

INTRODUCTION

The 2018 Regional Transportation Plan (RTP) is a 24-year blueprint that establishes a set of regional transportation goals, policies, and actions intended to guide development of the planned multimodal transportation systems in Kern County. It has been developed through a continuing, comprehensive, and cooperative planning process, and provides for effective coordination between local, regional, state and federal agencies. Included in the 2018 RTP is the Sustainable Communities Strategy (SCS) required by California's Sustainable Communities and Climate Protection Act, of Senate Bill (SB) 375. The California Air Resources Board (CARB) set Kern greenhouse gas (GHG) emissions reductions from passenger vehicles and light-duty trucks at 5 percent per capita by 2020 and 10 percent per capita by 2035 as compared to 2005. In addition, SB 375 provides for closer integration of the RTP/SCS with the Regional Housing needs Allocation (RHNA) ensuring consistency between low income housing need and transportation planning. Kern COG engaged in the RHNA process concurrently with the development of the 2014 RTP. This process required Kern COG to work with its member agencies to identify areas within the region that can provide sufficient housing for all economic segments of the population and ensure that the state's housing goals are met.

Kern COG is a federally designated Metropolitan Planning Organization (MPO) and a state designated Regional Transportation Planning Agency (RTPA). These designations formally establish Kern COG's role in transportation planning. Preparing an RTP is one of Kern COG's primary statutory responsibilities under federal and state law.

Kern COG prepared a Program Environmental Impact Report (Program EIR), pursuant to the California Environmental Quality Act (CEQA), for the RTP. Individual transportation projects are preliminarily identified in the 2018 RTP; however, the Program EIR analyzes potential environmental impacts from a regional perspective, providing opportunities for streamlining the analysis required in project specific environmental documents. In addition the companion RTP conformity document demonstrates that the Plan will not delay attainment of federal air quality standards in the State Implementation Plans for air quality.

PUBLIC PARTICIPATION: Listening to the Citizens and Stakeholders

Public participation is encouraged at every stage of the planning process and all meetings are open to the public. Community engagement and outreach are fundamental to the development of the 2018 RTP/SCS. By nature, this plan represents the region's mutual vision for its future and was developed using a grassroots, bottom-up approach, garnering input from over 6,000 residents at over 20 meetings and events across the region. Kern COG's comprehensive community engagement process, Directions to 2050, was designed to solicit input from stakeholders and community members on priorities for the region's long-term future. The name "Directions to 2050" was meant to encourage participants to think long-term. The community engagement process extended from December 2015 through February 2018. The program provided various opportunities for community members, stakeholders, and local agencies and jurisdictions to participate. The program provided numerous public workshops, community events and interactive and educational booths at festivals and fairs, an interactive project website, three statistically valid phone surveys and presentations to various clubs and community groups.

The vast majority of people want to maintain, fix and finish what we have. A discussion of Kern COG's public participation activities is provided in Chapter 4 of the RTP and a Summary of Findings is documented in Appendix C of the RTP.



Executive Summary

OUR VISION: Fix and Finish What We Have

Through the RTP process Kern COG has placed an emphasis on sustainability and integrated planning. The intent of the SCS is to achieve the state's emissions reduction targets for automobiles and light trucks. The SCS will also provide opportunities for a stronger economy, healthier environment, and safer quality of life for community members in Kern County.

The RTP SCS seeks to: improve economic vitality, improve air quality, improve the health of communities, improve transportation and public safety, promote the conservation of natural resources and undeveloped land, increase regional access to community services, increase regional and local energy independence and increase opportunities to help shape our community's future.

Kern County is unlike any other region in California. Kern's large size and diverse valley, desert and mountain environs are dominated by agriculture, oil production, renewable energy, aerospace, military, recreation, transportation linkages and other activities that warrant unique and different approaches to address the SCS goals. These economic pursuits are the basis for dispersed rural centers and strategic locations for developments within the county that are unlike other areas of the state. Accordingly, unique strategies are needed to support Kern's economic, transportation and other needs. This uniqueness is reflected in the General Plans and programs of Kern County's local governments.

The 2018 RTP/SCS supports an improved quality of life for our residents by providing more choices for where they will live, work, and play, and how they will move around. The safe, secure and efficient transportation systems will provide improved access to opportunities, such as jobs, education and healthcare. The emphasis on transit and active transportation will allow our residents to lead a healthier, more active lifestyle.

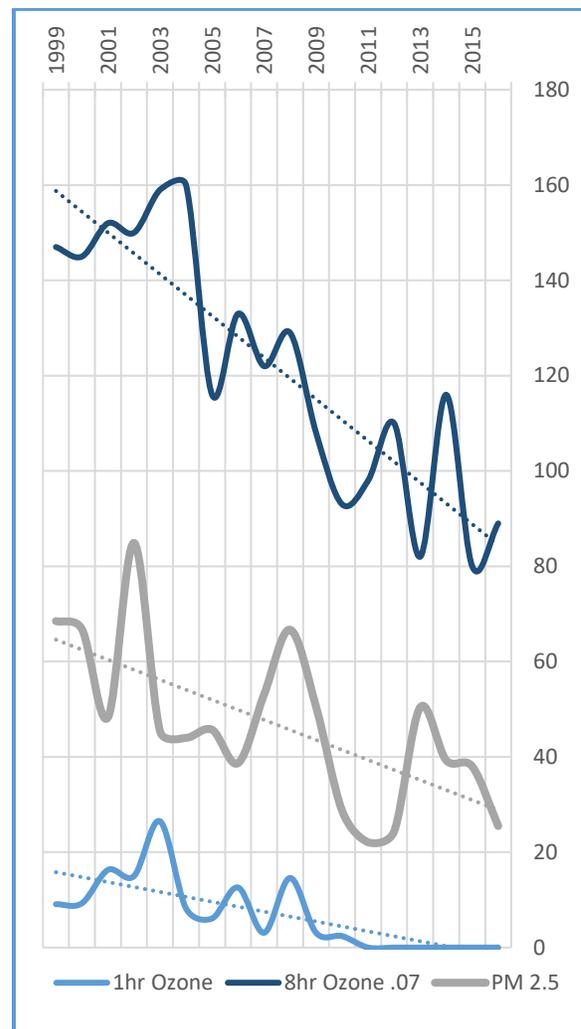
CHALLENGES

Solutions for the Economy and Air Quality

Even though Kern County has already recovered all the jobs lost during the great recession, Kern continues to suffer from double-digit unemployment. The Federal Highway Administration estimates that every \$1 billion spent on transportation infrastructure creates 10,870

job years of which up to 4,000 can persist long after construction, generated by increased labor from better mobility and more efficient goods movement. This 24-year investment plan is projected to add over 80,000 job years (3,100 24-year jobs) from construction, maintenance and better mobility, a 40% jump over the 2011 RTP. The plan could ultimately add 28,000 permanent jobs to the region, increasing Kern's economic base, adding capacity to reinvest in an ever more efficient/cleaner transportation system, triggering an upward economic spiral for future generations.

Figure ES-1: Number of Days Exceeding Federal Air Standards in Kern County 1999-2016



Note: In this air quality graph, lower ozone and PM 2.5 numbers are equivalent to better air quality. Source: CARB iADAM data.

Since the 1990s, the Kern region has achieved consistent improvements in the number of days exceeding federal standards for ozone and particulate matter, generally defined as “fine dust”. In 2012, Kern demonstrated attainment of the 1-hour ozone standard, and has made significant progress on the new 8-hour ozone and PM_{2.5} standards (Figure ES-1). However the air quality modeling forecast for this RTP showed that by 2042, if things didn’t change and population and travel continue to grow, the NO_x precursor component to PM_{2.5} begins to creep back up. To combat this effect the plan focuses new efforts to achieve and maintain the federal air quality standards, and in doing so also makes significant progress toward the new state climate change goals. These strategies such as improving transit, bike, walk, and housing options are included in the SCS in Chapter 4.

Financial Challenges

Of all the challenges facing us today, there is none more critical than funding. With the projected growth in population, employment and demand for travel, the costs of our multimodal transportation system needs surpass projected revenues available from our historic transportation funding source – the gas tax. Maintaining the local transportation infrastructure is of critical importance for the entire region, and was ranked as the highest priority based on public outreach. Funding from the federal gas tax has traditionally been used to support the maintenance of these facilities. Over time; however, gas tax revenues have failed to keep up with inflation. The increase in the number of electric and hybrid vehicles that pay significantly less gas tax per mile traveled only exacerbates the problem.

As a result of years of underinvestment, a significant number of our roadways and bridges have fallen into a state of disrepair. It is imperative that this situation be addressed. The rate of deterioration will only accelerate with continued deferral, significantly increasing the cost of bringing our transportation assets back into a state of good repair. Furthermore, with recent declines in transit funding, the region’s transit operators continue to face major obstacles to providing frequent and convenient transit services.

The region must consider ways to stabilize existing revenue sources and supplement them with reasonably available new sources. This region needs a long-term, sustainable funding plan that ensures the

region receives its fair share of funding, supports an efficient and effective transportation system that grows the economy, provides mobility choices, and improves our quality of life.

PLANNING FOR OUR POPULATION

Population, Housing and Employment Forecasts

Population in the 8,200 square mile County of Kern was estimated to be just under 905,801 in 2018. The forecast projects that the population growth will average about 21,400 people per year from 2015 to 2035 and about 21,900 people per year over the entire forecast time frame from 2015 to 2042. Kern County has had a trend of increasing average household size, growing to 3.03 from 2000 to 2010, to 3.2 in 2015, and 3.27 in 2035. It is anticipated that the average household size will slow to 3.11 by 2042. The Kern region is California’s eleventh most populated of 58 counties ahead of San Francisco, but behind Fresno County in the Central Valley. The Kern region is forecasted to grow by nearly one-half million persons to 1,458,000 in the forecast year 2042.

According to the California Employment Development Department (EDD) Kern County gained 74,000 jobs since 2000 and experienced an increase in per capita income. According to the Employment Development Department, the unemployment rate for January 2018 in Kern County was 9.2 percent, up from a revised 8.4 percent in December 2017, and below the year-ago estimate of 10.0 percent. This compares with an unadjusted unemployment rate of 4.6 percent for California and 4.5 percent for the nation during the same period. In 2010 there were 1.08 jobs per household, but estimates for 2014 indicate the ratio has increased to 1.22. The forecast indicates that Kern County will experience a slight reduction in the number of jobs per household to 1.13 in 2035 and 1.06 by 2042.



Executive Summary

This decline is generally in proportion to the decline in labor force participation expected nationally.

Over the past decade, growth has concentrated in Metropolitan Bakersfield and the communities of Delano, Wasco, Ridgecrest, California City, Arvin, Shafter, Tehachapi, McFarland and the unincorporated communities around Tehachapi, Rosamond, and Frazier Park.

Much of Kern employment is dispersed, consequently, the Metropolitan Bakersfield area experiences a “reverse commute” whereby a segment of workers commute to outlying areas such as agricultural fields, food processing facilities, warehousing, wind farms, oil fields, prisons, power plants, and government installations.

Development

Land use is one of the most important elements of effective transportation planning. Kern COG does not have jurisdiction over land use planning, but the agency does advise and encourage dialogue among those involved in the decision making process. The RTP/SCS was developed in consultation with local jurisdictions and is consistent with existing adopted General Plans and Zoning. Kern COG will continue to use the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to communicate with Kern cities and the county on issues of land use, transportation and air quality, to ensure that land use projects are environmentally sound.

At the core of the 2018 RTP are seven goals:

1. **Mobility** – Improve the mobility of people and freight;
2. **Accessibility** – Improve accessibility to major employment and other regional activity centers;
3. **Reliability** – Improve the reliability and safety of the transportation system;
4. **Efficiency** – Maximize the efficiency of the existing and future transportation system;
5. **Livability** – Promote livable communities;
6. **Sustainability** – Minimize effects on the environment; and
7. **Equity** – Ensure an equitable distribution of the benefits among various demographic and user groups.

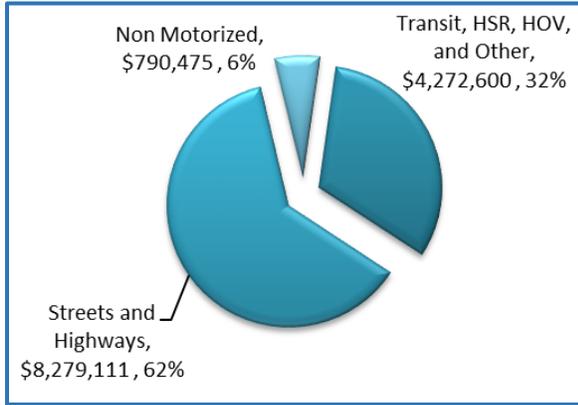


STRATEGIC INVESTMENTS

The 2018 RTP/SCS financial plan identifies how much money is available to support the region's transportation investments. The plan includes a core revenue forecast of existing local state and federal sources along with funding sources that are considered to be reasonably available over the time horizon of the RTP/SCS. These new sources include adjustments to state and federal gas tax rates based on historical trends and recommendations from two national commissions (National Surface Transportation Policy and Revenue Study Commission and National Surface Transportation Infrastructure Financing Commission), leveraging of local sales tax measures, local transportation impact fees, potential national freight program/freight fees, future state bonding programs and mileage-based user fees.

The 2018 RTP promotes a more efficient transportation system that calls for fully funding alternative transportation modes, while emphasizing transportation demand and transportation system management approaches for new highway capacity. The Constrained Program of Projects includes projects that move the region toward a financially constrained and balanced system. Constrained projects have undergone air quality conformity analysis to ensure that they contribute to the Kern region's compliance with state and federal air quality rules.

Investments by Mode 2018–2042 (\$ x 1,000)



The RTP fulfills several requirements with one document:

- Congestion Management Program
- Sustainable Communities Strategy & Rural Urban Connectivity Strategy
- Regional Housing Need Allocation
- Safety-Security Action Element
- Environmental Justice & Performance Measure Analysis

As the Congestion Management Agency, Kern COG has responsibility to ensure that all cities and the county are following the Congestion Management Program (CMP). Kern COG completes a coordinated and comprehensive review of current traffic data during each RTP update. Through the Kern Regional Traffic Count Program, the cities, county and Caltrans undertake annual traffic counts on their roads. Use of current peak-hour traffic counts to monitor congestion ensures that the review is based on observed traffic conditions and includes an innovative multi-model level of service analysis policy. The SCS includes a Rural Urban Connectivity Strategy analysis designed to ensure that the economic development of rural areas for agriculture, energy, tourism, military and other activities are not left out of efforts to provide for a more efficient transportation system.

To ensure consistency requirements with the SCS, Kern COG engaged in the RHNA process concurrently with the development of the 2014 RTP. The RHNA is

an 8-year document that provides low income housing goals for each community in the region.

The Safety/Security Action Element fulfills a federal requirement for homeland security planning in the RTP as well as forwards the region's safety and emergency planning efforts.

Recognized as a national best practice, the Kern RTP includes an innovative analysis with the Integrated Performance Measures Analysis for System Level, Smart Mobility Framework, Health Equity, Environmental Justice and Title VI. The analysis advises our decision makers on the progress we are making toward our goals, while ensuring disadvantaged communities are not left behind.

MONITORING PROGRESS

Transportation planning for the Kern region requires continually improved information on the condition and use of the transportation system. The Highway Performance Monitoring system is a federally mandated program designed by the Federal Highway Administration to assess the performance of the nation's highway system. Chapter 8 discusses an array of monitoring efforts.

SUMMARY OF BENEFITS

2018 Regional Transportation Plan

The region represented by the Kern Council of Governments is projected to grow by more than 50% by 2042. To protect the quality of life for future generations, the 2018 RTP is presented as an economic development strategy as well as a transportation, infrastructure and sustainability investment.

MOBILITY BENEFITS

- ✓ The plan improves overall mobility and provides needed congestion relief by maintaining, fixing and finishing what we have.
- ✓ This plan fully funds maintenance of the transportation system while increasing funding for bike, pedestrian, and transit facilities.
- ✓ Implementation of the plan will nearly double the number of homes within walking distance to quality transit. By integrating land use and transportation, 72% of homes will be near quality transit compared to 57% under the prior plans.

ECONOMIC BENEFITS

- ✓ The Federal Highway Administration estimates that every \$1 billion spent on transportation infrastructure creates 10,870 job years of which up to 4,000 can persist long after construction, generated by increased labor from better mobility and more efficient goods movement.
- ✓ This 24-year investment plan is projected to add over 75,000 job years (3,100 26-year jobs) from construction, maintenance, and better mobility, and saves an additional 21,000 existing jobs that would have been lost because of poor road conditions.
- ✓ The plan could ultimately add 26,000 permanent non-transportation sector jobs to the region, increasing Kern's economic base, adding capacity to re-invest in an ever more efficient transportation system, triggering an upward economic spiral for future generations.

HEALTH BENEFITS

- ✓ Improve air quality and public health by reducing all criteria pollutants, emissions and their precursors to meet national standards – oxides of nitrogen (NOx), reactive organic gasses (ROG), particulate matter (PM₁₀), fine particulate matter (PM_{2.5}) and carbon monoxide (CO).
- ✓ 5% or more reduction in health expenditures because of improved air quality.
- ✓ Promotes more active transportation by fully funding the Kern Active Transportation Plan and increasing funding for bike and pedestrian facilities 700% over Pre-SCS RTPs.

SUSTAINABILITY BENEFITS

- ✓ 12% or more reduction in household water use by providing a full range housing choices.
- ✓ 12% or more reduction in infrastructure costs by revitalizing existing communities.
- ✓ 90% reduction in farmland conversion to urban uses outside city spheres of influence



2018 Regional Transportation Plan

Reflecting diverse public input, the plan assumes projects that reflect a more efficient transportation system that will benefit the mobility, economy, health and sustainability of the region. Consistent with the prior plan, funding from traditional sources continue at historic rates as well as a slight increase in additional funding from potential new sources. Funding assumptions are updated every four years. Land use assumptions are based on local general plans with input from the public and the regional planning advisory committee.

