Kern Council of Governments' 2014 Sustainable Communities Strategy

ARB Staff Technical Evaluation

July 23, 2015

California Environmental Protection Agency

Air Resources Board

Overview

- Greenhouse gas reduction targets for the Kern region
  - 5 percent per capita in 2020
  - 10 percent per capita in 2035

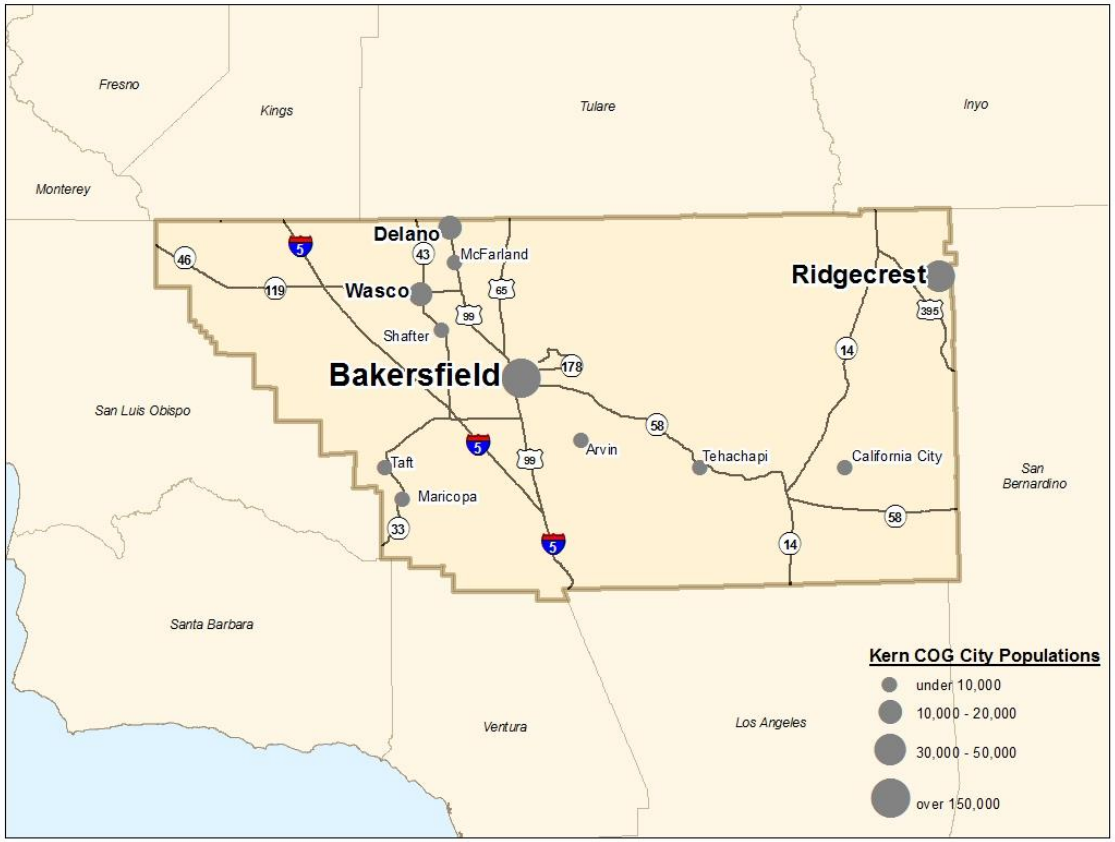
- KernCOG's RTP/SCS calls for a more sustainable growth pattern
  - Growth in existing urban areas
  - More jobs and housing near transit
  - More funding for transit and active transportation

Kern County

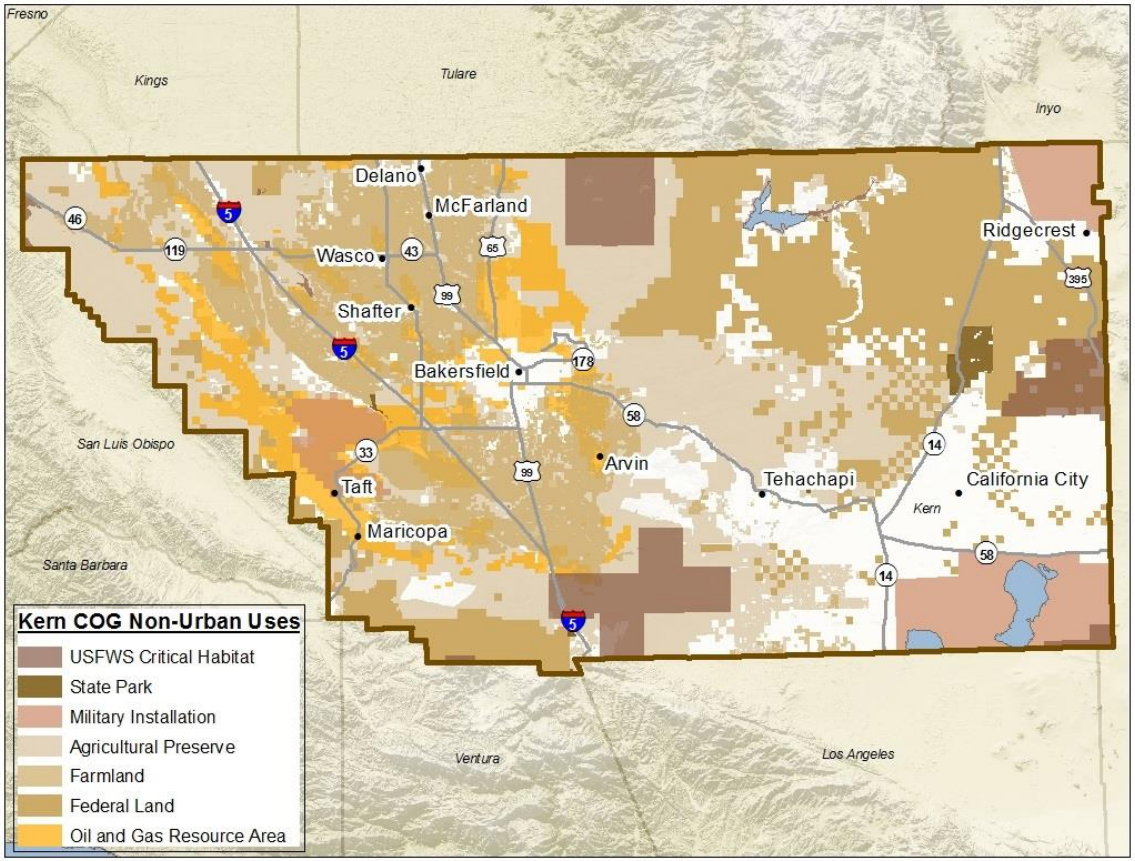
- Largest county in the San Joaquin Valley
- Interstate 5, Highway 99 are major transportation corridors and freight routes
- Almost one-fourth of jobs are in agriculture or resource extraction

Population Centers

- Total county population is almost 850,000
- Over 60 percent of the population lives in Metropolitan Bakersfield



Land Use



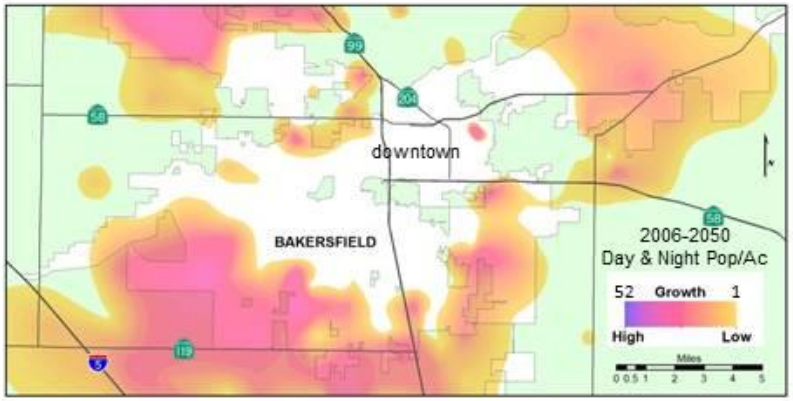
- Over 70 percent of land area is dedicated to non-urban uses
- Eleven cities make up almost 6 percent of the land area

2014 SCS Key Strategies

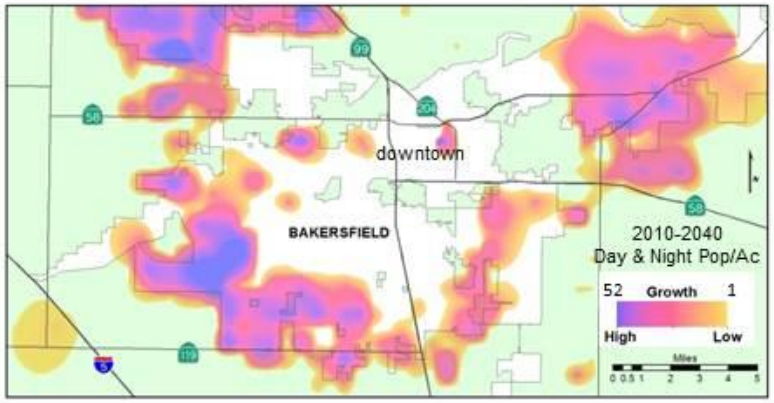
- Land Use
  - Increase infill in existing urban areas
  - More compact and transit oriented development
- Transportation
  - Over 700 miles of new bike lanes
  - Additional express and rapid bus routes
  - Additional bus transfer stations
- Transportation Demand Measures
  - Expand vanpools
  - Add capacity at park-and-ride lots
  - HOV lanes

Change in Population Density

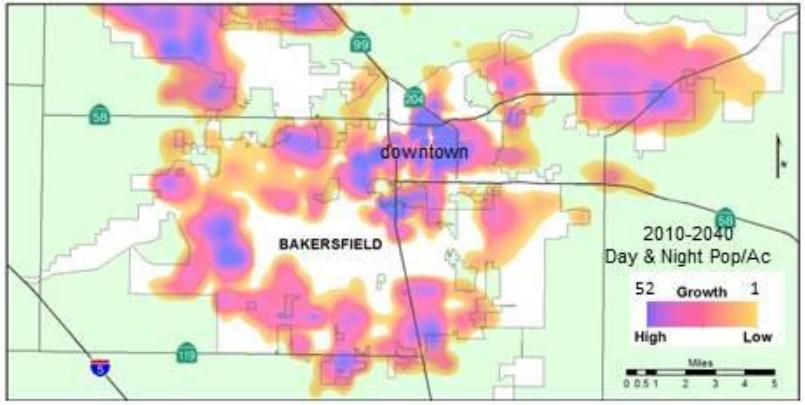
2006



2011 RTP



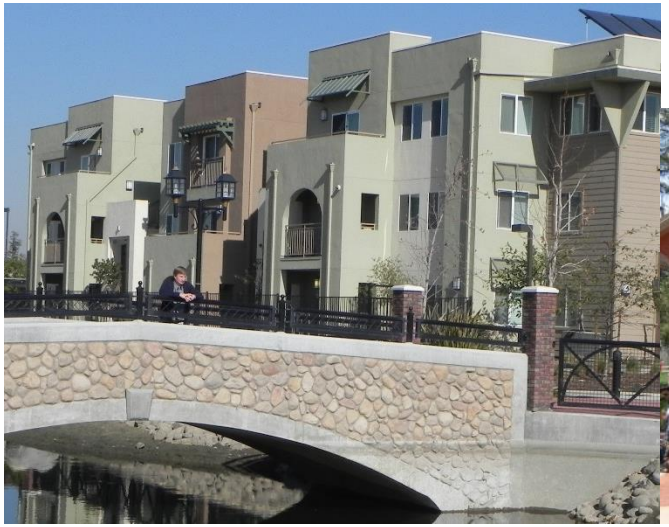
2014 SCS



Examples of Sustainable Development

Baker Street Mixed Use

Bakersfield Arts Alive District



Mill Creek District

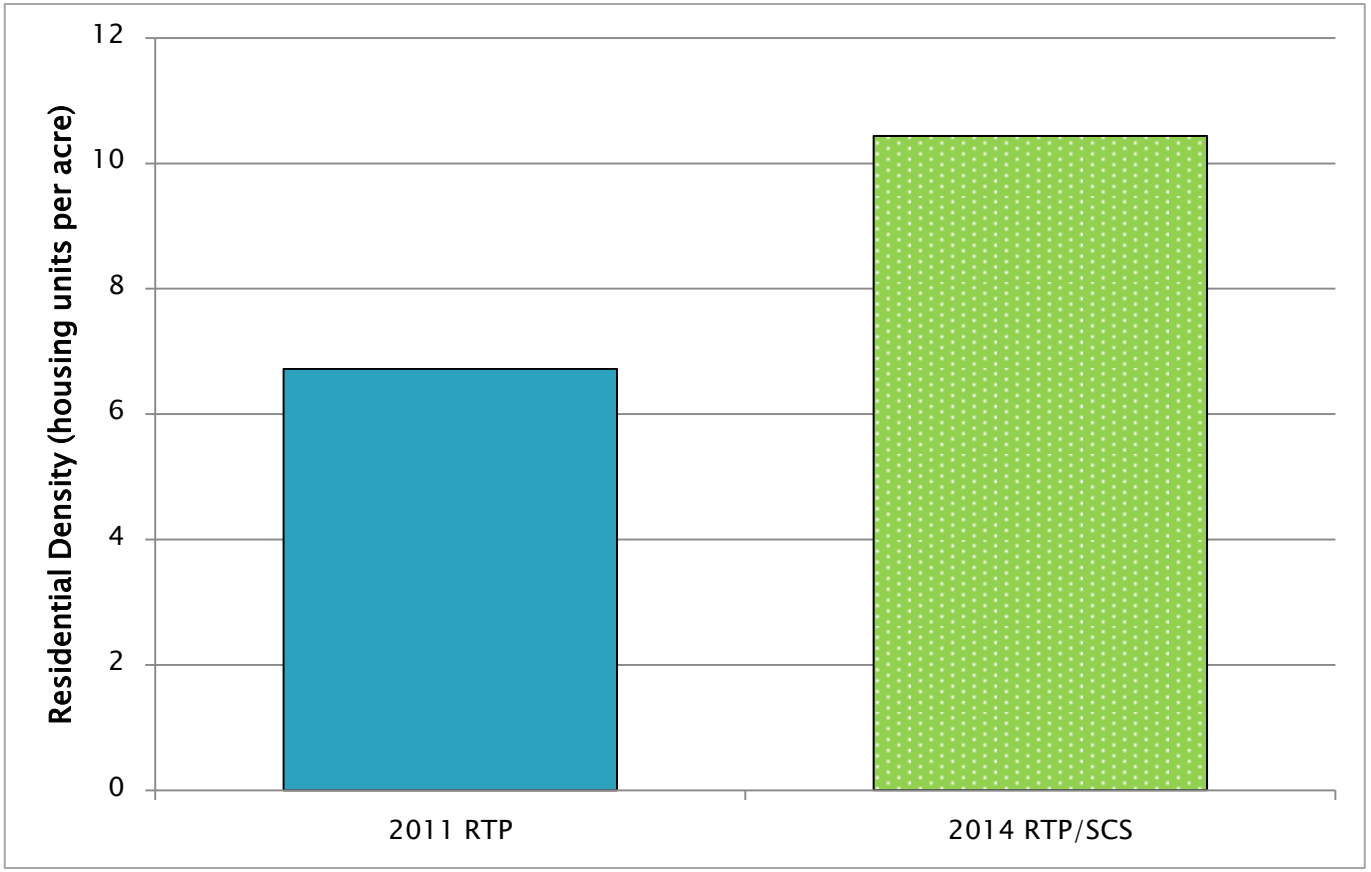
State Funding for Implementation

- Cap-and-Trade Proceeds
  - Strategic Growth Council funding for implementation of sustainable communities projects
  - Caltrans funding for transit operations, facility, and fleet improvements
- Caltrans Grant Programs
  - Funding for pedestrian infrastructure improvements
  - Pilot program for meeting rural transit needs, jointly conducted by Valley MPOs and UC Davis

Technical Performance and Evaluation

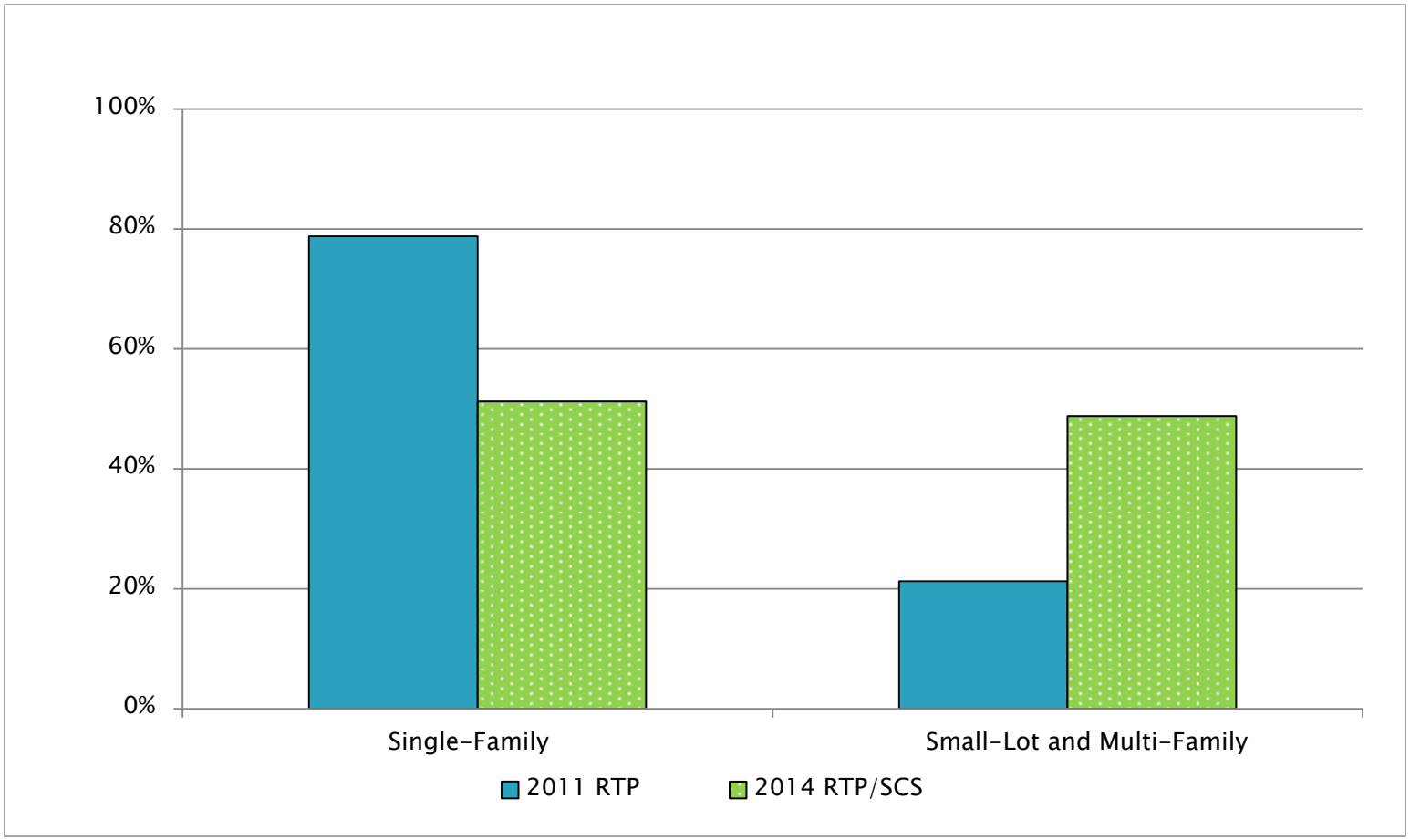
Increased Residential Density by 2035

Based on New Development in Metropolitan Bakersfield

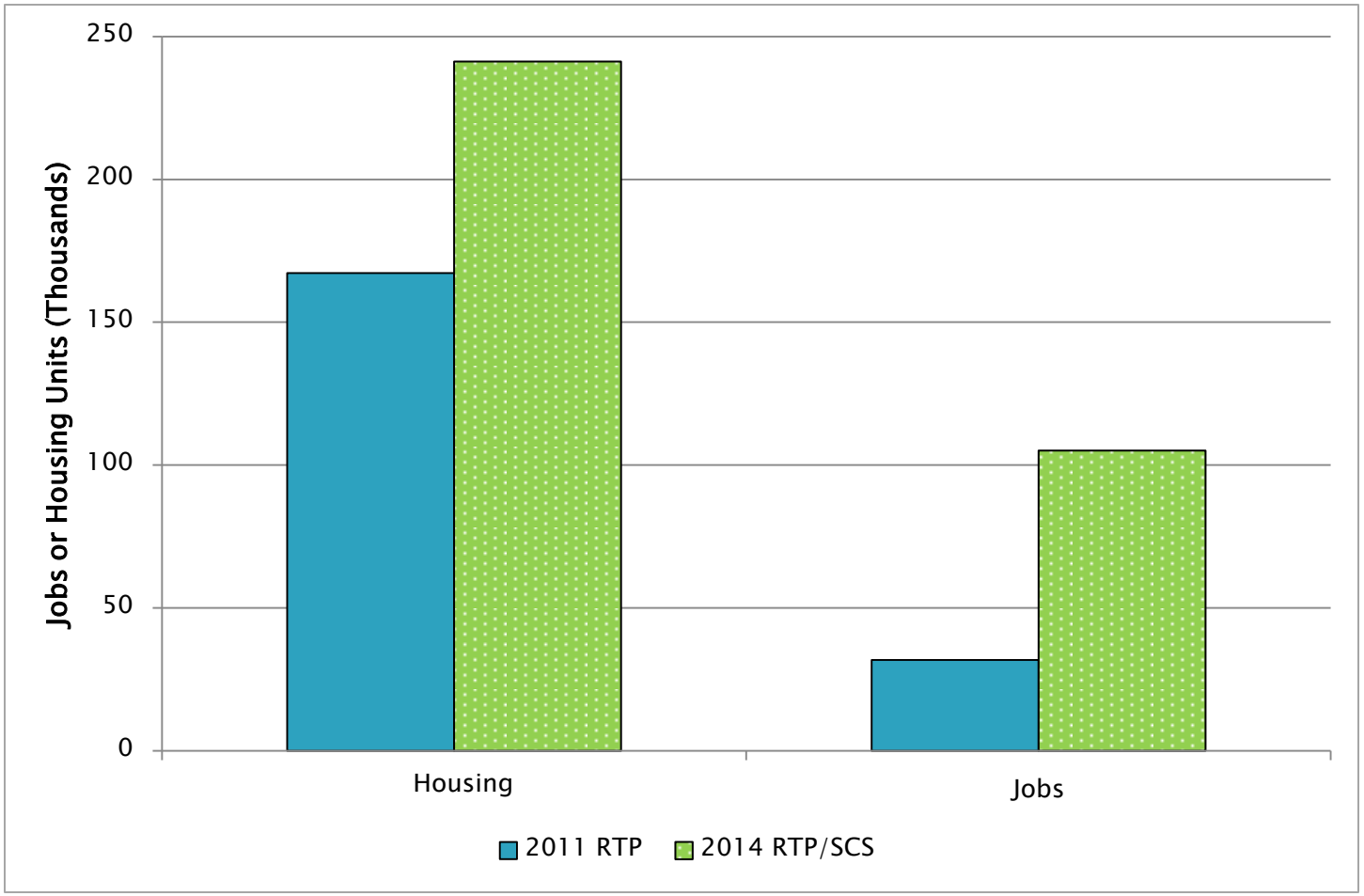


Increase in Multi-Family Housing by 2035

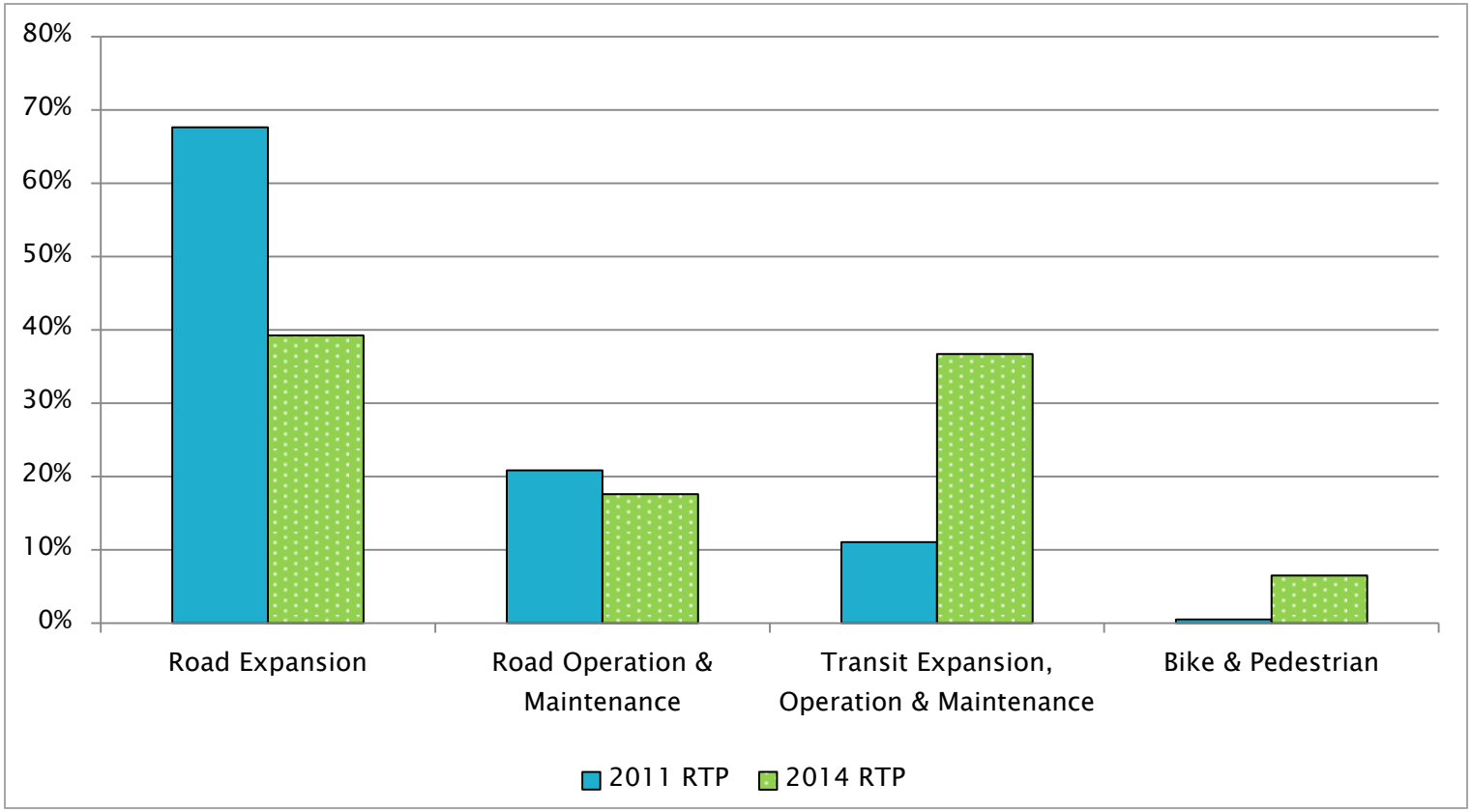
Based on New Development in Metropolitan Bakersfield



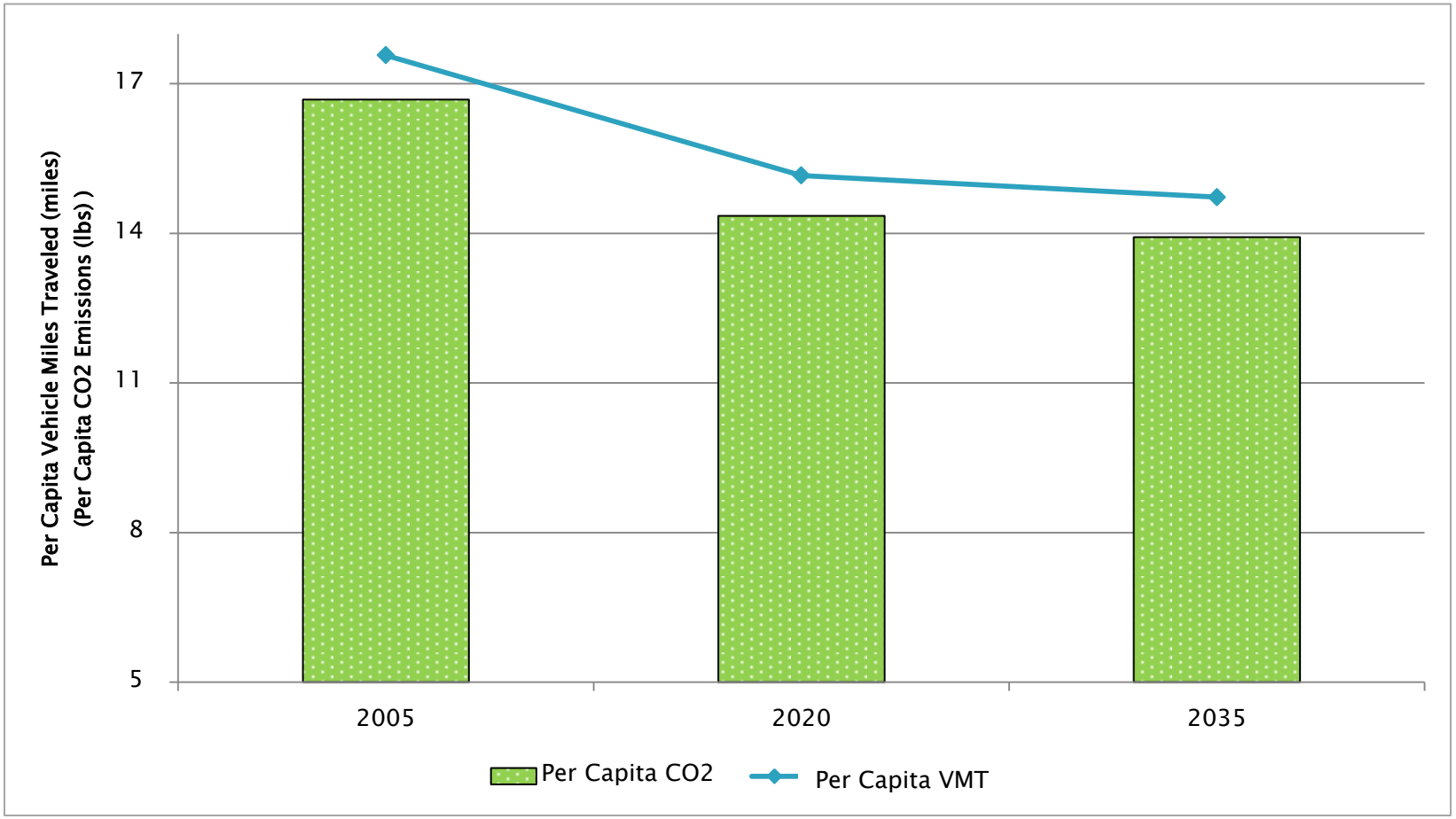
More Jobs and Housing Near Transit by 2035



Greater Investment in Transit and Active Transportation by 2040



Decrease in Per Capita VMT and CO2



Modeling Tools & Assumptions

- Similar to travel models of other Valley MPOs
- UPlan was used to evaluate alternative land use patterns
- KernCOG assumptions are comparable to those of other MPOs
  - Including auto operating cost and economic activity
- ARB evaluation included running KernCOG's model

Model Sensitivity

- ARB and KernCOG staff collaborated on designing and running five sensitivity tests
  - Auto operating cost
  - Transit frequency
  - Residential density
  - Proximity to transit
  - Household income
- The model response is comparable to empirical data

Staff Recommendation

- Staff recommends that the Board accept KernCOG's determination that its 2014 RTP/SCS, if implemented, would meet the region's per capita GHG emissions reduction targets for 2020 and 2035