

PRELIMINARY SUSTAINABLE COMMUNITIES STRATEGY

I. A SUSTAINABLE COMMUNITIES STRATEGY FOR THE KERN REGION

This 2014 Regional Transportation Plan (2014 RTP) seeks to guide the Kern region toward a stronger economy, healthier environment, and safer quality of life for everyone, while ensuring each community's independence to determine the best path to that future. This chapter outlines the required Sustainable Communities Strategy (SCS) component of the 2014 RTP. The following section describes what an SCS is, how the Kern Region is unique in comparison to unlike any other in California, and key lessons learned in other California metropolitan planning organizations (MPOs) completing sustainable communities strategies that are addressed by the Kern region SCS.

What Is the Sustainable Communities Strategy?

The SCS strives to reduce greenhouse gas emissions from passenger vehicle and light duty truck travel by better coordinating transportation expenditures with forecasted development patterns local land use assumptions—and, if feasible, help meet California Air Resources Board (CARB) targets for the region. Under California law, an SCS must:

- Utilize the most recent planning assumptions, considering local general plans and other factors (Government Code (GC) Section 65080(b)(2)(B)).
- Identify the general location of uses, residential densities, and building intensities within the region (GC Section 65080(b)(2)(B)(i)).
- Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population over the course of the planning period of the RTP, taking into account net migration into the region (GC Section 65080(b)(2)(B)(ii)).
- Identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to G~~overnment Code~~ Section 65584 (GC Section 65080(b)(2)(B)(iii)).
- Identify a transportation network to service the transportation needs for the region (GC Section 65080(b)(2)(B)(iv)).
- Gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of G~~overnment Code~~ Section 65080.01 (GC Section 65080(b)(2)(B)(v)).
- Consider the state housing goals (GC Section 65080(b)(2)(B)(vi)).
- Set forth a forecast development pattern for the region which, when integrated with the transportation measures and policies, will reduce the greenhouse gas (GHG) emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the GHG emissions reduction targets approved by the state board (GC Section 65080(b)(2)(B)(vii)).
- Allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (GC Section 65080(b)(2)(B)(viii)).
- Consider spheres of influence that have been adopted by the Local Agency Formation Commission (LAFCo) within its region (GC Section 65080(b)(2)(G)).

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- Quantify the reduction in GHG emissions projected to be achieved by the SCS and set forth the difference, if any, between the amount of that reduction and the target for the region established by CARB (GC Section 65080(b)(2)(H)).
- Consider any adopted multiregional goals and policies, such as the Directions to 2050 Principles for Growth, in the development of an SCS (GC Section 65080(b)(2)(N)).

California law (GC Section 65080(b)(2)(K)) ~~also places certain limits on the regulatory authority of an SCS. Specifically, states that neither a sustainable communities strategy nor an alternative planning strategy regulates an SCS does not regulate~~ the use of land, nor is it subject to any state approval. Nothing in an SCS supersedes the exercise of the land use authority of cities and counties within the region, and a city's or county's land use policies and regulations, including its general plan, are not required to be consistent with the RTP.

This chapter outlines how the Kern region will integrate its transportation network and related strategies with ~~a forecasted development pattern for the region a regional land use pattern established by local agency plans~~ that responds to ~~projected growth~~, housing needs, changing demographics, and transportation demands. This SCS demonstrates how integrated land use and transportation planning can reduce local and regional GHG emissions from passenger vehicles and light-duty trucks, and shows how the various strategies and programs elsewhere in this RTP document are interrelated and work together to achieve lasting benefits for the region.

The SCS for the Kern region identifies the following:

- A ~~forecasted development~~~~land use~~ pattern to accommodate the region's future transportation, employment, and housing needs, while promoting conservation of natural resources and open space areas.
- A transportation network comprising well-maintained public transit, local streets and roads, managed lanes and highways, and bikeways and walkways.
- Strategies to manage demands on the region's transportation roadway system (also known as transportation demand management, or TDM) in ways that reduce or eliminate traffic congestion during peak periods of demand.
- Strategies to manage operations of the region's transportation system (also known as transportation system management, or TSM) to maximize the efficiency of the network and reduce congestion.

The Kern SCS will be updated every four years in conjunction with the RTP updates. Revisions will reflect amendments to local government General Plans and other factors that respond to the changing needs of the cities and the county.

Why Have a Sustainable Communities Strategy?

The intent of the SCS is to ~~achieve implement~~ 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 SCS seeks to:

Improve economic vitality

Our transportation system will be increasingly efficient and cost-effective in the future. The 2014 RTP will generate construction jobs for transportation projects and additional jobs in a broad cross-section of

industries as a result of the improved transportation system. This SCS seeks to reduce obstacles to development and reduce infrastructure costs for new development, which will enable appropriate development that supports the community's vision for the future. With a more efficient transportation system, our region will be more mobile and our roadways will be less congested, enabling the efficient movement of goods through the region. With increased maintenance of streets and roads, and more transit and active transportation options, Kern region transportation costs will be lower and community members will have more resources to spend on themselves and their families.

Improve air quality

This SCS seeks to improve air quality in the Kern region by reducing emissions. We will achieve our emissions reduction target set by CARB by achieving a 5% reduction by 2020 and 10% by 2035 compared to the [placeholder for baseline year] level on a per capita basis. This SCS meets criteria pollutant emission budgets set by the Environmental Protection Agency. By improving air quality, this SCS helps to remove San Joaquin Valley's \$29 million fine and to meet very fine dust (particulate matter—PM_{2.5}) attainment plan goals. With each passing year, Kern region community members should expect to breathe cleaner air and live healthier lives.

This air quality benefit is made possible largely by integrating transportation and land use ~~decisions~~ to allow Kern region residents to live closer to where they work and play and to high-quality transit service, bicycle paths, and sidewalks.

Increase transportation and public safety

Our local transit service and intercity transit services will be expanded and our transit system efficiency will be improved. Kern region community members will be safer. This SCS seeks to lower accident rates on highways and local streets and roads, giving our residents the peace of mind to travel safely.

Improve communities' health

Our region's bicycle and pedestrian facilities will expand, providing more opportunities to bike and walk to work, the store, school, and home. In the future, Kern region residents will be able to live closer to where they work and play. The share of households living ~~near where they work and play in centers~~ will [placeholder: from RHNA – what percentage of new houses will be in ~~these centers~~ areas] before 2035, signaling a more efficient overall development pattern in the future. As a result, more residents will be able to use transit and active transportation as a safe and attractive means of travel. Active transportation helps to maintain our communities' health and well-being.

Promote the conservation of natural resources and undeveloped land

Our military air space, recreation, and agricultural lands are an important resource. Our economic resource areas are an important part of the region's economic base. This SCS acknowledges existing local General Plan policies promoting resource conservation and supports Kern's agricultural sector by maintaining existing streets and roads and focusing appropriate compact ~~and in-fill~~ development in center areas.

Increase access to community services

Kern region residents will have more access to comprehensive community services for health, education, safety, and recreation in the future. By improving transportation infrastructure, such as highways and local streets and roads, and increasing transit and active transportation options, traveling to these services will be easier.

Increase regional and local energy independence

The Kern region will continue to increase its regional and local energy independence. With more transit and active transportation options and by living closer to where they work, community members will have alternatives to driving their cars. Additionally, this SCS seeks to promote conservation of our natural resources and open spaces, providing opportunities to invest in renewable energy production and distribution.

Increase the opportunities to help shape our community's future

Kern region community members will continue to have ample opportunities to provide input in the transportation planning process. We value each person's opinion and will continue to solicit feedback from the public.

The Kern Region: Unlike Any Other in California

Kern County is unlike any other region in California. Kern's large size and **diverse** valley, desert and mountain ~~environssettings~~ 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.

II. LOCAL AND REGULATORY FRAMEWORK FOR THE KERN REGION SUSTAINABLE COMMUNITIES STRATEGY

The framework for the Kern Region SCS is established by two key California laws: Assembly Bill (AB) 32 and Senate Bill (SB) 375, described later in this section. The SCS is now a required component of RTPs and must identify how the region will meet emissions reduction targets. One of the factors leading to adoption of AB 32 and SB 375 was the success of numerous grassroots "blueprint" planning efforts throughout the state, including in Kern County. Blueprints bring regional land use and transportation planning efforts together to accommodate future growth in California communities in ways that reflect grassroots values of local communities. The 2014 RTP presents goals and policies to achieve the region's mutual vision of a stronger economy, healthier environment, and safer quality of life for everyone, while ensuring each community's independence to determine the best path to that future.

This SCS chapter of the 2014 RTP includes a strong commitment to reduce emissions from transportation sources to comply with California state regulations, improve public health, and meet national air quality standards.

The following section describes:

- Directions to 2050 and blueprint planning efforts that preceded the SCS.
- Kern COG's SB 375 Framework.
- The legal and regulatory authority for the SCS.
- Regional emissions and affordable housing targets for the SCS.

Laying the Groundwork for the Sustainable Communities Strategy

The Kern Regional Blueprint (2008), San Joaquin Regional Blueprint (2009), and Kern SB 375 Framework (2012) laid much of the groundwork for the Kern COG 2014 RTP.

Kern Regional Blueprint

Adopted in November 2008, the Kern Regional Blueprint, based on the local General Plans of the cities and the county, established a grassroots vision, guiding principles, and an alternative growth scenario for the region in 2050. The Blueprint provides the foundation for advancing decision-making for growth management at the local and regional levels. It was developed to shape the region's future and as a tool for each community to inform how they shape their local community's future in the coming decades. Approximately 3,500 community members of all interests and backgrounds participated in the Blueprint development process. The Blueprint public involvement process began in 2006 when the economy fared considerably better than it does in 2014 and included two statistically valid, 1,200-person quality-of-life phone surveys.

The mutual vision for the future of the Kern region includes:

- Economic development opportunities linked to the education system and current and future industries to build strong local economy and diverse employment opportunities.
- Livable and safe communities for everyone.
- Unique natural resources and open spaces—a healthy environment in which to explore and recreate.

Blueprint participants crafted a set of principles for growth in the Kern region that will help inform decision-making in local communities. These principles for growth are:

- Enhance economic vitality
- Conserve energy and natural resources, and develop alternatives
- Provide adequate and equitable services
- Provide a variety of transportation choices

Directions to 2050 Principles for Growth

The SCS employs the vision, guiding principles, and growth scenario developed at the grassroots level as part of the Kern Regional Blueprint and updated as part of the Directions to 2050 outreach process. These guiding principles are really more like broad categories of principles supporting the RTP goals and policies expressed in Chapter 2, Transportation Planning Policies.

Enhance economic vitality

Conserve energy and natural resources, and develop alternatives

Provide adequate and equitable services

Provide a variety of transportation choices

Provide a variety of housing choices

Use and improve existing community assets and infrastructure

Use compact, efficient development and/or mixed land uses where appropriate

Conserve undeveloped land and spaces

Increase civic and public engagement

- Provide a variety of housing choices
- Use and improve existing community assets and infrastructure
- Use compact, efficient development and/or mixed land uses where appropriate
- Conserve undeveloped land and spaces
- Increase civic and public engagement

These principles were reconfirmed as part of the Directions to 2050 outreach process and are supported by the goals of this 2014 RTP (see Chapter 2, Transportation Planning Policies, Table 2-2). Directions to 2050 community participants expressed continuing support for all nine principles for growth, indicating they are still relevant to the Kern region. The Directions to 2050 community engagement program is described in detail later in this chapter.

Since the initial Blueprint process, Kern COG has completed annual statistically valid, quality-of-life phone surveys to track changes in public opinion. The most recent survey (2012) found that providing job opportunities is now the highest ranking issue on which local governments should be focused.

See Chapter 2, Transportation Planning Policies, for further information on Directions to 2050.

San Joaquin Regional Blueprint

The San Joaquin Valley Regional Blueprint stitched together the Kern Blueprint with the seven other county grassroots blueprint efforts, developed by the eight regional planning agencies (RPAs). The RPAs collaborated to develop a long-term strategy for the future of the eight-county region.

Adopted in 2009, the San Joaquin Valley Regional Blueprint effort included the Kern Council of Governments, Fresno Council of Governments, Kings County Association of Governments, Madera County Association of Governments, Merced County Association of Governments, San Joaquin Council of Governments, Stanislaus Council of Governments, and Tulare County Association of Governments to develop voluntary, long-term regional growth principles for the future of the eight-county region.

The valley-wide Blueprint identified 12 voluntary growth principles that were consistent with the nine Kern Regional Blueprint principles for growth:

- Create a range of housing opportunities and choices
- Create walkable neighborhoods
- Encourage community and stakeholder collaboration
- Foster distinctive, attractive communities with a strong sense of place
- Make development decisions predictable, fair, and cost-effective
- Mix land uses
- Reserve open space, farmland, natural beauty, and critical environmental areas
- Provide a variety of transportation choices

- Strengthen and direct development toward existing communities
- Take advantage of compact building design
- Enhance the economic vitality of the region
- Support actions that encourage environmental resource management

Kern COG SB 375 Framework

In February 2012, the Kern COG Board of Directors adopted the SB 375 Framework for this SCS. Kern COG's Regional Planning Advisory Committee (RPAC), a committee comprised of local government, agency, and stakeholder representatives, worked together to develop the framework. The framework's purpose is to guide the development and implementation of this SCS with agreed-upon core values and core actions.

The SB 375 Framework Core Values are:

- 1) The Sustainable Communities Strategy relies on the existing and planned circulation networks and land use designations for Kern County and its eleven (11) incorporated cities.
- 2) The Sustainable Communities Strategy shall not hinder the local land use authority of Kern County and its eleven (11) incorporated cities, ~~and their ability to create new planned land use designations to respond to local/regional needs and promote economic prosperity.~~
- 3) The Sustainable Communities Strategy shall allow Kern County and its eleven (11) incorporated cities to continue the pursuit and promotion of a diversified economic base.
- 4) ~~Kern County shall continue to discuss cooperation and coordination with the seven (7) other counties located in the eCentral San Joaquin Valley, to develop a regional Sustainable Community Strategy that recognizes the both shared and unique characteristics of each of the eight (8) counties. while recognizing the Kern region's unique qualities and developing appropriate strategies for Kern County.~~

The SB 375 Framework Core Actions are:

- 1) Identify Kern County's existing and planned transportation and circulation network as the Sustainable Communities Strategy (SCS) network.
- 2) Identify and model transportation measures with the purpose of reducing vehicle trips and vehicle miles travelled for Kern County's existing and planned transportation and circulation network to determine anticipated effectiveness.
- 3) Include clean fuel and clean technology (Paveley) regulations when evaluating any measures that may reduce vehicle trips and vehicle miles traveled.
- 4) Use the adopted land uses that may be amended from time to time, of Kern County and its eleven (11) incorporated cities as the forecasted development patterns.
- 5) Base all models utilized by Kern COG on locally adopted general plans and identified regional economic centers. Any request to change the baseline model will require approval of the local city and/or county whichever has the appropriate authority.

- 6) Consistent with adopted General Plans, model strategic locations for new retail and employment uses to determine whether they reduce vehicle trips and vehicle miles traveled.
- 7) Allow for the flexibility to amend the adopted land use elements of Kern County and its eleven (11) incorporated cities based on market demands and market responses.
- 8) Identify local, community oriented, alternative feasible transportation strategies such as enhancing biking and walking within established communities.
- 9) Respect the uniqueness of Kern County when the California Air Resources Board considers revising the targets.
- 10) Strive to achieve an acceptable SCS to allow for the use of CEQA streamlining by the development community.
- 11) Identify regional modeling baseline information and provide updates for the eight (8) sub-regions of Kern County to provide feedback on progress towards achieving the state targets.
- 12) Develop two types of strategies within the plan: (1) strategies that reduce emissions county-wide; and (2) strategies that reduce emissions sub-regionally.
- 13) Explore the potential of establishing modeling budgets for each sub-region of the county.

See Chapter 7, Future Links, for further discussion on the SB-375 Framework, including the core actions.

Regulatory Framework

California Greenhouse Gas Emissions Legislation

Kern COG's SCS must be set within the context of the eight-county Central Valley and the state, where much of the momentum for climate change legislation in the United States originates. Kern COG's SCS must also recognize the **significant** large portion of Kern County that is not in the Central Valley i.e. the desert of eastern Kern and the mountain portions of Kern County.

California has long been a sustainability leader, as illustrated by Governor Schwarzenegger's signing Executive Order (EO) S-3-05 in 2005. EO S-3-05 recognized California's vulnerability to reduced snowpack, exacerbation of air quality problems, and other issues that may require adaptive strategies. To address these concerns, the Executive Order established targets to reduce statewide emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80% below 1990 levels by 2050.

In 2006, California became the first state in the country to adopt a statewide reduction target through AB 32. This law codifies the EO S-3-05 requirement to reduce statewide emissions to 1990 levels by 2020. AB 32 resulted in CARB's 2008 adoption of a Climate Change Scoping Plan (Scoping Plan), outlining the State's plan to achieve emissions reductions through a **combination** mixture of direct regulations, alternative compliance mechanisms, various incentives, voluntary actions, market-based mechanisms, and funding. The Scoping Plan identifies local governments as "essential partners" in the State's efforts to reduce emissions.

AB 32 engendered several companion laws that can assist the Kern region in reducing transportation-related emissions, including, but not limited to, AB 1493 emissions performance standards for motor vehicles and EO S-1-07 performance standards for the carbon intensity of transportation fuels.

Senate Bill 375 Requirements

SB 375, adopted in 2008, represents the latest in a series of actions at the state level to address California's contributions to global climate change. Building on AB 32, SB 375 seeks to coordinate land use decisions made at the local (city and county) level with regional transportation planning. ~~By~~ coordinating these efforts, it is ~~envisioned~~~~hoped~~ that vehicle congestion and travel can be reduced ~~resulting in a corresponding reduction in and~~ ~~emissions~~ ~~can be reduced~~. SB 375 directed CARB to set regional targets to reduce emissions; regional ~~and local~~ plans are required to identify how they will meet these targets.

SB 375 has three major components:

- Using the regional transportation planning process to achieve reductions in emissions consistent with AB 32's goals.
- Offering California Environmental Quality Act (CEQA) incentives to encourage projects that are consistent with a regional plan that achieves emissions reductions.
- Coordinating the Regional Housing Needs Allocation (RHNA) process with the regional transportation process while maintaining local authority over land use decisions.

An SCS is a required component of the RTP. The SCS is an ~~emissions reduction~~ ~~growth~~ strategy for the region which, in combination with transportation policies and programs, strives to reduce emissions and, if feasible, helps meet CARB's targets for the region. See the discussion above under "What Is the Sustainable Communities Strategy?"

An alternative planning strategy (APS) must be prepared if the SCS is unable to reduce emissions and achieve the emissions reduction targets established by CARB. The APS is separate from the RTP, but it may be adopted concurrently with the RTP.

The following is a more detailed discussion of the State-mandated requirements for the RTP and SCS.

Meeting Federal Air Quality and Transportation Requirements

The SCS must allow the RTP to comply with Section 176 of the federal Clean Air Act (42 USC 7506) requiring that the RTP demonstrate that it will not delay attainment of the federal air quality standards in each air basin. In addition, GC Section 65584.01(i)(1) states that it is the intent of the legislature that ~~housing~~ ~~planning~~ for housing be coordinated and integrated with the RTP. To achieve this goal, the allocation plan shall allocate housing units within the region consistent with the development pattern included in the SCS.

Kern COG prepares and adopts concurrently with the RTP an air quality conformity analysis to ensure that the SCS ~~scenario~~ does not delay attainment of federal air quality standards.

Greenhouse Gas Emissions Inventory, Projections, Targets

The purpose of SB 375 is to implement the state's emissions reduction goals for cars and light-duty trucks. This mandate requires CARB to determine per capita emissions reduction targets for each MPO in the state at two points in the future: 2020 and 2035. The 2014 RTP must achieve emissions reductions of 5% per capita in 2020 and 10% per capita in 2035. Because emissions in the transportation sector are closely related to passenger vehicle travel, a mandated reduction essentially requires Kern COG to devise a regional plan and a series of strategies that will produce a per capita reduction in passenger

vehicle travel. Based on the information presented above, this means the region must reduce per capita emissions by approximately X over the next 20 years. [Placeholder: Kern COG to insert number.]

Affordable Housing – Regional Housing Needs Allocation

SB 375 combines transportation and housing planning by integrating the RHNA process with the 2014 RTP. Specifically, GC Section 65080(b)(2)(B), subparagraphs (iii) and (vi), requires that the SCS identify areas within the region sufficient to accommodate an eight-year projection of the regional housing need and consider the state housing goals specified in GC Sections 65580 and 65581. Kern COG has been engaged in the RHNA process concurrently with the development of the 2014 RTP. This process requires 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.

III. COMMUNITY ENGAGEMENT

State and federal regulations require comprehensive public participation as part of the Global Warming Solutions Act of 2006 (AB 32) and the Sustainable Communities and Climate Protection Act of 2008 (SB 375). The Code of Federal Regulations—Title 23: Highways requires metropolitan planning agencies, such as Kern COG, to enable public participation in the RTP planning process, as well as to facilitate interagency coordination during SCS development. This section describes:

- SB 375 public participation and agency consultation requirements.
- Community engagement activities supporting development of the Kern region SCS.
- A summary of community input used to develop the SCS.

Public Participation Requirements

The public participation requirements for development of the SCS, pursuant to the requirements of SB 375, can be incorporated into an existing plan. Kern COG currently has a public participation plan that meets federal requirements.

SB 375 increased the minimum level of public participation required in the regional transportation planning process, including collaboration between partners in the region during the development of an SCS. Pursuant to GC Section 65080(b)(2)(F), each MPO shall adopt a public participation plan, which shall include:

- Outreach effort to encourage the active participation of a broad range of stakeholder groups in the planning process, consistent with the agency's adopted Federal Public Participation Plan (GC Section 65080(b)(2)(F)(i)).
- Consultation with congestion management agencies, transportation agencies, and transportation commissions (GC Section 65080(b)(2)(F)(ii)).
- Workshops throughout the region to provide the public with the information and tools necessary to provide a clear understanding of the issues and policy choices. At least one workshop shall be held in each county in the region. For counties with a population greater than 500,000, at least three workshops shall be held. Each workshop to the extent practicable shall include urban simulation computer modeling to create visual representations of the SCS and the APS, if one is prepared (GC Section 65080(b)(2)(F)(iii)).

- Preparation and circulation of a draft SCS and an APS, if one is prepared, not less than 55 days before adoption of a final regional transportation plan (GC Section 65080(b)(2)(F)(iv)).
- At least three public hearings on the draft SCS in the regional transportation plan and APS, if one is prepared. If the MPO consists of a single county, at least two public hearings shall be held. To the maximum extent feasible, the hearings shall be in different parts of the region to maximize the opportunity for participation by members of the public throughout the region (GC Section 65080(b)(2)(F)(v)).
- A process for enabling members of the public to provide a single request to receive notices, information, and updates (GC Section 65080(b)(2)(F)(vi)).

Agency Input and Consultation with Local Elected Officials

As a result of SB 375, the consultation requirement has been expanded, which includes the following:

- During the development of the SCS (and APS if applicable), Kern COG must conduct at least two informational meetings in each county for members of the board of supervisors and city councils. Only one informational meeting is needed in each county if it is attended by representatives of the county board of supervisors and city councils that represent a majority of the cities representing a majority of the population in the incorporated areas of that county.
- The meeting (or meetings) shall be to discuss the SCS (and APS if applicable), including the key land use and planning assumptions, with the members of the board of supervisors and city council members in that county and to solicit and consider their input and recommendations. Notices of these meetings are to be sent to the clerk of the board of supervisors and city councils and local elected officials as key stakeholders in the regional transportation system. While local elected officials serve on regional agency boards, expanded consultation is required pursuant to GC Section 65080(b)(2)(E) and (F) to provide outreach to all local elected officials and their member jurisdictions affected by the SCS (and APS if applicable).
- Pursuant to GC Section 65080(b)(2)(G), in preparing an SCS, Kern COG shall consider spheres of influence that have been adopted by LAFcos within the region. Kern COG should also consult with LAFcos regarding special districts within the region that provide property-related services such as water or wastewater services, and should consult with these regional special districts, as appropriate, during development of an SCS (and APS if applicable).
- Additionally, pursuant to the 2010 California Regional Transportation Plan Guidelines, Kern COG should consider consultation with school districts within their region during development of the RTP. School-related trips constitute a significant portion of all vehicle trips.
- Based on the 2010 California Regional Transportation Plan Guidelines, Kern COG is encouraged to share data on growth projections and consult with school districts in the development of the SCS (and APS if applicable), especially with respect to land uses and the regional transportation system. Where possible, an SCS should incorporate current and future school needs into the RTP.

California Air Resources Board Review

Prior to starting the public participation process, the MPO shall submit a description to the state board of the technical methodology it intends to use to estimate the emissions from its SCS (GC Section 65080(b)(2)(J)(i)). It is encouraged that Kern COG communicate with CARB as early in the RTP

development as possible to obtain input. Following adoption, the MPO shall submit a SCS to the state board for review (GC Section 65080(b)(2)(J)(ii)).

Following SB 375, Kern COG will need to coordinate with CARB and the California Department of Housing and Community Development. CARB must review the SCS and possibly an APS after the documents are prepared. In summary, early communication and coordination with all appropriate levels of government, elected officials, and the public is very important to avoid delays that may impede the final federal air quality conformity determination, the determination by CARB whether the SCS or APS, if implemented, would achieve the regional emissions reduction target, or successful coordination of the RHNA with the SCS.

Kern COG Public Involvement Procedure

Kern COG updated its public involvement procedure in September 2011 to reflect SB 375 legal outreach and review period requirements. The plan provides guidance for Kern COG's elected officials and staff in public participation and interagency consultation throughout the regional planning process. It contains the policies, guidelines, and procedures Kern COG uses in developing the metropolitan planning process. This includes the development and approval of the RTP, Regional Transportation Improvement Plan, and environmental review documentation related to growth, transportation, and air quality, and any product prepared by Kern COG staff that statutorily requires public participation, or for which the Kern COG Board of Directors determines.

The public involvement process is guided by the following principles:

- It is the right and responsibility of citizens to be involved in the transportation planning process.
- Citizens should be educated about the needs and issues and encouraged to participate in finding solutions.
- Early and timely involvement of citizens is necessary to build community agreement on the needs and solutions before alternatives are proposed.
- Agreement on the final product is a desirable goal, but agreement does not mean 100% unanimity by all parties. Negotiation and compromise are essential ingredients to building agreement.
- The process by which a decision is reached is just as important as the product. Citizens should end the process satisfied that they had the opportunity to be significantly involved and that their voices were heard and reflected in the final document.
- After decisions are made, actions should follow to maintain confidence in the community involvement process.

The public involvement procedure identifies partner agencies with which Kern COG staff maintains regular contact and encourages participation in the development of local, regional, and state plans. The plan provides procedures and responsibilities for informing and engaging community members in various agency plans, programs, declarations, and policy evaluation. The plan also identifies media resources to use and legal display ad requirements to follow when posting public notices.

Summary of Activities

Community engagement and outreach were fundamental to the development of this 2014 RTP. By nature, this plan represents the region's mutual vision for its future and was developed using a grassroots, bottom-up approach.

Regional Planning Advisory Committee

Formed by the Kern COG Board in 2011, the RPAC was created to provide a forum to review and develop recommendations on key activities associated with regional transportation plans and other planning issues, including SB 375 implementation. The Kern COG RPAC reviews and develops recommendations on the following topics:

- Appropriate planning-related sections of the RTP.
- Blueprint planning.
- Climate change planning.
- Sustainable communities planning.
- Regional Housing Needs Assessment.
- Land use and population projections.
- Studies related to the environment (air, water, habitat conservation).
- Rural-urban connections strategy.
- Appropriate studies for inclusion in the annual Overall Work Program.
- Other matters as referred by the Kern COG Board.

Members of the RPAC are planning directors, community development directors, or their designees from each Kern COG member jurisdiction. Additional voting members include the public transit agency (Golden Empire Transit) and Caltrans District 6. Community at-large voting members represent varied economic, social, and geographic sectors and are appointed by the Kern COG Board. They include business groups, nonprofit organizations, military agencies, and tribes. Non-voting members consist of the executive officer of the LAFCo and the president/CEO of the Kern Economic Development Corporation. Representatives from the regional air districts, the San Joaquin Valley Air Pollution Control District (APCD) and the Eastern Kern APCD, participate in most RPAC meetings.

The RPAC formulated a SB 375 SCS Framework with values and actions that were approved by the Board of Directors in ~~February~~ ~~November~~ ~~2012~~ **24**. The RPAC developed a broad structure of SB 375 implementation for the entire county that included solutions for the region's unique geographic and economic features.

Transportation Modeling Committee and Kern Climate Change Task Force

The Kern Regional Transportation Modeling Committee was established in 2001 to provide oversight for the Kern Regional Travel Demand Model. After the adoption of the Kern Regional Blueprint in 2008, the Kern COG Board established the Kern Climate Change Task Force. These two committees merged in

2010 to form the Transportation Modeling Committee. Made up primarily of member agency traffic engineers, transportation model users, and other stakeholders, the committee serves as a subcommittee to the RPAC and the Transportation Technical Advisory Committee dealing with technical modeling and forecasting issues.

Kern COG worked with the Transportation Modeling Committee and RPAC to develop and implement the Directions to 2050 community engagement process.

Directions to 2050

The Directions to 2050 program, Kern COG's comprehensive community engagement process, was designed to solicit input from stakeholders and community members on priorities for the region's long-term future. The horizon year 2050 was not meant to represent a specific year, but to try to ~~encourage~~ participants to think long term about what might happen. The horizon year for the SCS is 2035 and the RTP horizon year is 2040. Directions to 2050 extended from September 2011 to December 2012. [Placeholder: Kern COG to confirm final participant number] Approximately 5,000 community members participated in the Directions to 2050 process. The program provided various opportunities for community members, stakeholders, and local agencies and jurisdictions to participate in the process, including:

- Stakeholder roundtable meetings with the RPAC and business and industry, environmental, social services, and equity stakeholders.
- Community workshops hosted in 16 different local jurisdictions with small group discussions and interactive strategy prioritization exercise. Each workshop included visual simulation computer modeling to create visual representations of regional growth and transportation projects. Workshop presentations and activities were designed to provide community members with the information and tools necessary to provide a clear understanding of the issues and policy choices.
- Community event interactive and educational booths at the Great Kern County Fair, the Tehachapi Mountain Festival, and the Desert Empire Fair.
- Presentations and discussions with existing community-based organizations including the following: Greater Tehachapi Chamber of Commerce; Greenfield Walking Group; Kern River Valley Revitalization, Inc.; Kiwanis Club of Shafter; McFarland Chamber of Commerce; Mountain Communities Chamber of Commerce (Frazier Park/Pine Mountain Club); Ridgcrest Chamber of Commerce; Rosamond Municipal Advisory Council; Taft Service Clubs; and Wasco Rotary.
- Interactive and educational workshop with students of the Frontier High School ASB Leadership:
- An interactive project website (www.directionsto2050.com) served as a communication and education tool and included interactive online prioritization and resource allocation activities, a survey, and project resources.
- Statistically valid phone surveys of residents of Kern County to assess residents' overall opinion of the quality of life in their city or town, to survey the importance of issues related to the future, and to understand the daily commute for the average resident.
- Promotional efforts: Kern COG personally contacted stakeholders, such as City staff, agencies, health organizations, environmental groups, and community-based organizations, distributed fliers advertising community workshops, and posted advertisements and shared press releases with various media resources.

Brief Summary of Community Input

[Placeholder: Kern COG to complete. Pull from overall Directions to 2050 outreach Cycle 1 and 2 summaries]

Consider Social Equity

Chapter 2 outlines seven goals that are the core of the 2014 RTP. One of the goals is to ensure an equitable distribution of the benefits among various demographic and user groups. To that end, Chapter 2 outlines three policies:

- Avoid, minimize, and/or mitigate disproportionately high and adverse human health or environmental effects, including social and economic impacts, on traditionally disadvantaged communities, especially racial minority and low-income communities.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority populations and low-income populations.

Kern COG conducted Environmental and Social Equity Stakeholder Roundtable Meeting throughout the outreach process. The purpose of the meetings was to continue to share information about the outreach process, provide an overview of recent studies conducted by Kern COG, present and discuss regional housing needs, and present and discuss the environmental justice methodology to be used in the 2014 RTP/SCS. For more information on performance measures related to social equity, see Chapter 2.

IV. SUSTAINABLE DEVELOPMENT PATTERN (“LAND USE”)

One of the key components of the SCS is a sustainable regional ~~forecasted development~~~~land use~~ pattern that ~~when integrated with the transportation network~~ enables the region to accommodate future growth in a manner that reduces passenger vehicle emissions, enhances economic vitality, promotes housing affordability, and ~~encourages~~~~promotes~~ resource land conservation. This ~~forecasted development~~~~land use~~ pattern is the basis for development of the regional transportation system described throughout the 2014 RTP and summarized in this SCS. Kern County has a unique pattern that is dominated by rural, outlying areas. This section describes:

- Current ~~development patterns~~~~land uses~~, urban/rural connectivity, residential densities, and building intensities in the Kern region.
- Anticipated future population, jobs, and housing in the region.
- A forecasted development pattern, regional housing needs, and strategies to promote conservation of resource areas and farmland.

Current Uses, Residential Densities, and Building Intensities

GC Section 65080(b)(2)(B)(i) requires MPOs to identify the general location of uses, residential densities, and building intensities in the region. The assessment of existing conditions, based on local COG general plans and planning assumptions, provides a foundation ~~to begin planning~~ for ~~the Kern COG SCS. more sustainable communities.~~

See Chapter 3, *Planning Assumptions*, for further information on current land uses, residential densities, and building intensities.

Existing Conditions: Putting the SCS into Perspective

Kern County is unlike any other region in California. From an overall perspective, Kern County, consisting of 8,200 square miles (the size of New Jersey), is the third largest county in California. *As the crow flies*, Kern County is 159 miles in length from the northwestern boundary to the southeastern boundary. The population is currently 850,000 and is expected to grow by 55% over the next 20 years and nearly double by 2050. Although two-thirds of Kern's population lives within 1/20th of the area of the county known as Metropolitan Bakersfield, many of the economic centers require long exurban commutes to areas that are not conducive to urban development.

There are 11 incorporated cities within Kern County: Delano, McFarland, Wasco, Shafter, Taft, Maricopa, Bakersfield, Arvin, Tehachapi, Ridgecrest, and California City. Kern County comprises separate regions based on significant variations in terrain, climate, geographic and environmental factors. The regions are identified as follows:

- Valley Region:** The southern San Joaquin Valley below an elevation of 1,000 feet mean sea level.
- Mountain Region:** The westernmost and central portion of the county above the 1,000-foot mean sea level contour in the valley and western region of the county and west of the primary alignment of the Los Angeles Aqueduct in the eastern county, including the southernmost portion of the county.
- Desert Region:** The eastern section of the county, east of the primary alignment of the Los Angeles Aqueduct.

Kern County has six significant industry clusters:

Value-Added Agriculture is the leading employment cluster with the bulk of the state's agricultural operations concentrated throughout the Valley. The cluster builds on Kern's historic role as a leading center for crop production, particularly vegetables, nuts, citrus, dairy, and cotton. The cluster also benefits from the food processing component, particularly carrot and tomato processing.

Transportation and Logistics is a fast-growing industry with tremendous potential within Kern. This is a leading cluster and supports the competitiveness of the Energy and Natural Resources and Value-Added Agriculture clusters through the use of warehousing and distribution services. Given Kern's location at the geographic population center of California, logistically and environmentally Kern is the best location in the state to centralize distribution services to the rest of the state with the lowest carbon footprint. Kern also serves as the immediate northern gateway to Los Angeles County. With California's two major north-south freeways running through the county as well as the only year-round pass over the Sierra Nevada Mountain Range in the San Joaquin Valley, it is a natural place for growth in transportation and logistics. Kern has become the location for major distribution centers.

Energy and Natural Resources production is the cornerstone and foundation of Kern County. Historically oil production has driven energy development. Kern County is the top oil-producing county in California. This county alone produces 76% of California's total oil. If Kern County were a state, it would be the third largest oil-producing state in the U.S., behind Alaska and Texas. Kern County has four giant oil fields (greater than 1 billion barrels of cumulative production) and as a whole produces 445,000 barrels per day. In terms of future production, Kern County is leading the state in development and production of renewable energy. Over 7,000 megawatts of renewable energy in the form of wind, solar, geothermal,

biogas, and gasification production have been permitted countywide. The county's dependence on energy and natural resource production as part of our economic structure is reflective in the fact that all 10 of the county's top tax payers are either oil-producing and/or processing companies or renewable energy producers. For the year 2010–2011, these companies made up an overall assessed value of nearly 28% of all general taxes owed and paid to the county.

Aerospace and Defense remains a leading industry cluster for the county and particularly for eastern Kern County where the economy of most of the communities is dependent on the strength of the aerospace and defense industries. The county has some of the best natural assets in the western United States for continued expansion in aerospace and defense. The 2005 Base Realignment and Closure process resulted in the decision to consolidate naval weapons and armament research development and testing at the US Naval Air Weapons Station at China Lake, resulting in a projected 1,400 new direct jobs. The potential for space tourism continues to be great, though other states are fiercely competing for this business.

Tourism, Recreation and Entertainment suggests continued growth opportunities in both annual expenditures and employment. This includes the generation of tourism and visit activity from people traveling between major cities in Northern and Southern California as well as those from large metro areas in Southern California seeking a close weekend get-away destination.

Healthcare Services has been recast to reflect the vast array of services and networks in the county. Throughout the San Joaquin Valley, population growth has resulted in major increases in hospital and healthcare employment. In addition, the general growth in healthcare spending has served as the catalyst for the recent or planned expansion of several regional facilities.

Rural/Urban Connectivity Strategy

California Government Code 65080(b)(4)(C) states, "The metropolitan planning organization ... shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs." Kern has developed a guideline to direct funding to outlying rural areas to promote safety and interconnectivity in accordance with SB 375. A more complete discussion can be found in Section VII. of the SCS under the Project Selection Update. This goes into greater detail on the nature of Kern's unique resource areas and farmland.

Rural, resource areas represent the vast majority of Kern County land uses. Kern's rural lands hold diverse resources strategic to Kern and California's growth and success. For example, Kern County produces 76% of all oil produced in California, has over 7000 MW of operating and permitted renewable energy with a 10,000 MW in production goal by 2015 meeting the majority of California's 33% renewable goal for electricity generation. In addition, one in six jobs in Kern County are directly related to the resource sectors of forestry, fishing, hunting, mining (esp. oil/gas) and agriculture. Growing interest in ecotourism, from white water rafting to farmer's markets, offers an insight into the development of a diverse and vibrant economy.

Kern strives to provide feasible solutions to transportation, land use and air quality issues that connect these strategic rural employment areas with the major urban areas of the County. The Blueprint, adopted in 2008 by the Kern COG Board made up of local officials from 11 cities and the County of Kern, provides ~~information a tool~~ to assist in the formation of strategies that enhance strategic agriculture, rural communities, resource conservation, recreation, quality of life, and regional sustainability.

FIGURE 4-1A: KERN COUNTY 2011 CROPS

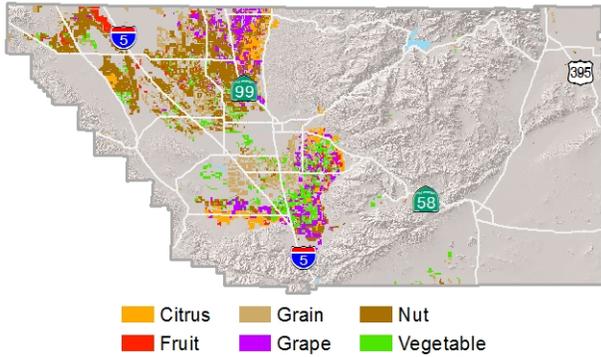
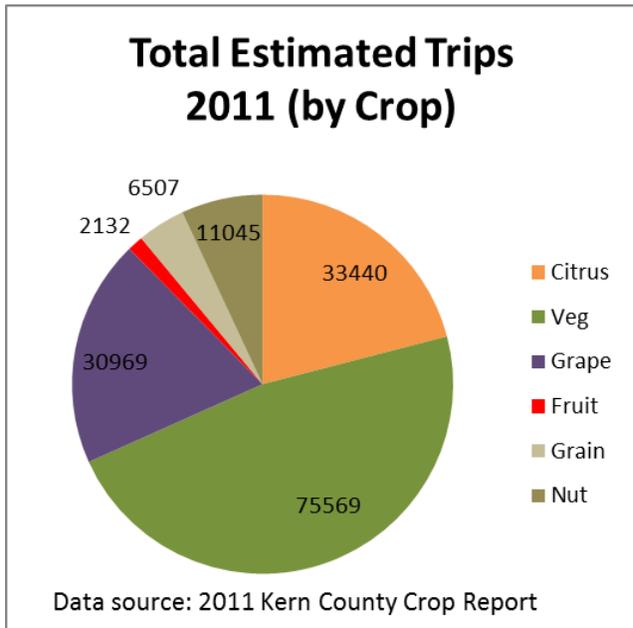


FIGURE 4-1B: KERN COUNTY 2011 TRIPS



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TABLE 4-1: FARMERS MARKETS IN THE KERN REGION

LOCATION	SEASON	DAY	TIME
Brimhall Farmers' Market NE Corner of Brimhall & Calloway, 9500 Brimhall Rd.	Year – Round	Sat	9 am - 1 pm
Clinica Sierra Vista/Delano Community Health Center, 1508 Garces Hwy.	May–Nov	Tues	3 pm – 5 pm
Clinica Sierra Vista/East Bakersfield Community Health Center, 815 Dr. Martin Luther King Jr. Blvd.	May – Nov	Thu	10 am – 12 pm
Clinica Sierra Vista/Lamont Community Health Center, 8787 Hall Rd	May–Nov	Tues	9 am – 11 am
Haggin Oaks Farmers' Market Corner of Ming & Haggin Oaks, 8800 Ming Ave.	Year – Round	Sun	9 am - 2 pm
Lakeshore Farmers' Market Lakeshore Lodge, 7644 Wofford Heights Blvd.	Year – Round	Sat	9 am – 1 pm
Nuui Cunni Farmers' Market Lake Isabella 2600 Highway 155	Year – Round	Sat	9 am – 2 pm
Paramount Produce Day Lost Hills Recreation Center, Lost Hills Rd. & Hwy 46	Year – Round	Fri	3 pm – 7 pm
Taft Farmers' Market 5th Street Plaza between Center St. & Main St.	Jun – Sep	Thu	5 pm – 8 pm
Tehachapi Farmers' Market Green St. between E & F St.	Jun – Aug	Thu	4 pm – 7 pm
Valley Farmers' Market Golden State Hwy. & F St.	Year – Round	Sat	8 am – 12 pm

FIGURE 4-2: KERN COUNTY DAIRIES

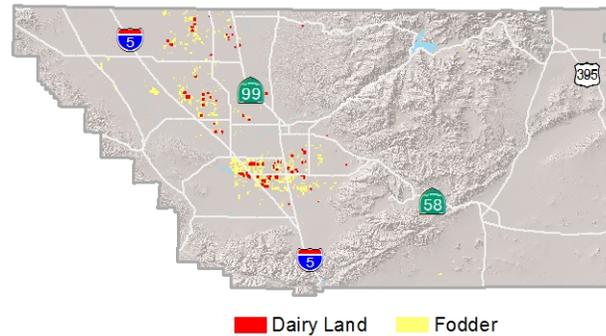
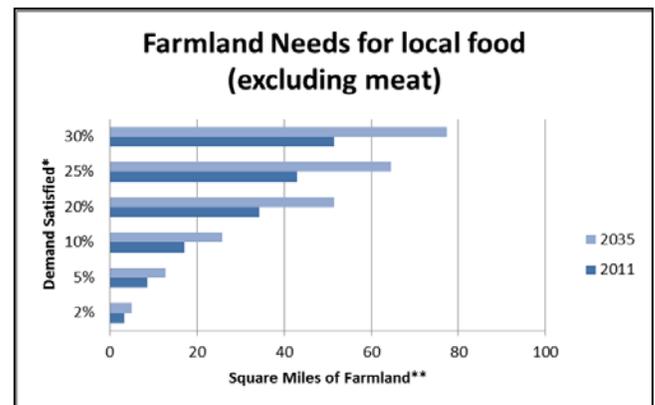


FIGURE 4-3: FARMLAND NEEDS FOR LOCAL FOOD



Agricultural Resource Areas (Farmland) - Residential rural areas of Kern County number 38,700 acres. Semi-agricultural lands, like warehousing and packaging facilities, yield less than 12,000 additional acres. The combination of which are roughly a third of the 142,000 acres of urban land. When taking inventory of agricultural land, however, the ratio inverts dramatically. Farmland as defined by GC Section 65080.01 (b) is classified as prime, of statewide importance, or otherwise unique in character outside all existing city spheres of influence or city limits; the combination of these lands exceeds 900,000 acres. Additionally, designated grazing land provides a stunning 1.8 million acres. From these lands, Kern County’s agricultural revenues topped \$5 billion in 2011.

Another significant portion of Kern’s rural economy is dairies. Kern accounted for 10% of California’s milk production, ranking fifth among California’s counties who, collectively, account for 21% of

the nation’s milk. Not including fodder production, over 7,500 acres of Kern dairy land net almost \$750 million— placing milk, market & manufacturing as Kern’s agriculture sector leader in 2011. As seen in Figure 4-2, fodder production is mostly concentrated around dairies. Milking equipment is central to farm operations. Due to milk being highly perishable, quick processing and transportation is essential. Milk haulers transport milk from farm tanks by bulk tanker truck to processors. Due to high transportation costs associated with refrigerated transport, local consumption of fluid milk (> 17 million gal) is fulfilled by the local production of nearly a half billion gallons, with fluid milk consumption by the population at just 3.6% of what it produced. Kern’s 55 dairies’ 168,000+ cows present a cows/dairy ratio that is the highest in the state (3,069), over 50% greater than the next, Imperial County (1,966). With over 4 billion pounds of milk produced in Kern, conservative estimates indicate over 77,000 trips generated for milk hauling alone. (US Dept of Agriculture, 2012)

Farm to Market Needs - Metropolitan Bakesfield’s geographic location at the center of farm production, provides ideal connectivity for the transportation of agricultural products to markets, both local and statewide. The proportion of locally grown produce destined for local markets is low. Due to the economies of scale delivery networks often find it more economical to send produce to distant distribution facilities, often resulting in local markets being provided with products not only distributed from other areas, but sourced from them as well. It’s estimated that 2% of regional consumption is locally produced. See Figure 4-3: **Farmland Needs for Local Food**.

Despite low consumption of local-sourced fare, direct markets continue to grow and thrive. Kern County’s farmers’ markets (see Table 4-1) provide area residents access to a variety of locally-farmed products. Additional forms of agritourism flourish among many local farms that provide retail outlets at the farms themselves.

From this inventory come a variety of themes to which rural development strategies are focused: *Production, Infrastructure and Consumption*.

Production: Connect farmers to available markets & Provide business training opportunities to farmers.

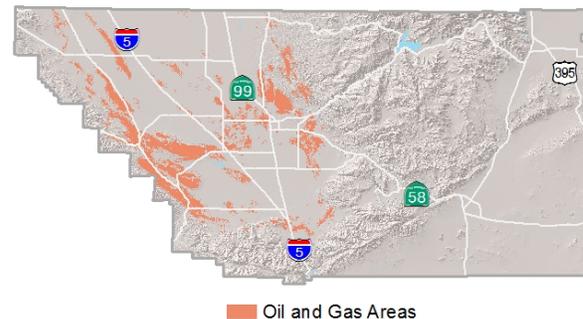
Infrastructure: Increase Local Processing Capacity & Distribution

Consumption: Increase the Number and Types of Food Outlets, Promote local food sourcing.

Oil, Gas and Mineral Resources - Perhaps one of Kern County’s most well-known features is oil and gas production—for good reason. Kern County’s 880 square miles of oil fields account for 76% of the oil and gas reserves in California.

Kern County led the state in 2011 with over 60,000 employed in the Natural Resource and Mining industry. Of those, nearly 40% are occupations which are directly related to production and extraction. Consequently, heavy commute traffic is experienced both within adjacent rural areas and between urban and rural areas. This commute traffic is the primary consideration as, unlike agricultural products, petroleum products are transported primarily by rail and pipeline.

FIGURE 4-4: OIL AND GAS RESOURCES



East Kern also includes gold and other mining operations. The largest borax mining operation in the world is located at the east edge of the county next to Boron employing 600 working three shifts per day, seven days per week. An average of 5 trains per week transport the mineral to a bulk transload facility at the Port of Long Beach.

Wind Energy - Kern’s energy resources extend beyond the traditional—it also hosts one of the first wind farms in the nation. Situated to the east of the mountain city of Tehachapi, the Tehachapi Pass Wind Farm is a pioneering effort at wind power generation beginning in the 1980’s. Thanks to intensive maintenance, research and development, several generations of turbines coexist and continue to provide power as long as the wind blows. Maintenance, research and development jobs are expected to be a persistent traffic concern in these rural areas, but they aren’t the only problem. Further development within the farm’s 50 square-mile boundary had been limited by fully utilized transmission lines. However, to meet the State’s renewable energy requirements, construction of upgraded transmission lines began in 2008, and is scheduled for completion in 2013. As many as 2,000 additional turbine installations are expected by 2020, providing 4,500 megawatts of power; meaning new installation-related traffic can be expected to continue into the near future and likely well-beyond.

Military/Civilian Aerospace Testing Complex - In Kern’s eastern half, the mountainous shadow of the southern San Joaquin Valley harbors the desert communities of California City, Ridgecrest, Inyokern, Mojave, Rosamond and Boron.

Kern County’s eastern region boasts not one, but two United States’ Military Air bases: Edwards Air Force Base and Naval Air Weapons Center China Lake. Surrounding communities benefit directly and indirectly from their proximity to these bases. The aerospace industry and its service and support-related personnel represent a significant interest to Kern’s eastern regional communities, as well as its southern neighbors. As these areas continue to grow eastern Kern will require its own rural and urban policy considerations.

Correctional Facilities - Another significant rural transportation issue is correctional institutions. Kern County has five public and private high-security institutions that house over 20,000 federal, state and local inmates. There are a number of low and medium “community” correctional institutions located in urban areas (not shown). To manage these facilities, Kern County has almost 5000 correctional officers and first-line supervisors who commute by auto for each shift.

FIGURE 4-5: KERN COUNTY WIND FARMS

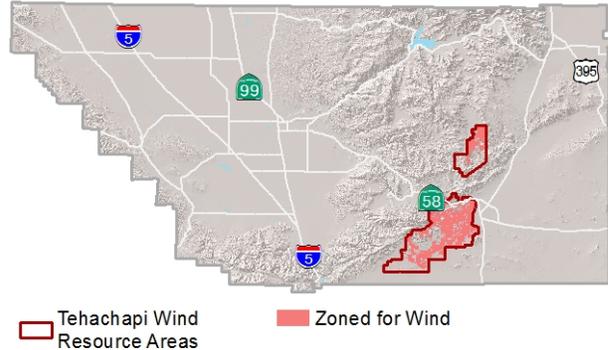


FIGURE 4-6: KERN COUNTY MILITARY INSTALLATIONS



FIGURE 4-7: KERN COUNTY CORRECTIONAL FACILITIES



Rural Resource Area Transportation Safety - Alternative transportation connectivity to these resource areas are dominated by regional transit and vanpooling. The rural job market plays an important role among rural and urban residents alike. As rural lands transition into non-agricultural uses, commute and other high speed auto traffic will experience conflicts with slow moving farm vehicles. In addition, vehicle miles driven are appreciably higher than in urban settings due to the lower population density of rural areas. This results in a disproportionately higher number of accidents per capita in rural settings than urban. A sustainable community strategy is required to address rural highway safety issues and provide financial incentives to address them.

Forecast Development Pattern

GC Section 65080(b)(2)(B)(vii) requires MPOs to set forth a forecasted development pattern for the region, which when integrated with the transportation network and other transportation measures and policies will reduce emissions from automobiles and light-duty trucks to achieve, if there is a feasible way to do so, the emissions reduction targets approved by CARB.

Housing the Kern Region's Population

Land Use Pattern: Centers Concept Strategy

The ~~SCS Centers Concept Strategy Maps~~ has been developed by Kern COG staff and shows both the place types reflecting forecasted development patterns and Kern COG modeling ~~local planning~~ assumptions, and the planned transportation investments from this RTP. The map shows how investments in transportation are being coordinated with forecasted development patterns ~~local land use~~ to reduce emissions from automobiles and light-duty trucks. The map s contains transit priority and strategic employment areas centers and transportation infrastructure that are existing, planned or proposed and have been grouped by Kern COG staff into descriptive types. The map s ~~were~~ developed with input from the Transportation Modeling Committee and the Regional Planning Advisory Committee but there are currently no General Plans adopted that use these terms or categories ~~of center designations~~.

The following place types employed in the RTP are not intended to represent detailed land use policies, but are used to describe the general conditions likely to occur within a specific area based on the best local assumptions. The place types are each comprised of specific characteristics related to jobs and housing intensity, urban design and transportation choices. It is important to note that this map is only a snap shot of ~~local assumptions~~ forecasted development patterns and Kern COG modeling assumptions to be updated every 4 years. For the latest information on land use, land use designations and transit concepts, please refer to the appropriate local jurisdictions. Detailed descriptions on how this information is used can be found in the Appendix: SCS Background Documentation.

Metro

Metro areas are the regions primary business, civic, commercial and cultural centers that can exceed 60,000 in population. These districts have significant amounts of employment and corresponding residential uses and retail, typically clustered in multistory buildings and include easy access to neighboring residential and employment areas. Metro areas are served by numerous transportation choices. Existing and planned enhancements may include easy walk/bike design and improved transit. Metro areas are also typically located at the convergence of a number of high-capacity transit facilities such as passenger rail. The proposed Bakersfield metro center for Kern is also the planned location for

the future high-speed train terminal. In East Kern, the closest metro place type is Palmdale/Lancaster in Northern L.A. County.

Community

Community place types feature subregional business, civic, commercial and cultural centers and draw activity from the subregional area. These areas may range from 15,000 to 60,000 persons or more and contain significant employment centers and a mix of housing choices, supported by retail and daily services. Existing and planned community enhancements may include easy walk/bike design and improved transit.

Town

Town place types feature business activity, local-serving retail, daily services, housing choices, and may include a civic and cultural center and draws activity from the town and immediate area. These areas may range from 5,000 to 15,000 people or more. Existing and planned enhancements may include easy walk/bike design and improved transit.

Village

Village place types feature business activity and essential local services, and housing choices. These areas may range from 50 to 5,000 people or more. Existing and planned enhancements may include easy walk/bike design and improved transit as appropriate.

Strategic Employment (Rural/Urban)

Strategic employment ~~areas~~centers can be found in rural and more urban areas and may include both jobs and housing, though these two uses are rarely found in close proximity to each other. These areas often contain employment in isolated resource areas with sporadic activity dependent on the strategic resource (wind energy, agriculture, etc.). Many strategic employment areas are characterized by large operations located in close proximity to a resources to minimize transportation costs and the carbon footprint. In urban areas, existing and planned enhancements may include easy walk/bike design and improved transit. In rural strategic employment areas, regional transit and or vanpooling are existing or planned along with interconnectivity and safety projects.

The ~~transit priority and strategic employment areas were centers concept was~~ jointly adopted by the City and County into the Metropolitan Bakersfield General Plan in 1982 and are found in the community plans for most of the outlying communities. The ~~centers concepts~~ has a distinct advantage over a corridor and strip commercial development pattern in that it provides for activity nodes around which future transit, and vanpooling services can be planned for in a way that is supportive of forecasted development patterns. local planning assumptions.

Figures 4-8 depicts a forecasted development~~land use~~ pattern based on local area government planning assumptions consistent with the transit priority and strategic employment areas. Centers Concept Strategy. The map also indicates a network of Quality Transit Areas (QTA). These are areas within one-half mile of fixed route transit service based on planned transit expenditures. Nearly all of the region's planned highway projects will benefit the QTA routes. In addition the rural strategic employment areas outside the QTAs will also have access to carpool, vanpool and the HOV network being developed to benefit the resource areas consistent with SB 375.

CHAPTER 4 SUSTAINABLE COMMUNITIES STRATEGY – VERSION 53

FIGURE 4-8: LAND-USE FORECASTED DEVELOPMENT PATTERN MAP – KERN REGION 2035

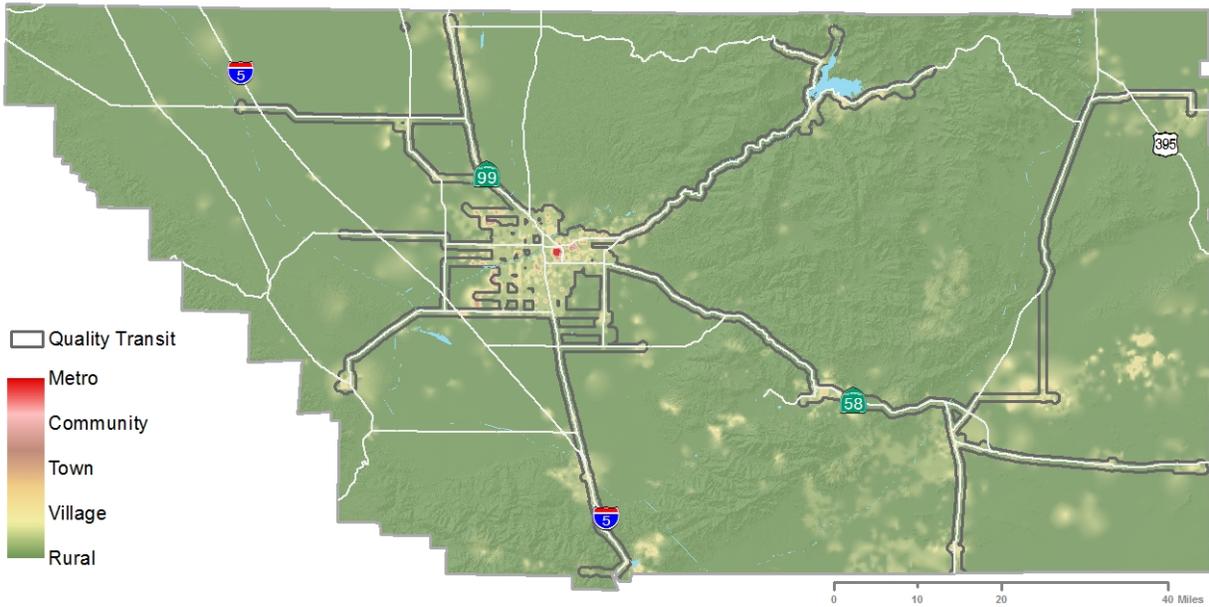
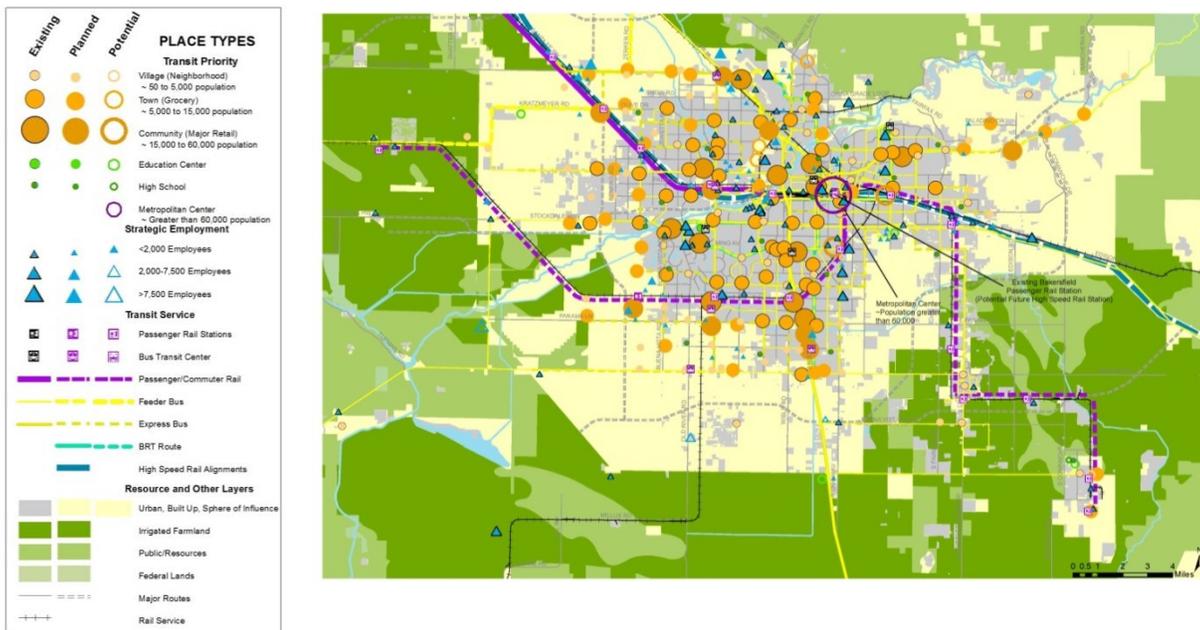


FIGURE 4-9: TRANSIT PRIORITY & STRATEGIC EMPLOYMENT PLACE TYPES CENTERS CONCEPT MAPS



DISCLAIMER: These maps are for conceptual purposes only. The RTP is updated every 4 years. Local general plans and other data can be updated more frequently. For more detailed information on the latest planning assumptions, please refer to the latest locally adopted general plan for each community or other latest data source. Local general plans and other data updates will be incorporated into the next RTP update every 4 years.

**FIGURE 4-10: TRANSIT PRIORITY & STRATEGIC EMPLOYMENT PLACE TYPES CENTERS CONCEPT MAPS
(CONTINUED)**



DISCLAIMER: These maps are for conceptual purposes only. The RTP is updated every 4 years. Local general plans and other data can be updated more frequently. For more detailed information on the latest planning assumptions, please refer to the latest locally adopted general plan for each community or other latest data source. Local general plans and other data updates will be incorporated into the next RTP update every 4 years.

Transit Priority Areas

The Golden Empire Transit (GET) Long Range Transit Plan, adopted in June 2012, was developed in anticipation of Kern COG’s SCS. The plan provides for gradual phasing of near-, mid- and long-term improvements. The plan supports the centers concept by providing improved service to Transit Priority Areas in Metropolitan Bakersfield. The red line on the map indicates the new rapid bus service, which will provide regular service at each stop every 15 minutes. In addition, stops are spaced approximately one-half mile apart to better service the centers concept. Figures 4-11 and 4-12 illustrate phased improvements to regional transit service.

FIGURE 4-11: 2012 METRO BAKERSFIELD SHORT-TERM TRANSIT IMPROVEMENTS

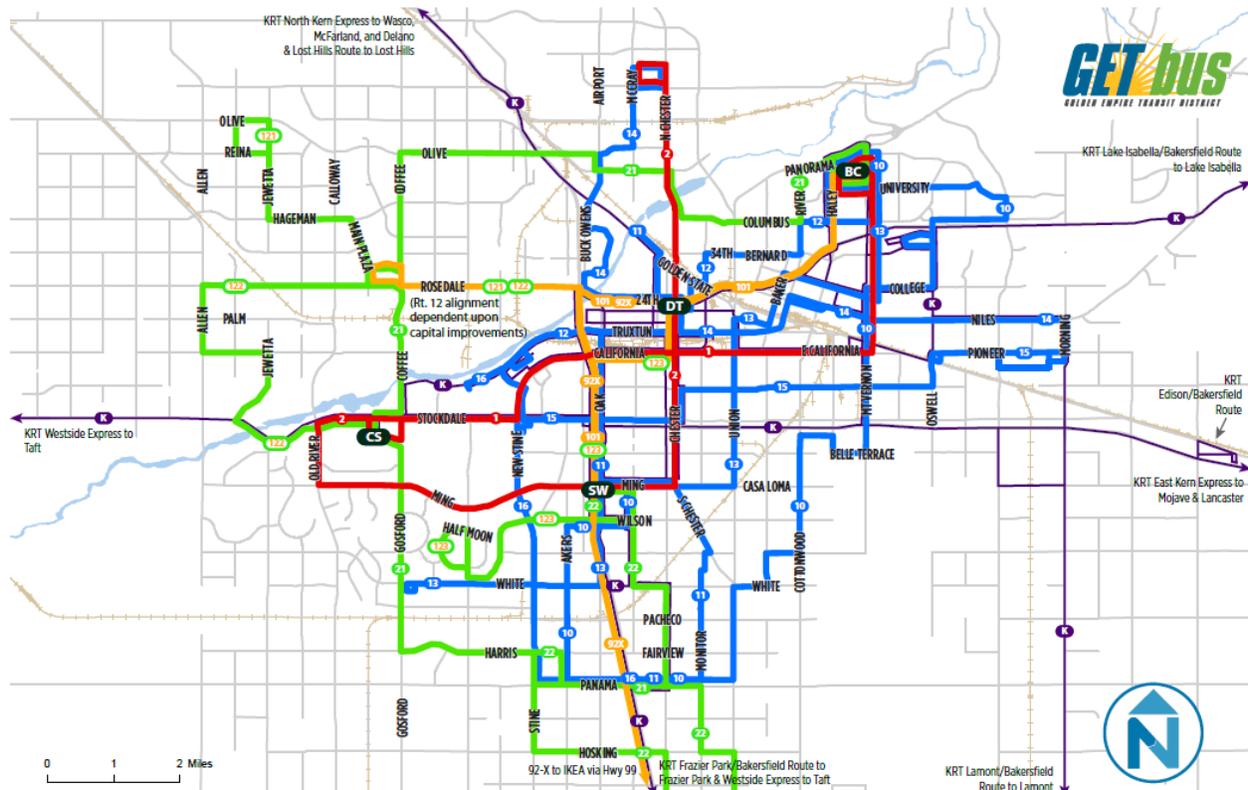
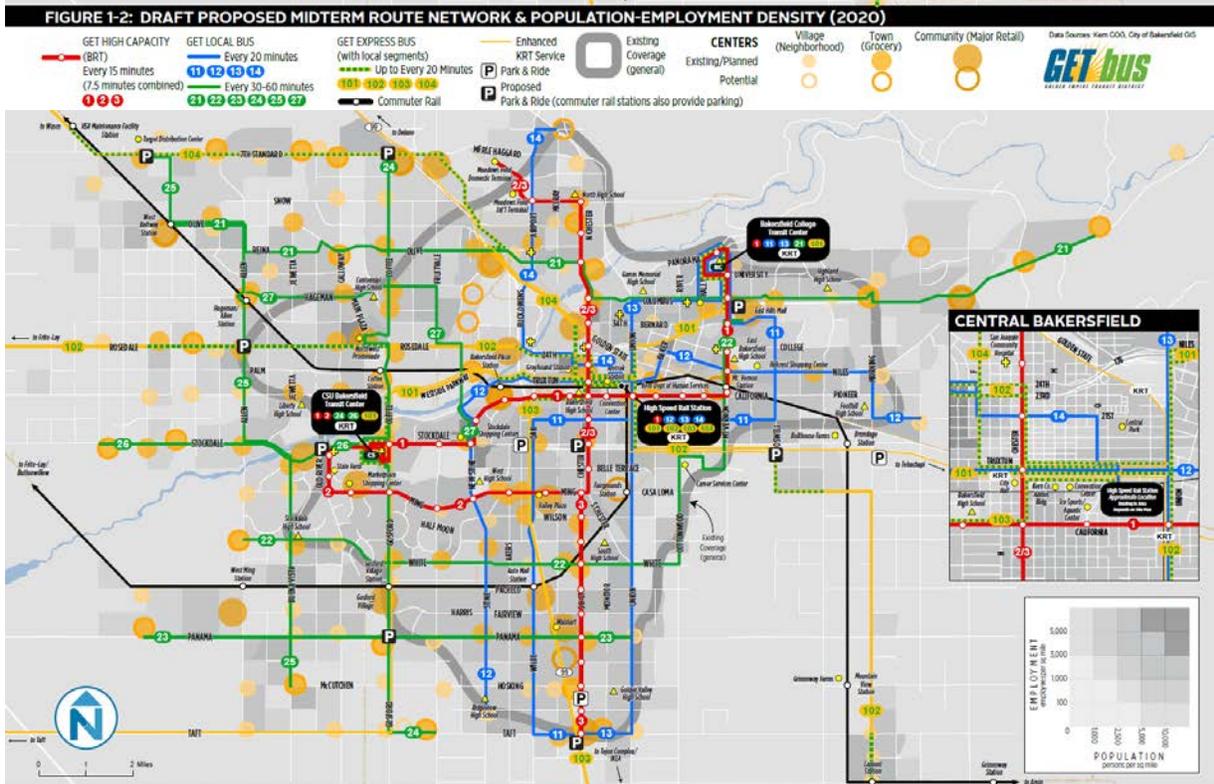
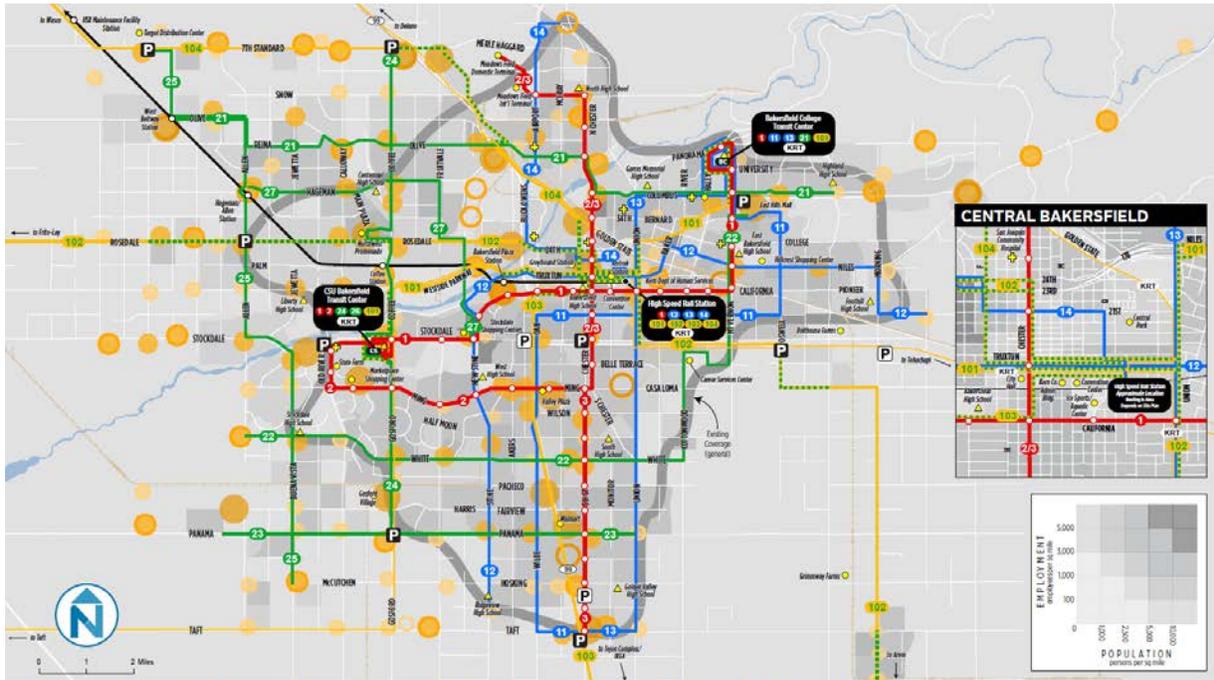


FIGURE 1-1: DRAFT PROPOSED SHORT-TERM ROUTE NETWORK

GET Routes	2 Rapid Mon-Fri 6am-11pm Sat-Sun 7am-7pm every 15 minutes	101 Express Mon-Fri 6am-7pm Sat-Sun 7am-7pm every 30 minutes Mon-Fri 7-11pm every 60 minutes	21 Circulator Mon-Fri 6am-7pm Sat-Sun 7am-7pm every 60 minutes No evening service	13 Crosstown Mon-Fri 6am-7pm Sat-Sun 7am-7pm every 30 minutes Mon-Fri 7-11pm every 60 minutes	1225 Circulator Express Mon-Fri 6am-7pm Sat-Sun 7am-7pm every 60 minutes No evening service	Transit Centers DT Downtown SW Southwest BC Bakersfield College CS CSU Bakersfield	KRT Routes Kern Regional Transit
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Data Sources: Kern COG, City of Bakersfield GIS

FIGURE 4-12: 2020/2035 MID/LONG-TERM TRANSIT IMPROVEMENTS



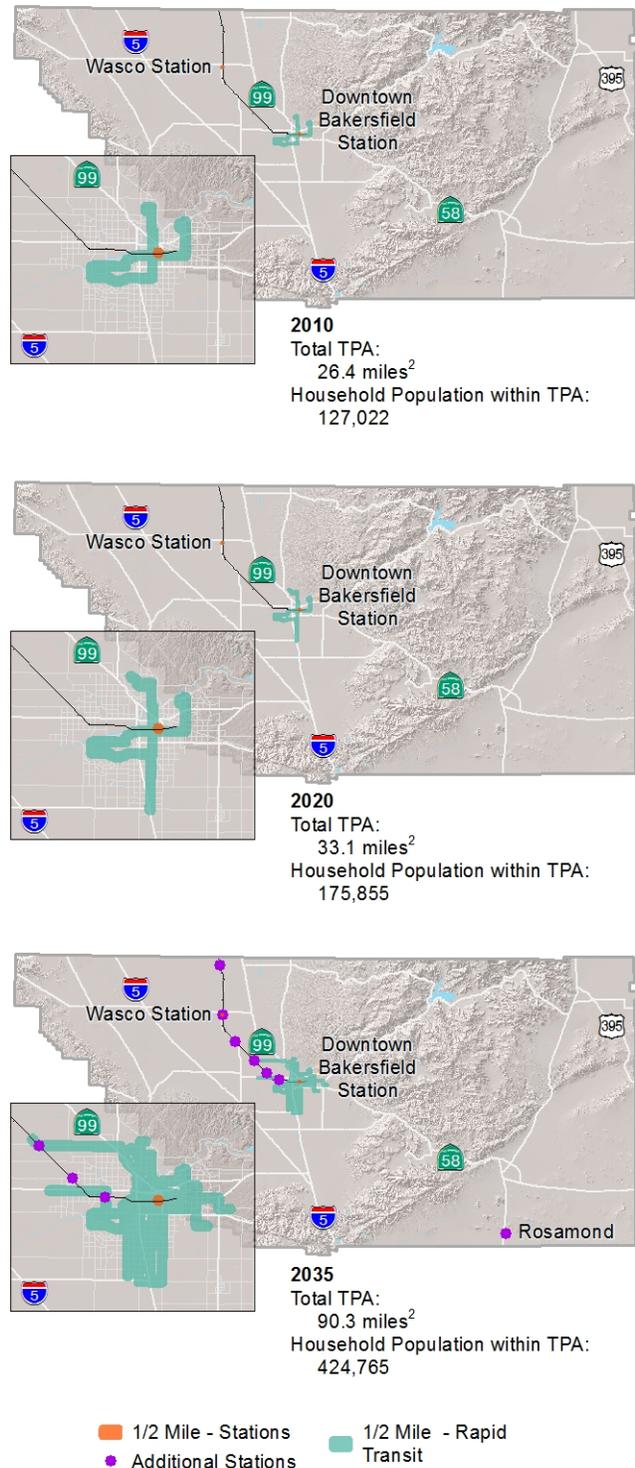
The Long-Range Transit Plan provides for an expansion of transit priority areas that are eligible for environmental streamlining provisions under SB 375. The maps in Figure 4-13 illustrate the expansion of areas within one-half mile of passenger rail service or rapid bus service (15-minute headways), bus rapid transit, and/or light rail. Prior to 2012, only 5,600 people lived within one-half mile of high-quality transit areas. The Kern region has been proactive in expanding high-quality transit service since SB 375 passed in 2010. With the implementation of short-term transit improvements in 2012, population served by transit priority areas has already expanded more than 20 times. Another 38% increase is anticipated by 2020, and an increase of up to 225% is anticipated by 2035 over 2012 service areas. The long-range transit plan assumes passage of a local transportation measure.

The Long-Range Transit Plan also analyzed improvements to the Kern Regional Transit (KRT) express bus system that services outlying communities. The plan found that KRT can achieve operating efficiencies by interfacing with GET at its outlying transfer centers, reducing operating costs and allowing service improvements to outlying communities.

In addition, 2012 saw the finalization of the Kern Commuter Rail Study. The study called for consideration of extending L.A. Metrolink service from Lancaster north to Rosamond and Edwards AFB in eastern Kern. The study recommended additional passenger rail stops on the Burlington Northern Santa Fe (BNSF) Railway alignment in northwest Bakersfield. The stops may become part of a future passenger feeder rail system for Express Amtrak service and for the high-speed rail project, should it move forward.

These transit improvements are subject to the voluntary application of the ~~land-use~~ centers concept or other similar concepts in local general plans. In addition, other factors include removal of barriers to develop these centers and a healthy, diverse housing market demand, and the resources necessary to improve transit. Incorporating these efforts in the SCS will provide a voluntary catalyst to make sure that

FIGURE 4-13: EXPANDING TRANSIT PRIORITY AREAS TO POPULATIONS WITHIN ONE-HALF MILE OF HIGH QUALITY



these factors are addressed.

Local Agency Formation Commissions' Spheres of Influence

MPOs are required by GC Section 65080(b)(2)(G) to consider spheres of influence that have been adopted by the Local Agency Formation Commissions (LAFCo) within the region during development of the SCS. MPOs should consult with LAFCos within the region regarding municipal service review boundaries, foreseeable changes to those boundaries, and service capacities over the period covered by the RTP as well as any local LAFCo-adopted policies regarding conservation of agricultural and open space land, island annexations, annexations, service extensions, and sphere changes. MPOs are encouraged to request the most recent Municipal Service Reviews for local agencies providing services in the region, as well as LAFCo-prepared GIS maps, if available, for all local agency boundaries and spheres of influence in the region.

What Is LAFCO?

Kern County LAFCo was established December 10, 1963, pursuant to provisions of Chapter 1808 enacted by the 1963 California Legislature and Section 56000 (prior code 54780, et seq.) of the Government Code. The duties of LAFCo are to review and approve or disapprove with or without amendment, wholly, partially, or conditionally, proposals for the incorporation of cities, formation of special districts, annexation of territory to local agencies, exclusion of territory from a city, disincorporation of a city, consolidation of two or more cities, and the development of a new community.

Spheres of Influence

The Transit Priority and Strategic Employment Areas Centers Concept map includes the latest Spheres of Influence areas adopted by LAFCo, and are consistent with the Forecasted Development Land Use Pattern Map. It is important to note that the SCS is a snap shot of the latest available information and will be updated every 4 years, and at that time any new annexations to Spheres of Influence will be incorporated in the SCS.

Regional Housing Needs

Accommodating Eight-Year Regional Housing Needs

[Placeholder: Kern COG to modify following text to incorporate Kern RHNA numbers and 2023 Plan run.] Kern COG prepares an RHNA of low- and very low-income housing for each jurisdiction in the region that must be approved by the California Department of Housing and Community Development. Each jurisdiction is assigned a forecast of housing need that is used in local general plan housing elements. SB 375 requires local jurisdictions to zone sufficient land to accommodate their low-income housing needs by 2015. The law's intent is that all cities provide sufficient housing to accommodate forecast growth in an effort to slow increases in migration from coastal communities to inland communities. The increasing need for lower-income housing may require jurisdictions to consider strategies such as more affordable, compact housing around transit centers. The *Market Demand Analyses for Higher Density Housing in the San Joaquin Valley* indicates a growing demand for higher-density housing in smaller communities and interest in mixed-use development. With enough land to accommodate twice the current forecast growth, Kern County has had little difficulty in providing adequate acreage for low-income housing. ~~Coastal communities have the greater challenge of accommodating their growth within their city limits using infill and compact growth techniques.~~

The Kern region's official regional housing need from the California Department of Housing and Community Development for the planning period 2014–2021 is [Placeholder: Kern COG to fill in] housing

units. Of these, approximately [Placeholder: Kern COG to fill in] are expected to be in the very low- and low-income category (affordable to those who make less than 80% of area median income), [Placeholder: Kern COG to fill in] are expected to be in the moderate-income category (affordable to those who make between 80% and 120% of median income) and [Placeholder: Kern COG to fill in] are expected to be offered at the above moderate-income category. The SCS incorporates the overall RHNA target for the Kern region and provides a land use pattern that shows where new housing growth can be accommodated in the future.

[Placeholder: Kern COG to update this paragraph with Kern COG's RHNA methodology in December 2012] The RHNA allocation was developed with reliance on local input on projected household growth and responses to local surveys. Results from the surveys support consistency with the state housing goals by encompassing a variety of planning factors that identify opportunities and constraints for jurisdictions to plan for housing at all income levels. These factors include the availability of suitable land, market demand for housing, distribution of household growth along transit corridors, and replacement need. To address increasing concerns regarding affordability, each jurisdiction's future housing need is adjusted to balance the proportion of affordable housing by county across the region. This adjustment considers areas that have a high proportion of certain income groups and adjusts future household growth toward a goal of social equity. This mitigates overconcentration of income groups and encourages planning for affordable housing in areas with limited opportunities in affordable housing.

Estimated Housing Capacity by Jurisdiction and Subregion

[Placeholder: Kern COG to describe anticipated RHNA distribution by jurisdiction and subregion or areacenter, and describe how it is determined by/consistent with the SCSland-use strategy.]

Conserving Resource Areas and Farmland

The 2014 RTP land-use-forecasted development pattern and transportation system attempts to minimize negative impacts on various natural and manmade resources, building on local General Plan policies and strategies related to conservation and preservationprotection of these resources. There is acknowledgement around the region of the need to maintain a balance between the need to urbanize and the need to conserve rural lands and their uses.

Agriculture and Farmland

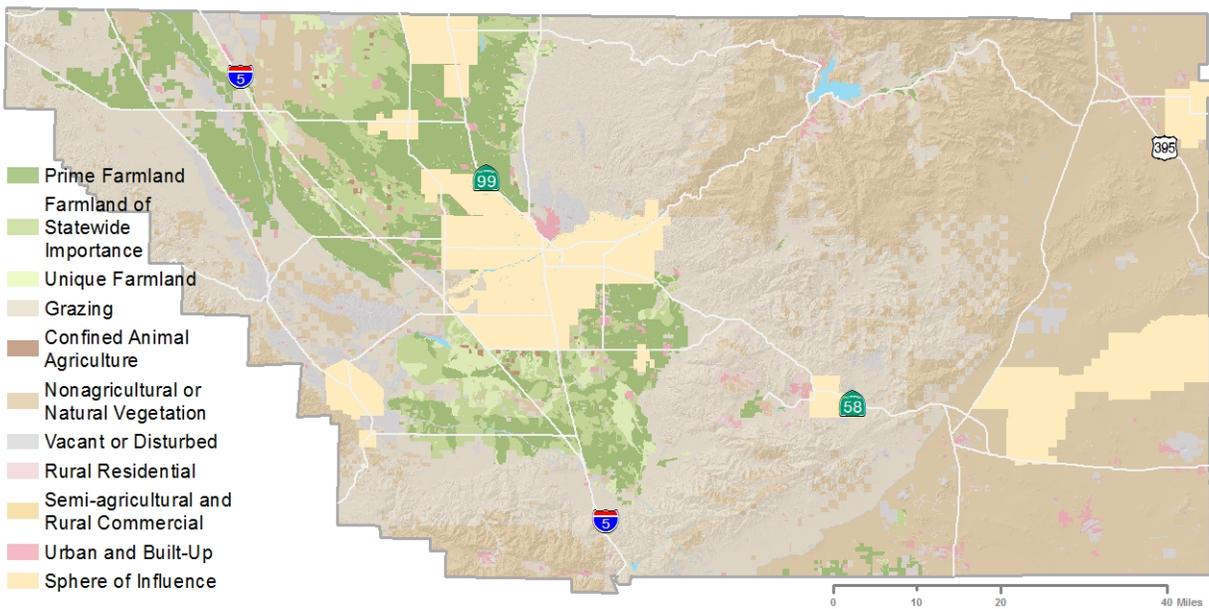
Agriculture has deep roots in the region's history and future. The Kern region has some of the most productive farmland in the world. According to the 2011 Kern County Agricultural Crop Report, Kern County Agriculture reached a milestone in 2011 by topping the \$5 billion dollar gross production value for the first time ever. The 2011 gross value of all agricultural commodities produced in Kern County is \$5,364,538,600. This represents an increase (12.8%) from the revised 2010 crop value (\$4,757,416,700).

Kern County's agricultural areas also provide benefits such as habitat, flood control, groundwater recharge, and energy production. Loss of these lands for agricultural purposes has economic, environmental, and social impacts. In developing the 2014 RTP land-use-forecasted development pattern and transportation system, Kern COG relied on the policies of local governments to develop urbanization assumptions based on the most recent information available. Local land use policies related to agricultural preservation were of particular importance in this effort.

The California Department of Conservation maps farmland throughout California under the Farmland Mapping and Monitoring Program (FMMP). Figure 4-14 shows a 2010 FMMP map of these farmlands in outside the spheres of influence (SOI) boundariesKern-County. Table 4-2 [Insert table] presents an acreage summary of the FMMP mapping categories outside the SOI. As the table shows, [summarize

conversion trends geographically and by farmland type]. According to FMMP data, only X% of the region is currently urbanized. The definition of farmland under Government Code Section 65080.01 (b) excludes farmland from SOI boundaries. [Summarize past agricultural land conversion trends.] From [placeholder for year span], a period of [placeholder for number of years] years, the region grew by approximately [placeholder for number of people] people. In that same time, approximately [placeholder for number of acres] acres of farmland were converted to urban and rural development (over [placeholder for percentage of total]% of total farmland, much of which was high quality). The majority of this conversion was in the jointly adopted Metropolitan Bakersfield General Plan area which anticipated the conversion of this land to accommodate house an urbanizing population. By focusing urbanization into this 409 square mile area, transportation, transit and other public infrastructure such as sewer and water can be utilized more effectively and infill can be encouraged.

FIGURE 4-14: KERN COUNTY IMPORTANT FARMLAND 2010



For the 2014–2035 planning period (21 years), this RTP forecasts the addition of 467,000 people and the conversion of [placeholder for current acreage] acres of farmland. This significantly lower rate of conversion is due largely to local and regional efforts to balance urban expansion with the conservation of economically viable farmland. [Summarize conversion trends geographically and by farmland type.] This decrease in the impact to farmland from the RTP is important, as the viability of the agriculture industry is correlated with the amount of land in production and the type of production. Limited farmland conversion outside identified areas for economic growth, can help to maintain the approximately [placeholder for amount of money] per year economic output related to agriculture in the Kern region and protect employment of over [placeholder for current number] people in the agricultural industry.

The California Legislature passed the Williamson Act in 1965 to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. An agricultural preserve defines the boundary of an area within which a city or county will enter into Williamson Act contracts with landowners. The Williamson Act creates an arrangement whereby private landowners contract for a minimum of 10 years with counties and cities to voluntarily restrict their land to agricultural and compatible

open-space uses. In return, restricted parcels are assessed for property tax purposes at a rate consistent with their actual use, rather than potential market value.

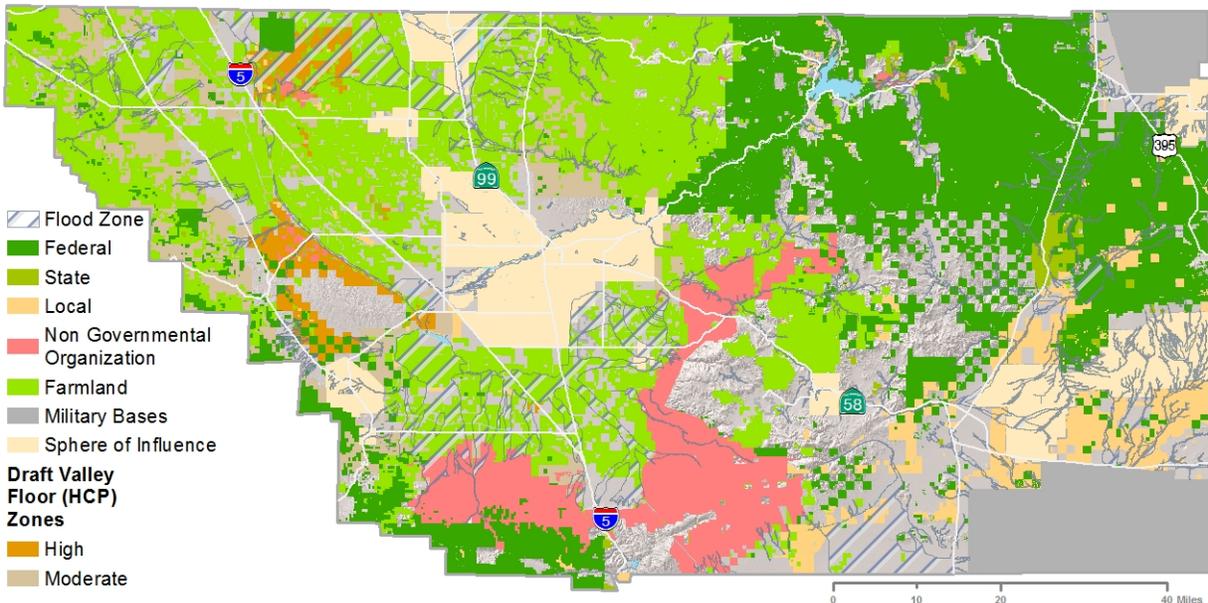
Farmland Security Zones are another vehicle to preserve agricultural and open space lands. Farmland Security Zones offer landowners greater property tax reduction than that of the Williamson Act. Land restricted by a farmland security zone contract is valued for property assessment purposes at 65% of its Williamson Act valuation, or 65% of its Proposition 13 valuation, whichever is lower. The minimum initial term for a farmland security zone contract is 20 years.

Though state subventions to backfill lost property tax revenue have been eliminated, the program is still embraced by the County and remains an important part of its farmland conservation strategy.

Recreation and Open Space

Beyond agriculture, open space includes forestry, parks, trails, and wildlife areas that provide habitat and support recreational activities, educational opportunities, and the connection and transition between built and natural environments. Kern COG's inventory of these lands currently accounts for roughly [placeholder for current acreage] acres of parks and conservation lands, including [placeholder for current acreage] acres in urban areas (Table 4-4 and Figure 4-15) [Add Table 4-4].

FIGURE 4-15: RESOURCE AREAS: FARMLAND, HABITAT, OPEN SPACE, AND GOVERNMENT LANDS 2010



Habitat

According to federal and state requirements, every land development and transportation project must mitigate, or compensate for, the effects on sensitive habitat and open space. In response to the mandate to conserve natural resources in a more systematic manner, several jurisdictions in the region have been developing habitat conservation plans (HCPs) and natural communities conservation plans (NCCPs). This section provides a summary of the status of HCPs and NCCPs in the region, although not all of these plans have been adopted or fully implemented. These plans include [Placeholder: Kern COG to confirm titles and status of each as HCP/NCCP] the Kern County Valley Floor HCP, the Metropolitan Bakersfield

HCP, the West Mojave HCP/NCCP, [Placeholder for Kern COG to add additional 26 HCPs here]. The boundaries of each of these 29 plans are depicted in Figure 4-16.

[Placeholder: Kern COG insert map of HCPs (Figure 4-16)]

During implementation of specific projects, an activity subject to Section 10 of the Endangered Species Act (ESA) and considered a covered project under the implementing rules of an adopted HCP or NCCP may be able to participate in the plan. To the extent possible, Kern COG and local jurisdictions work with federal agencies and regional partners regarding proposed development in areas containing federally or state protected natural resources. Kern COG gathers and considers information on the timing of any applicable permits and their relationship to HCP and NCCP planning efforts to feed into phasing assumptions for the RTP land use forecast. Given available data, mapping, and HCP and/or NCCP status, Kern COG recognizes the constraints imposed by the federal and state Endangered Species Laws. The ultimate resolution of the many ongoing natural resources planning efforts will have a major influence on future growth patterns in the region. The ~~land-use-forecasted development pattern~~ in this RTP considered the uncertainties associated with these ongoing efforts throughout the region. The progress of these planning initiatives will be carefully monitored, and it is expected that once the HCPs/NCCPs are adopted and being implemented, their provisions will have a significant influence on the land use forecasts in future RTPs/SCSs.

[Placeholder: Kern COG to add brief summary of 29 HCPs and their various stages in the process, similar to discussion in SACOG SCS. If possible, summarize likely impacts of RTP on HCPs, similar to discussions for agriculture and recreation.]

V. MOVING PEOPLE AND GOODS IN KERN COUNTY: A SUSTAINABLE TRANSPORTATION NETWORK

The RTP is at its core a transportation plan. The SCS seeks to better coordinate the process that Kern COG and local agencies use to prioritize long-range transportation investments by ensuring that they are aligned with ~~the forecasted development patterns regional land use planning objectives~~ which achieve RTP goals. This section discusses the following components of a sustainable transportation system to serve the needs of the Kern region:

- A revenue-constrained transportation network funded by financial resources expected between now and 2035.
- Transportation demand management (TDM) measures.
- Transportation system management (TSM) measures.
- Pricing measures.

Each of these four components is explained in further detail in Chapter 5, Strategic Investments.

Revenue-Constrained Network

Important parts of the revenue-constrained transportation network, which is described more fully in Chapter 5, Strategic Investments, include an emphasis on global gateways, a significant investment in public transit (rail and bus), and facilities that encourage walking and bicycling as forms of active transportation. The aim of these investments is to significantly increase the attractiveness of public transit, walking, and bicycling, ~~particularly in connecting centers that are planned for more compact and mixed-use development.~~ Investments in the Kern region's local streets and roads, including access to regional

airports, goods movement projects, and TDM and TSM projects and programs, also are integral to the overall transportation network.

Rail/Public Transit

The overarching goal of the rail and public transit investments detailed in the 2014 RTP is to provide high-volume rail and transit corridors to move goods and people in and through the region. The objective is to efficiently move goods to and through the region, while connecting homes to the major regional employment centers and high-speed connections to destinations beyond the region.

Rail and public transit measures identified in the 2014 RTP (see Chapter 5) include:

- 120 new buses in the region including Bus Rapid Transit, Rapid Bus, and Express Bus Service
- Extension/enhancement of transit service to new and intensified centers
- Addition of up to six passenger rail stops
- Ridesharing and voluntary employer-based incentives
- Traffic flow improvements/railroad grade separations

Park and ride lots

Bicycles and Pedestrians

Investments that promote bicycling and walking also are an important part of the revenue-constrained transportation network. In 2012, Kern COG completed the Bicycle Master Plan and Complete Streets Recommendations to enhance bike, pedestrian, and transit use of the transportation network in the unincorporated portion of Kern County. The plan calls for an additional 751 miles of new bikeways in the Kern region as well as other improvements to get the bike mode share up to 5% by 2035.

Bicycle and pedestrian measures identified in the 2012 Bicycle Master Plan include:

- 41 miles of Class I bike paths
- 291 miles of Class II bike lanes
- 287 miles of Class III bike routes
- Bike parking facilities
- 16 miles of neighborhood green streets
- Pedestrian facilities as part of local transportation projects and developments

Planned bicycle travel facility mileage by community in Kern County is provided in Table 4-5.

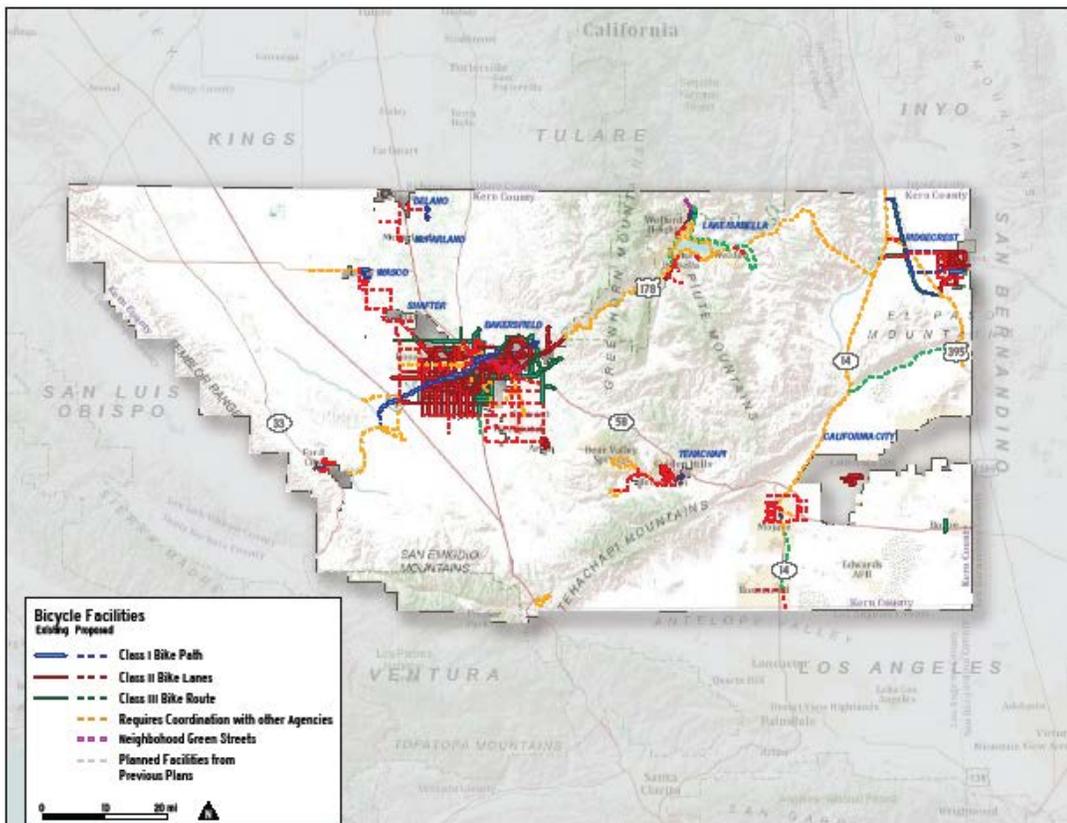
TABLE 4-5. BICYCLE TRAVEL FACILITY MILEAGE IN KERN COUNTY

	Existing	Planned
Unincorporated County	107.5	751
Arvin	6.5	22.5
Bakersfield	171	360
California City	7.5	26
Delano	0	25
Maricopa	0	0
McFarland	0	0
Ridgecrest	27	55
Shafter	6	0
Taft	7	15
Tehachapi	4.5	22
Wasco	2	12
Total	339	1,288.5

Bicycle and pedestrian measures identified in the 2014 RTP (see Chapter 5) include:

- Encourage member jurisdictions to implement their adopted local bicycle plans and to incorporate bicycle facilities into local transportation projects.
- Continue to seek funding for bicycle projects from local, state, and federal sources.
- Continue to seek funding to maintain existing bikeways.
- Promote the purchase and construction of bicycle racks and lockers for Kern County multimodal stations.
- Promote the inclusion of bike tie-downs and racks on commuter trains and buses.
- Fund updated Bicycle Facilities Plans for the incorporated cities.

FIGURE 4-17: PROPOSED BICYCLE FACILITIES IN KERN COUNTY



Highway/Road Facilities and Complete Streets

The Complete Streets Act of 2008 requires local jurisdictions in California to plan for the needs of all transportation system users with every major revision to general plan local circulation elements. Highways and roads can be designed to optimize pedestrian, bike, and transit usage. The complete streets approach affords policymakers, planners, and engineers with the opportunity to carefully evaluate and accommodate the needs of motorists, pedestrians, cyclists, transit vehicles and transit users, the young and old, and the able-bodied and physically challenged through the entire project development process. This ensures that the needs of all users of the public right-of-way are properly accommodated based on informed decisions about existing and future demand and that proper accommodations are designed into the project from the outset.

Highway/road facilities and complete streets measures identified in the 2014 RTP (see Chapter 5) include:

- As roads are maintained, bikeways should be implemented and upgraded per local development standards.
- Fund a Pedestrian Facilities Plan for the County of Kern and the incorporated cities.
- Encourage COG member jurisdictions to implement adopted local bicycle plans and incorporate bicycle facilities into local transportation projects.

Transportation Demand Management Measures

TDM measures are important in helping to improve the efficiency of the region's regional transportation system. These measures help reduce or eliminate vehicle trips during peak periods of demand. They typically offer programs and incentives to encourage the use of modes of transportation other than driving alone or to encourage people to shift their trips to times when demand on the transportation system is low. Examples of current TDM measures are employer-sponsored transportation benefits, regional transit and vanpool subsidies, and carpool and biking incentives.

TDM measures identified in the 2014 RTP (see Chapter 5) include:

- Free car-pool and van-pool programs
- Transit
- Park and ride lots
- Encourage flextime programs
- Intelligent transportation system technologies

Transportation System Management Measures

TSM measures also help to maximize the efficiency of existing and future transportation facilities. A combination of programs—including signal and ramp metering coordination and optimization, improved performance monitoring, and advanced vehicle and roadside communication platforms—will increase the ability of operators to monitor the performance of the transportation system, manage our system better, and improve efficiency.

TSM measures identified in the 2014 RTP (see Chapter 5) include:

- Carpool Facilities where appropriate
- Traffic signalization
- Ramp metering where appropriate
- Truck auxiliary lanes on major inclines
- Railroad grade separations

Pricing Measures

Pricing strategies also are used to reduce the demand on the Kern region's transportation system. On major freeway and highway facilities, HOV lanes, bus lanes, and toll lanes can be used to fund new capacity for non-single-occupant vehicle traffic. In other California regions, odometer-based tolling (i.e., a passenger vehicle travel fee) is also being considered to fund and maintain infrastructure that support goods movement activity. Variable parking cost can also be used as a strategy to reduce congestion during peak periods. The rising cost of fuel in the Kern region can act as a TSM measure.

Pricing measures identified in the 2014 RTP (see Chapter 5) include:

- Assume 50% increase in fuel and vehicle operating costs in the base run by 2025.

- Consider congestion pricing on high occupancy lanes.
- Consider truck toll lanes that use congestion pricing to encourage truck travel during off-peak hours.

VI. REDUCING GREENHOUSE GAS EMISSIONS IN KERN COUNTY

The key purpose of SB 375 and the Kern region SCS is to reduce per capita emissions originating from passenger vehicles and light trucks. This section:

- Describes sources of emissions in the Kern region, 2020 and 2035 emission reduction targets established by CARB for the San Joaquin Valley, and modeling techniques used to estimate and forecast emissions.
- Identifies statewide strategies to reduce transportation-related emissions and their anticipated effect within the Kern region.
- Identifies regional strategies that complement the SCS by reducing emissions in other sectors (e.g., energy consumption).
- Quantifies the effect of policies and programs in the RTP that reduce transportation-related emissions in the region.
- Compares the emissions reductions anticipated with implementation of the SCS with the regional targets.

Sources of Emissions

On September 23, 2010, CARB set targets for lowering emissions in the San Joaquin Valley. The targets call for a 5% reduction in per capita emissions from passenger vehicles and light trucks by 2020, and a 10% reduction by 2035 through land use and transportation planning.

[Placeholder: Kern COG to describe anticipated future emission trends between current year and 2035.]

Modeling

The process to develop the 2014 RTP and Kern region SCS was based upon modeling and the use of smart growth and sustainable development principles that have been standard planning practice in the region for some time along with an extensive public outreach process.

[Placeholder: Kern COG to describe transportation and emissions modeling process briefly. Can refer to Chapter 7 of the RTP.]

State-Level Strategies

[Placeholder: Kern COG to describe state-level strategies that supplement regional efforts to reduce transportation sectors. Include discussion of Pavley and low carbon fuel standard.]

Regional Strategies

[Placeholder: Kern COG to describe existing and proposed regional strategies that supplement SCS transportation sector efforts in other sectors—wind energy, solar energy. Discuss Kern Energy Watch regional energy efficiency planning efforts. Discuss non-passenger vehicle strategies]

Policies and Programs to Reduce Major Sources of Emissions

[Placeholder: Kern COG to identify each strategy/action item from the RTP that is used in the quantification of emissions, and identify the amount of emissions reduction attributable to each strategy/item. Suggest preparing a table, and sorting the table by measure type (land use/transportation) and sub-type (e.g., for transportation, constrained network, TDM, TSM, Pricing). Total emission reduction should be compared to target in next section.]

Comparison to Reduction Targets

[Placeholder: If SCS meets targets, Kern COG to modify the following.] The Kern region will meet established CARB targets, as shown in Table 4-6. Targets will be met by focusing housing and employment growth in urbanized areas, protecting sensitive habitat and open space, and investing in a transportation system that provides residents and workers with transportation options.

[Placeholder: Kern COG to complete Table 4-6 when data is available]

TABLE 4-6. RESULTS OF GREENHOUSE GAS EMISSIONS AND VEHICLE TRIPS REDUCTIONS

Vehicle Trips – Miles Per Capita				
	Region-Wide Projections		Change from [baseline year]	
	SB 375 (cars and light-duty trucks only)	All Vehicles	SB 375 (cars and light-duty trucks only)	All Vehicles
[baseline year]				
2020				
2035				
2040				
Carbon Dioxide (CO ₂) – Tons per Capita				
	Region-Wide Projections		Change from [baseline year]	
	SB 375 (cars and light-duty trucks only)	All Vehicles	SB 375 (cars and light-duty trucks only)	All Vehicles
[baseline year]				
2020				
2035				
2040				

In addition to the emissions reductions per capita, Kern COG has prepared an analysis of travel by subareas of the county, as summarized in Table 4-7..

TABLE 4-7. ANALYSIS OF TRAVEL BY COUNTY SUBAREA

Subarea	Vehicle Trips (in miles)	Percentage of Region-Wide Vehicle Trips (in miles)	Population	Per-Capita Vehicle Trips (in miles)
Delano	793,276	3.2%	68,409	11.60
Wasco	1,797,255	7.3%	37,171	48.35
Taft	1,298,015	5.3%	26,701	48.61
Tehachapi	<u>1,578,409</u>	<u>6.4%</u>	<u>62,060</u>	<u>25.43</u>
Metro Bakersfield	15,739,254	64.0%	904,219	17.41
Southeast Kern	1,801,465	7.3%	76,034	23.69
Lake Isabella	570,955	2.3%	30,171	18.92
Indian Wells Valley	449,367	1.8%	45,025	9.98
<u>Frazier Park</u>	<u>578,429</u>	<u>2.4%</u>	<u>13,627</u>	<u>42.45</u>
Kern County	24,606,424	100.0%	1,263,417	19.48

[Placeholder: Kern COG to include an explanation of Table 4.3 Analysis of Travel by County Sub-Area following table.]

VII. INCENTIVES AND OTHER APPROACHES

The Kern Region SCS provides for an incentive based approach to help achieve the state greenhouse gas emission goals. This section:

- Describes steps Kern COG and local jurisdictions in Kern County will take to implement the SCS.
- Outlines new CEQA streamlining and other key local provisions afforded to projects that meet certain criteria established in the SCS.

Promoting Sustainability through Incentives and Collaboration

The 2014 RTP is first and foremost a transportation plan. However, the transportation network and ~~forecasted development growth~~ patterns envisioned must complement each other. Integration of transportation and land use is essential for improved mobility and access to transportation options.

SB 375 calls for the integration of ~~forecasted development patterns land use policies~~ with transportation investments and asks that MPOs identify, quantify, and highlight co-benefits throughout the process. SB 375 provides CEQA incentives for development projects that are consistent with the regional SCS and help meet GHG emissions reduction targets. ~~Lead agencies (including local jurisdictions) maintain the discretion and will be solely responsible for determining consistency of any future project with the SCS.~~ Kern County and the cities maintain their existing authority over local planning and land use decisions, including discretion in certifying the environmental review for a project, regardless of eligibility for streamlining.

To achieve the goals of the 2014 RTP, public agencies at all levels of government may implement a wide range of strategies that focus on four key areas:

- A ~~forecasted land use and~~ development pattern that accommodates the region's future employment and housing needs, especially in rural, outlying areas while protecting habitat and resource areas.
- A transportation network that consists of public transit, highways, local streets, bikeways, and walkways.
- TDM measures that reduce peak-period demand on the transportation network.
- TSM measures that maximize the efficiency of the transportation network.

The following tables list specific implementation strategies that local governments, Kern COG, and other stakeholders may consider in order to successfully implement the SCS.

[Placeholder: Kern COG to develop tables similar to SCAG SCS Tables 4.3-4.6 (p. 152-156), with one table tied to each of the bullet points listed above. ~~Tables should identify proposed SCS Actions and responsible party(ies) for implementation.~~]

SB 375 Streamlining the CEQA Process

SB 375 provides incentives in the form of CEQA streamlining to encourage community design that supports reductions in per capita emissions. Generally, two types of projects are eligible for streamlined CEQA review once a compliant RTP has been adopted: (1) residential/mixed-use projects (consistent with the SCS) or (2) a transit priority project (TPP).

Residential/Mixed-Use Projects

Residential and mixed-use projects that are consistent with the SCS qualify for streamlined CEQA review if at least 75% of the total building square footage consists of residential use (or a project that is a TPP). If a project meets these requirements and is consistent with the use designation, density, building intensity, and applicable policy of the SCS, any environmental review conducted will not be required to discuss growth-inducing impacts, any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project upon its completion on climate change or the regional transportation network, or a reduced-density alternative.

Transit Priority Projects

A TPP is eligible for CEQA streamlining if it is consistent with the SCS, contains at least 50% residential use, is proposed to be developed at a minimum 20 dwelling units per acre, and is located within a half-mile of a major transit stop or high-quality transit corridor that is included in the RTP.

If a project meets these criteria, it may be analyzed under a new environmental document created by SB 375, called the Sustainable Communities Environmental Assessment, or through an environmental impact report for which the content requirements have been reduced. Alternatively, a TPP can be considered a Sustainable Communities Project and be eligible for a new full CEQA exemption if it further meets the additional requirements beyond the base criteria.

Kern COG staff may provide a lead agency at the time of its request readily available data and documentation to help support its finding upon request.

Other CEQA Streamlining Strategies

CEQA guidelines section 15332 for In-Fill Development Projects is used extensively by the local governments in Kern as an exemption for approving infill development. The guidelines state that “*class 32 consists of projects characterized as in-fill development meeting the conditions described in this section.(a) The project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations.(b) The proposed development occurs within city limits on a project site of no more than five acres substantially surrounded by urban uses.(c) The project site has no value, as habitat for endangered, rare or threatened species.(d) Approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality.(e) The site can be adequately served by all required utilities and public services.*” This CEQA exemption coupled with other infill incentives are providing significant opportunities for infill development in Kern.

Transportation Impact Fee Infill Incentive Zones

Both Tehachapi and Bakersfield have jointly adopted transportation impact fees for new development in the greater Tehachapi and Bakersfield areas. Both impact fee ordinances have identified core areas where the impact fee is half what the fee is on the periphery of the community. The incentive takes into account the higher cost of providing infrastructure on the periphery of a community while providing a financial incentive for infill development.

Indirect Source Review (ISR) Rule

The San Joaquin Valley Air Pollution Control District is the only region in the State that has implemented a rule to require new development to pay a fee for offsite travel emissions. Called the indirect source review (ISR) rule, the fee uses a modeling tool call URBEMIS to quantify emissions from a proposed development. The tool can account for the incorporation of pedestrian, bike, transit and other strategies to reduce travel. Developments that are successful in providing these strategies could receive reductions or elimination of the fee. This incentive is already resulting in new developments that are designed to be more pedestrian, bike and transit friendly in the Kern region.

Project Selection Criteria

The 2012 update to the Kern COG policy for the project selection process incorporates additional Kern Regional Blueprint growth management and SB 375 SCS framework concepts into the project selection process to:

- Influence local government land use policy by giving priority to transportation projects that reduce vehicle miles traveled (VMT) and/or promote livable communities or transit oriented development (TOD) as applicable;
- Leverage additional funding sources, including new funding sources, by modifying project performance measurement requirements for large projects to allow them to better compete for state and federal discretionary funds.

Table 4-8 summarizes consistency between the goals of the Kern COG RTP and the performance measures/outcomes of the Kern COG funding programs included in this document. The table also demonstrates that all programs include performance measures and outcomes that give priority to projects that reduce VMT, reduce emissions and improve livability consistent with SB 375.

Table 4-9 illustrates the consistency between the project selection criteria outcomes from the various Kern COG funding programs with the Kern COG SCS Framework Strategies.

TABLE 4-8. CONSISTENCY OF RTP GOALS WITH PERFORMANCE MEASURES/OUTCOMES

Funding Programs	KCOG RTP Goals							
	SB 375-Related Outcomes			Congestion Relief	Cost-Effectiveness	Safety	Sustainability/State of Good Repair	Economic Well-Being
	VMT Reduction	Emissions Reduction	Livability ¹					
RTIP	✓	✓	✓	✓	✓	✓	✗	✓
RSTP		✗					✗	✗
CMAQ	✓	✓	✓	✓	✓	✓		✗
TE	✗	✗	✗	✗		✗		
TDA	✓	✓	✓	✓		✓	✗	

✓ = Performance measure included in the project ranking criteria
 ✗ = Outcomes derived from eligible projects

¹ Livability includes enhancing or reducing the average cost of user mobility through the creation of more convenient transportation options for travelers; improving existing transportation choices by enhancing points of modal connectivity, increasing the number of modes accommodated on existing assets, or reducing congestion on existing modal assets; improving travel between residential areas and commercial centers and jobs; improving accessibility and transportation services for economically disadvantaged populations, non-drivers, senior citizens, and persons with disabilities, or make goods, commodities, and services more readily available to these groups.

TABLE 4-9. CONSISTENCY OF SCS FRAMEWORK STRATEGIES WITH FUNDING PROGRAM OUTCOMES

Outcomes from KCOG Transportation Funding Programs	KCOG SCS Framework Strategies																		
					Road		Transit			Pricing			TDM						
	Modify Distribution of households, population, and jobs	Rebalance the mix of land uses	Increase the level of density	Improve the pedestrian environment	Add HOV lanes	Implement ITS / Traffic management	Add general purpose roadway lanes	Construct new transit lines	Increase transit service	Upgrade transit service	Improve accessibility	Develop tolls and toll roads	Implement HOT lanes	Increase the cost of parking	Change in transit fares	Change in auto operation cost	Promote car/vanpooling, telecommuting/teleconferencing	Promote walking and biking	Implement employer-based trip reduction strategies
VMT Reduction				✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Emissions Reduction				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Livability				✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
Congestion Relief				✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cost-Effectiveness				✓	✓	✓	✓	✓	✓	✓		✓					✓	✓	✓
Safety				✓	✓	✓	✓					✓						✓	✓
State of Good Repair				✓	✓	✓	✓		✓								✓		✓
Economic Well-Being					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				

In addition to providing performance measures that reward projects that further the goals of SB 375, the new project selection process includes “Regional Priorities and Equity Guidance” that provides for a financial incentive for safety and connectivity projects in resources areas for by targeting 40% of the Regional Improvement Program funding for rural resource areas consistent with sec. 65080(b)(4)(C) of SB 375.

Community Travel Feedback Monitoring System

The Kern Transportation Modeling Committee developed an innovative tool to track progress toward the California SB 375 related passenger vehicle and light duty truck travel. The process incorporates a feedback by community and sub area of the county to track progress on reducing travel per capita. Kern COG will provide updated travel statistics by community for the Kern region. The Transportation Modeling Committee and the Regional Planning Advisory Committee envision a method to assist communities that are having difficulty reducing emissions per capita. This method may be developed in future cycles of the Regional Transportation Plan.

VIII. A GREAT START: SUSTAINABLE COMMUNITY SUCCESS STORIES

In order to help demonstrate our region’s extensive efforts to comply with state climate change goals, Kern COG has identified activities that demonstrate the progress our member agencies have made toward achieving SB 375 goals. The following is a compilation of these success stories: [Placeholder: Add map of Success Stories]

- Tehachapi General Plan (Form-Based Code, Mobility Element, Town Form Element, Transect Zone)
 - Transportation Impact Fee Core Area (City of Bakersfield and City of Tehachapi)
 - City of Ridgecrest General Plan and Circulation Element
 - City of Ridgecrest Park and Ride Facility
 - City of Ridgecrest Street Signalization
 - Metropolitan Bakersfield General Plan Sewer Policies
 - City of Bakersfield Minimum Lot Area Zoning
 - San Joaquin Valley Air District’s Indirect Source Review
 - City of Bakersfield Redevelopment Projects
 - Transit Priority Areas
 - Metropolitan Bakersfield General Plan Centers Concept
 - Commuter Rail Feasibility Study
 - Rideshare Program
 - Park and Ride Lots
 - GET Short-Term Service Plan (2012–2020)
 - GET X-92 Route Commute Kern – Dial-A-Ride and Local Transportation Services
 - Kern County Bicycle Master Plan & Complete Streets Recommendations/City of Tehachapi Bicycle Master Plan
 - City of Bakersfield Bicycle Facilities
 - Kern County 511
 - Cal Vans
 - San Joaquin Valley Blueprint Integration Project
 - Caltrans Vehicle Detection System
 - California Highway Patrol’s Safety Corridors
 - Kern County Wind Farm Area
 - Purchase of CNG Buses
 - The Electric Cab Company of Delano
 - [Shafter](#) Intermodal Rail Facility Expansion
 - Downtown Elementary School Expansion (Bakersfield)
 - Intersection Signalization
 - Traffic Control Devices
- Kern Regional Energy Action Planning