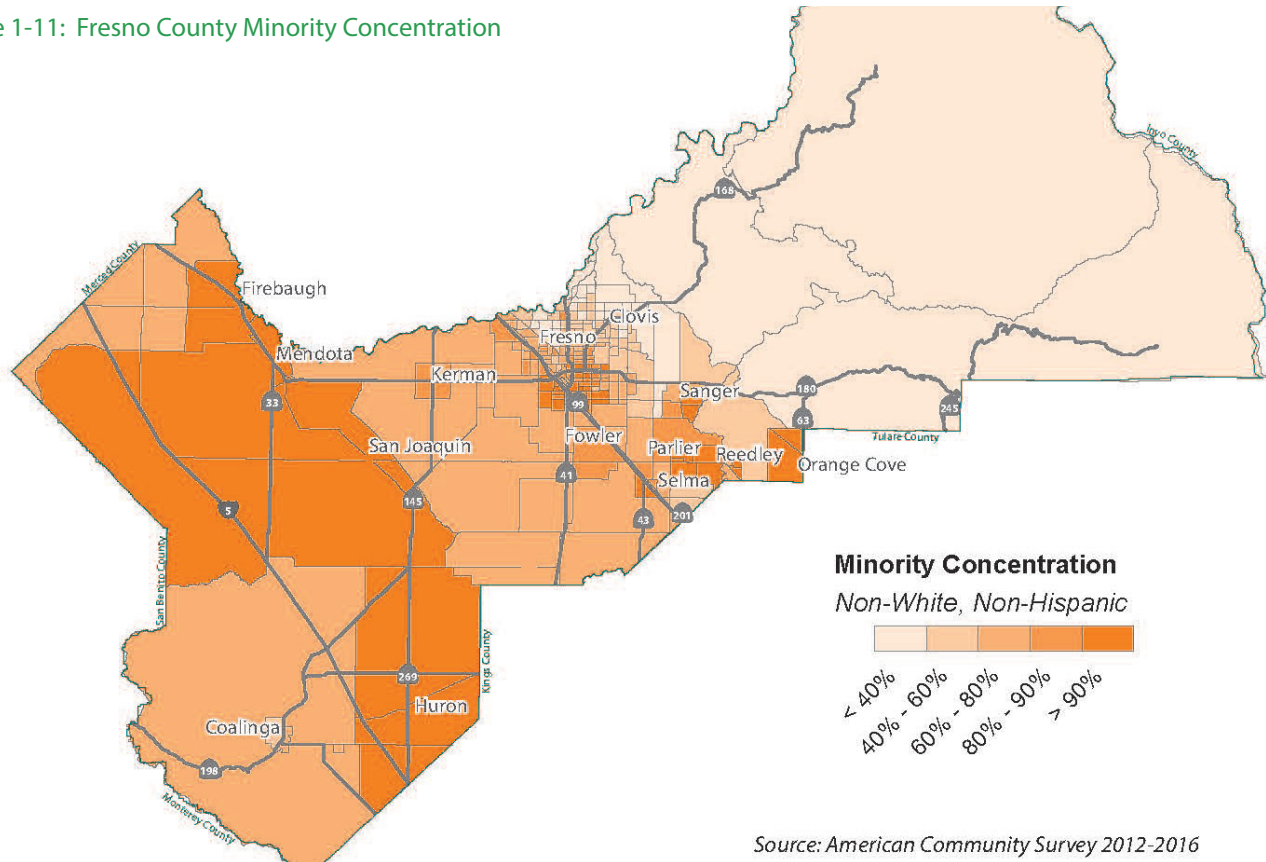


Figure 1-11: Fresno County Minority Concentration



Source: American Community Survey 2012-2016

1.4 Regional Planning Assumptions and Forecasts

Several factors are considered in the development of regional planning forecasts and assumptions, including regional growth projections for population, housing and employment. 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.

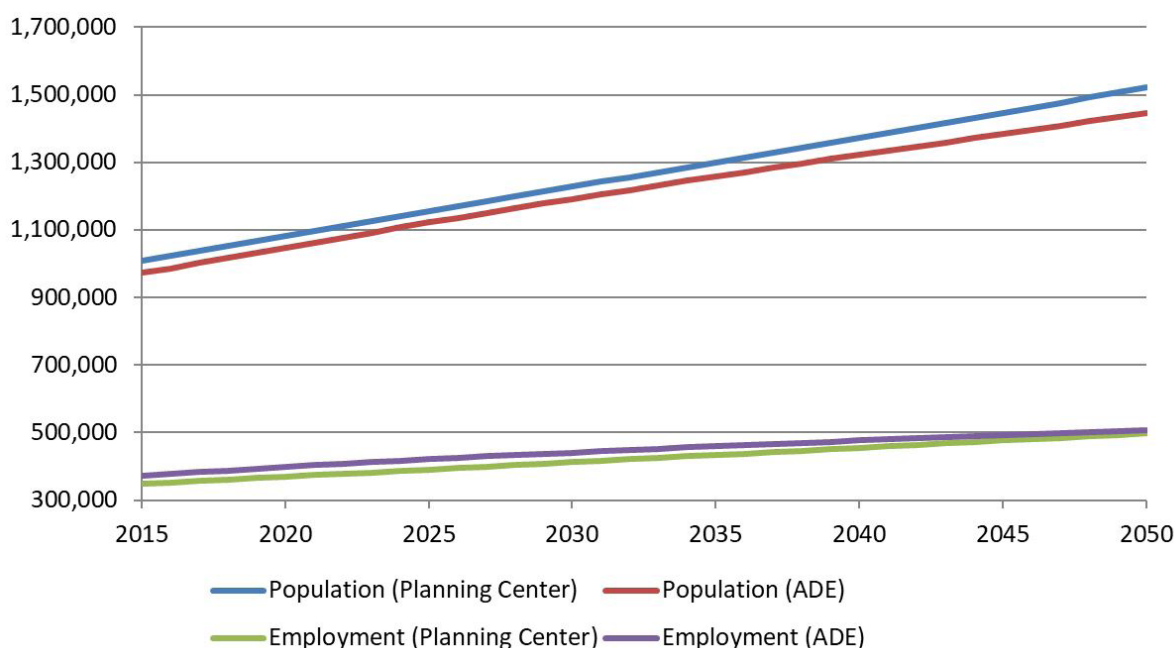
- Development alternatives that maximize energy conservation and promote clean air will continue to be valued by society.
- Recent state legislation related to climate change will continue to influence planning policy at the local and regional levels.

Forecasts

The forecasts used for the 2018 Fresno COG Regional Transportation Plan/Sustainable Communities Strategy were from the Fresno County 2050 Growth Projections prepared by Applied Development Economics (ADE), May 2017. When the previous forecast was completed in March 2012 by The Planning Center, the region was still recovering from the 2007-2008 recession, and the availability of new data in the years since prompted the need for an updated forecast. These forecasts were consistent with forecasts from several independent sources, including the Department of Finance's population projections, December 2014 edition.

Compared to the previous forecast, the updated forecast projects similar long-term trends in population growth, though the overall growth has been adjusted downwards to match known data. Conversely, the employment forecast shows more robust short-term growth (again, to match known data), with growth rates tapering off out to 2050.

Figure 1-12: Demographic Forecast Updates



The updated forecasts for regional population and employment are compared to the previous forecasts in Figure 1-12.

The Demographic Forecast Study

The study Fresno County 2050 Growth Projections by ADE is contained in the Sustainable Communities Strategy Appendix I. This study includes annual forecasts stratified by the 16 jurisdictions within Fresno County: the spheres of influence of the 15 incorporated cities, and the unincorporated balance of the County geography. The study includes two primary forecasts of population and employment, from which are derived other projections related to housing demand and demographics, such as households, housing units, age distribution, group quarters populations, average income, race/ethnicity, school enrollment, etc.

The methodology of this study can be summed up in the following excerpt:

The study process began by developing a range of total population and employment projections for the county as a whole, reflecting varying assumptions about Fresno County's future share of regional growth as well as trends in industry growth. The employment projection methodology used an economic base approach, forecasting export industry sectors, while local serving business sectors follow growth in the economic base and in the population.

Based on the forecast by ADE shown in [Table 1-2](#), countywide population will grow to an estimated 1,347,000 persons by the year 2042. This assumes a declining average annual growth rate of 1.5% in 2015 to 0.9% by 2050. This decline is consistent with past trends: 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) 390,608, or 42%, more people are expected to reside in Fresno County.



Employment Forecast

The Fresno County employment level will increase during the period 2010-2042, 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 1990-2016 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. Agricultural levels effect agricultural employment as well as employment in traditionally non-agricultural sectors such as wholesale trade, manufacturing, services, finance, insurance and real estate.

Table 1-2: 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	1,047,440	343,074	398,050
2035	1,258,860	392,178	460,100
2042	1,347,000	413,172	482,600

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 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 ADE using forecast data from the State of California Employment Development Department, Wood and Poole¹, and Caltrans. These projections were made in several steps, including: projecting economic base sectors (including farm jobs and agricultural services, manufacturing, transportation, etc.); projecting local-serving employment sectors (such as retail and service jobs) by obtaining business-to-business employment multipliers from the IMPLAN input-output model for Fresno County, and developing a set of population-based multipliers to generate business employment from residential demand; and projecting health care sector jobs by using the recent project from Economic Modeling Specialists Institute (EMSI), which considers changes in the health care field and demographic demands in its methodology. The resulting employment forecast is included in the [Table 1-2](#) Fresno County Population, Housing and Employment Forecasts.

¹ Woods and Poole Economics, 2016 State Profile for California

Household Forecast

The population and household projections depend on a population cohort survival model developed by ADE. This model applied age- and race-adjusted birth- and death-rate factors to project the 2010 decennial Census data forward to 2015, in order to estimate the natural change in populations for each jurisdiction. These natural change populations were then compared to the California Department of Finance's 2015 population estimates, attributing city- and County-level differences between the two datasets to in- or out-migration. The 2015 natural change population for each SOI was then adjusted to the DOF 2015 population estimates. The population cohort survival method was then applied to the 2015 data for each subsequent year out to 2050, applying a growth rate consistent with that of the DOF's population projection estimates.

The resulting household forecast is included in the [Table 1-2](#) 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 December 2014.
- **City of Clovis** - Clovis formally adopted its General Plan Update in August 2014.
- **County of Fresno** - The County adopted its updated General Plan in October of 2000.



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.

1.5 Land Use Projections for Traffic and Air Quality Modeling

Given federal and state requirements, 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. The

general growth pattern of the Fresno County region is fueled primarily by the Cube Land modeling tool, which uses an economically-driven bid-rent methodology to predict development patterns at the zonal level. This ensures that growth patterns within each jurisdiction are grounded in economic reality, following processes that mirror market-driven behavior.

By using future population growth and socioeconomic 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.

1.6 Regional Planning Process

Regional transportation planning is a dynamic process requiring periodic refinement, monitoring and updating. The planning program for the next four-year period will include extensively evaluating the Plan itself and each respective transportation mode's elements. Each component will be studied and modified consistent with Plan priorities to achieve an integrated multimodal 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 comprises mayors from the region's 15 incorporated cities and the Fresno County Board of Supervisors' chairman.

Two committees serve as basic support to the Policy Board:

- **Policy Advisory Committee (PAC)** comprises city managers, the county administrator and Caltrans
- **Transportation Technical Committee (TTC)** comprises technical staff from member agencies, other interested agencies, public members and Caltrans.

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

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

- Transportation Technical Committee
- Social Services Transportation Advisory Council
- RTP Roundtable Committee
- Environmental Justice Subcommittee
- Measure C Oversight Committee
- Greenprint Steering Committee
- Association for the Beautification of Highway 99
- Fresno County Airport Land Use Commission

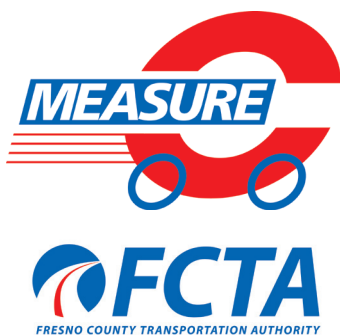
Public participation is encouraged at every stage of the planning process and all meetings are open to the public. Major planning documents receive public hearings prior to adoption. Fresno COG's citizen involvement centers on public information, education and citizen participation in an advisory and decision-making process. Efforts include advertising via pamphlets, Fresno COG's website, public outreach events, annual reports, emails, newsletters, speeches and public hearings. Citizen workshops and conferences are held jointly and coordinated with public and quasi-public agencies as opportunities present themselves.

Fresno COG continues to focus on strengthening its government-to-government relationships with federally recognized tribes and makes every effort to regularly and meaningfully consult and coordinate with them on matters that significantly or uniquely affect their communities. Fresno COG staff have received training on California's SB 18 requirements that mandate cities and counties contact and consult with California Native American Tribes before adopting or amending a General Plan or when designating land as open space.

Committee reports ensure that the Fresno COG Policy Board consider all members' viewpoints. Citizens are encouraged to participate in whatever capacity may be appropriate to their cause.

Measure C

The original Measure C local sales tax measure shepherded the Fresno County Transportation Authority into the transportation planning process. Authority staff sits on the TTC and works closely with Fresno



COG and Caltrans to deliver a highway improvement program that is reasonable and achievable. In 2006, voters approved a 20-year extension of Measure C that included a multi-modal transportation program with almost 25% of expected funds directed to public transit services; roughly 30% to capacity-increasing street and highway improvements; and just under 35% 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. Local governments intending to use any state and federal transportation funds must conform to the Regional Transportation Plan, the SJVAPCD portion of the State Implementation Plan, and the Regional Transportation Improvement Program (RTIP).

1.7 Making the Transition to Interactive Regional Planning

As discussed earlier, the metropolitan area is experiencing a period of continuing growth amid the realities of evolving air quality and transportation conformity requirements. Local agencies coordinate within the traditional framework available at the Fresno Council of 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 and state requirements, this and future RTPs will necessitate a stronger level of coordination, communication, and cooperation in order to achieve air quality conformity, reduce greenhouse gas emissions and comply with other federal and state mandates.

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/Climate Change** - 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. The Valley COGs, with support from Caltrans and the Air District, have embarked upon a comprehensive and regional approach, the San Joaquin Valley Blueprint, 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 Governments. 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 Governments’ Transportation Forum

The Fresno County Transportation Forum brings together top public administrators, private sector executives, interested citizens and stakeholders 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 2014, a minor update to the valley models was developed, known as VMIP2, which incorporated the latest data from the Census, American Community Survey, and California Household Travel Survey. In addition, the Fresno Council of Governments used land use tools such as Cube Land and Envision Tomorrow, as well as the Integrated Transport and Health Impact Modeling Tool (ITHIM) to measure the health impacts of

transportation. Through these tools 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 and Climate Change 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. In order to improve the air quality and achieve the climate change



goals, integrated transportation and land use strategies as describe in the Sustainable Communities Strategy (SCS) chapter will need to be developed and implemented. 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.

