

San Joaquin Council of Governments'

2014 Sustainable Communities Strategy

ARB Staff Technical Evaluation

May 21, 2014

California Environmental Protection Agency

 **Air Resources Board**

San Joaquin Council of Governments' 2014 RTP/SCS

- ▶ Reduction targets for SJCOG region are five and ten percent per capita in 2020 and 2035
- ▶ SJCOG's 2014 RTP/SCS calls for a more sustainable growth pattern
 - Higher density
 - More mixed-use and infill development
 - More funding for transit and active transportation
- ▶ The SCS reflects policies in recently updated local general plans and sustainability plans

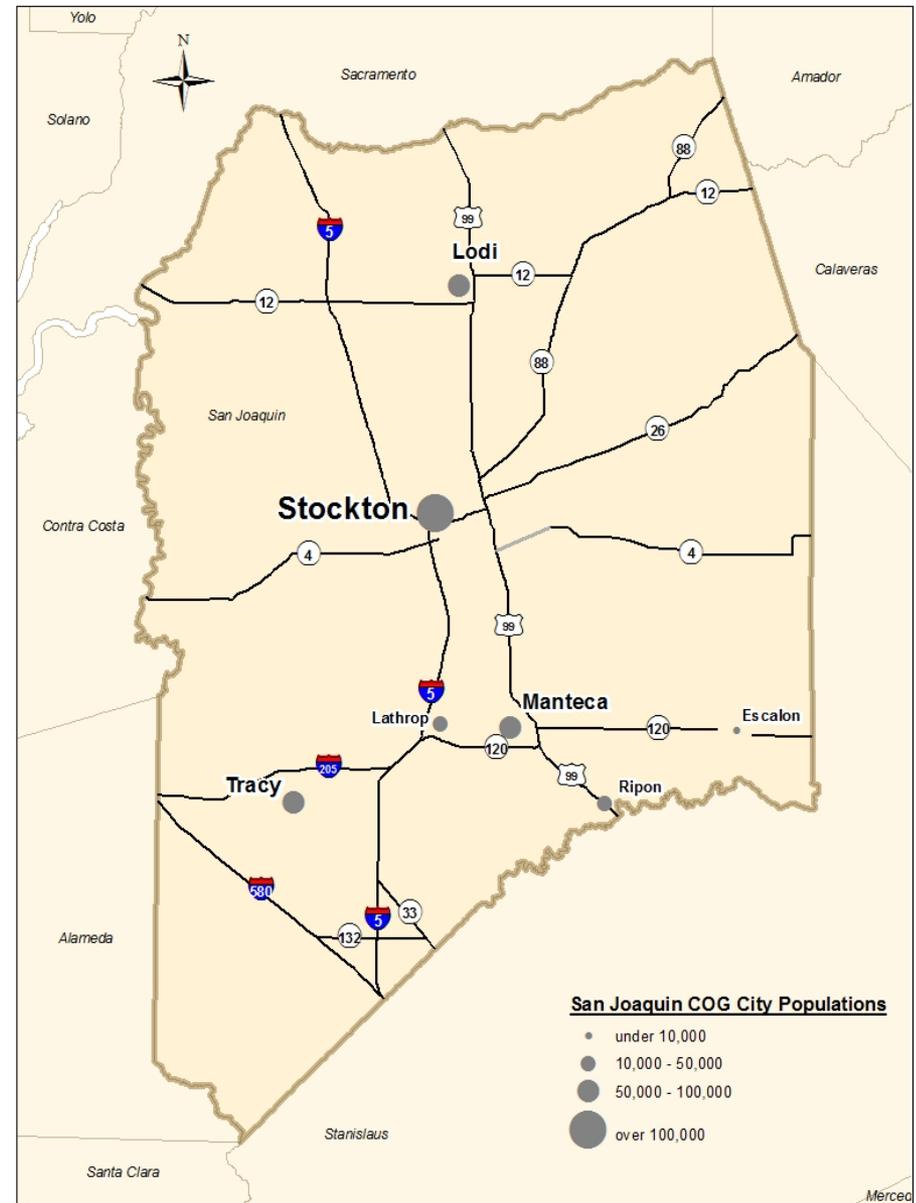
San Joaquin County

- ▶ Northernmost Valley county, adjacent to Bay Area and Sacramento
- ▶ Seventy-five percent of land is used for agriculture
- ▶ I-5 and Hwy 99 are major freight routes
- ▶ Significant amount of commute traffic to neighboring counties



Population Centers

- ▶ Total county population is about 700,000
- ▶ Seven cities, of which Stockton is the largest
- ▶ Twenty percent of the population in unincorporated communities



Key Strategies in 2014 SCS

- ▶ Promote mixed-use, infill development
- ▶ Increase the amount of multi-family housing
- ▶ Encourage transit-oriented development
- ▶ Add six bus rapid transit (BRT) lines
- ▶ Build over 800 miles of new bikeways
- ▶ Implement transportation demand measures such as carpooling and vanpooling

Examples of New Compact Development



Grand View Village



Anchor Village



Cal Weber 40

Expanding Successful BRT System

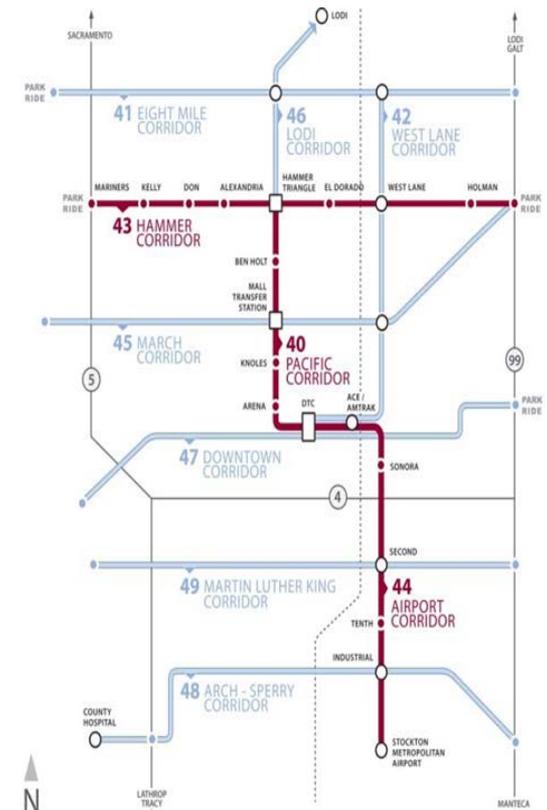
- ▶ Three existing BRT routes with largest bus ridership in the county
- ▶ Ridership increased from 213,000 in 2007 to almost 2 million in 2013



Proposed BRT SYSTEM MAP

- Transfer Station
- Transfer Point
- PARK RIDE Park-N-Ride Location
- BRT Phases I & II
- BRT Phase III
- Future BRT Corridor Under Review

Revised April 12, 2012

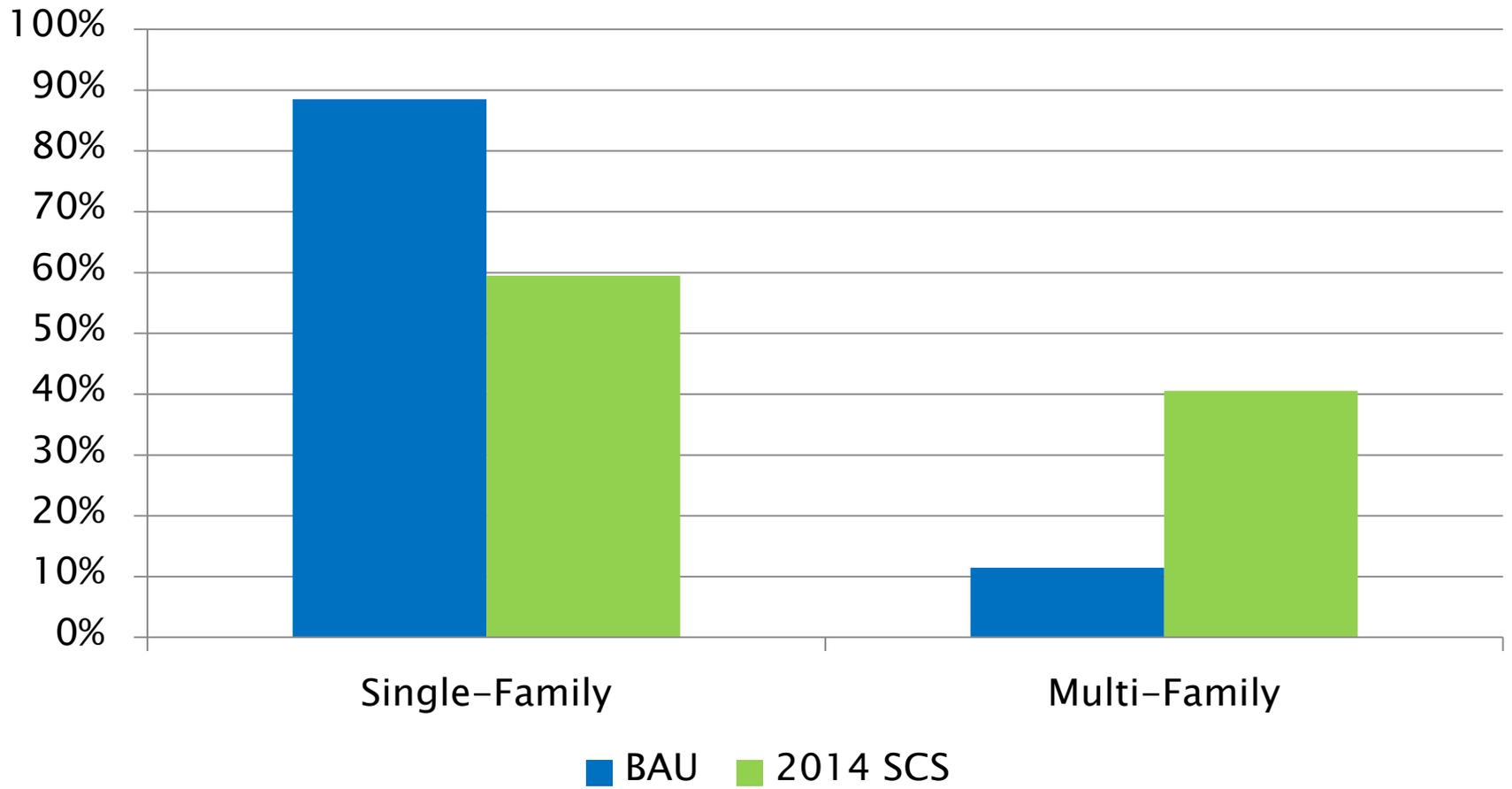


metro *Express*

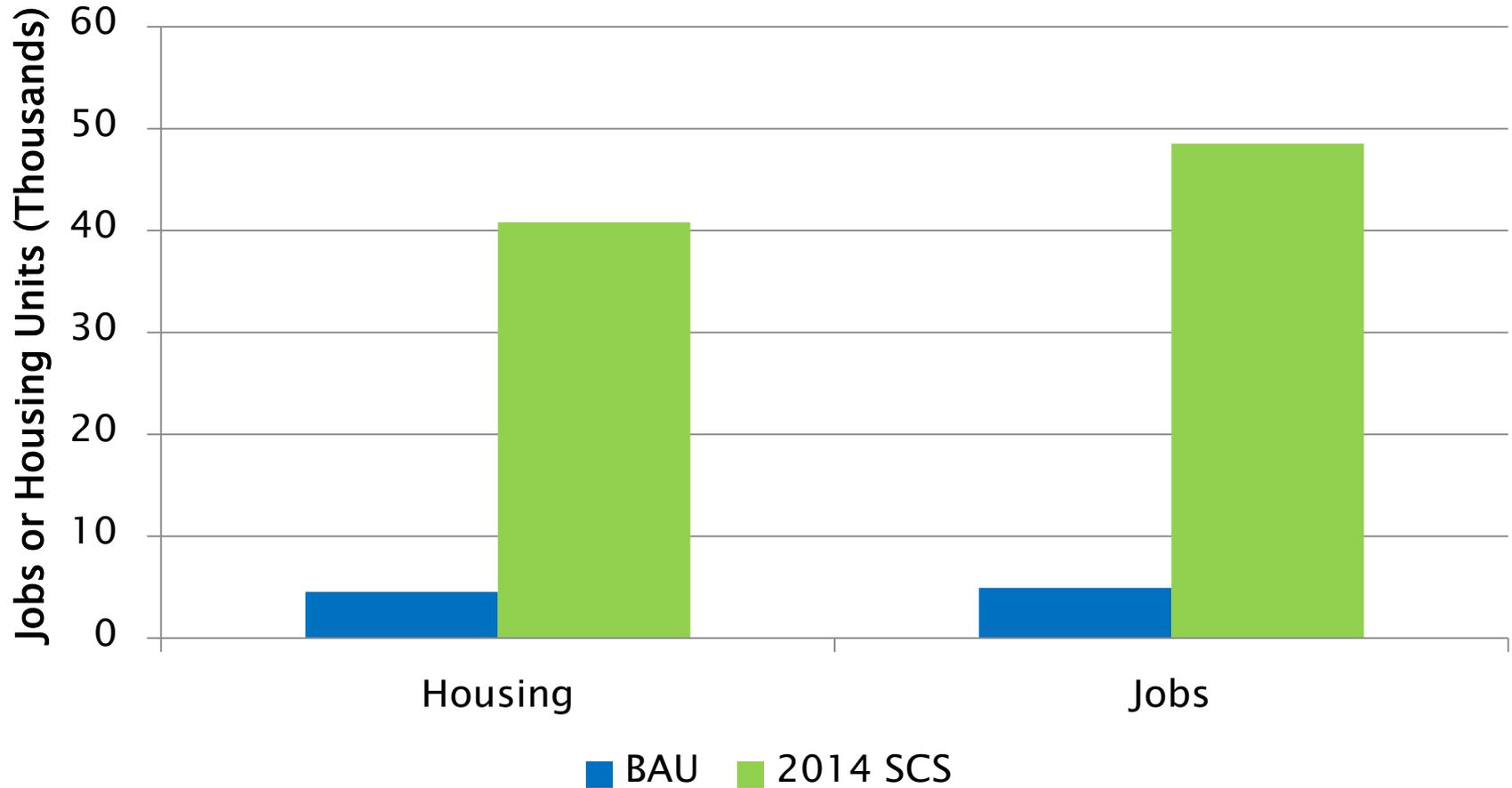


Technical Performance and Evaluation

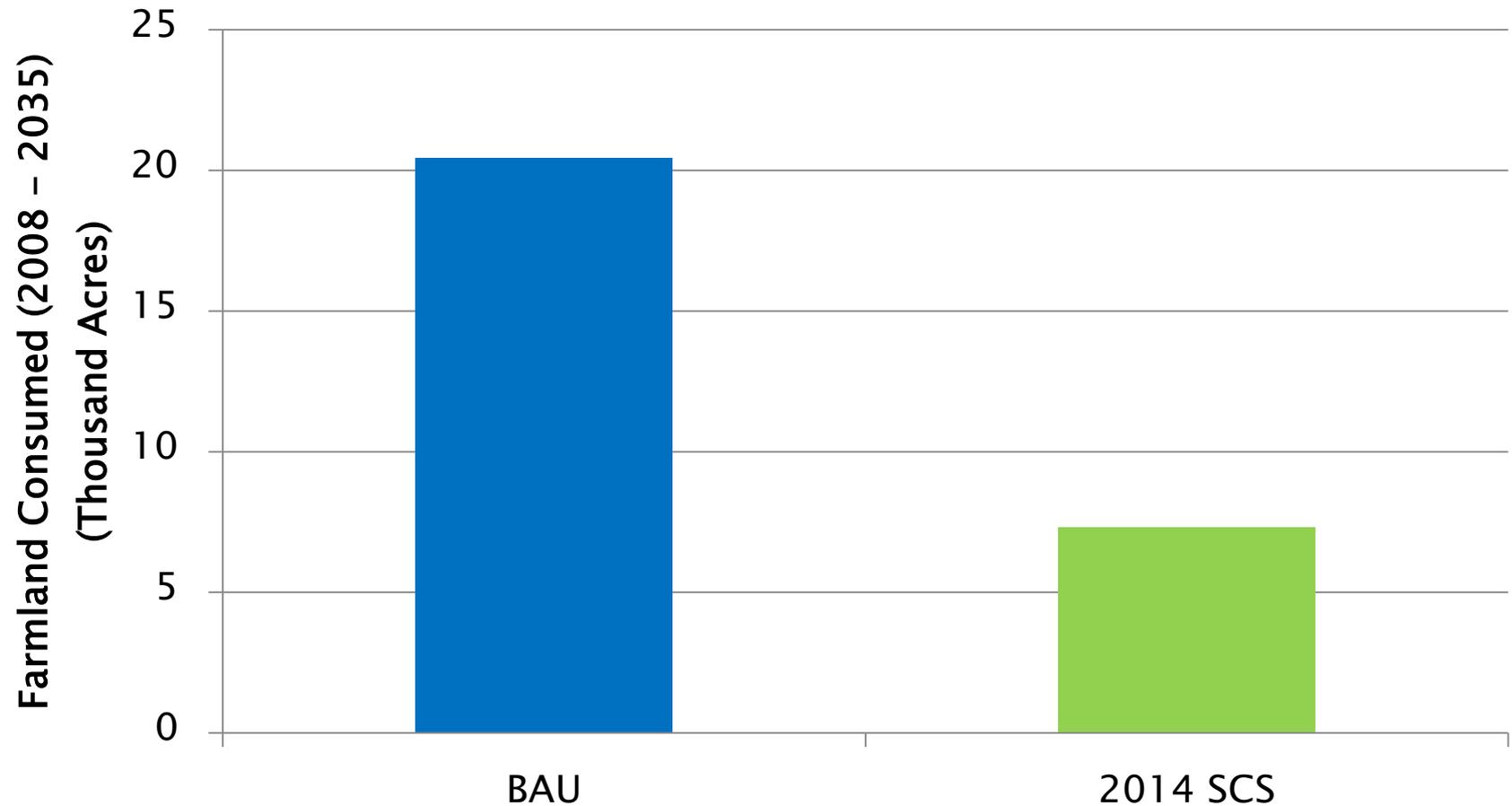
Increase in Multi-Family Housing in 2035



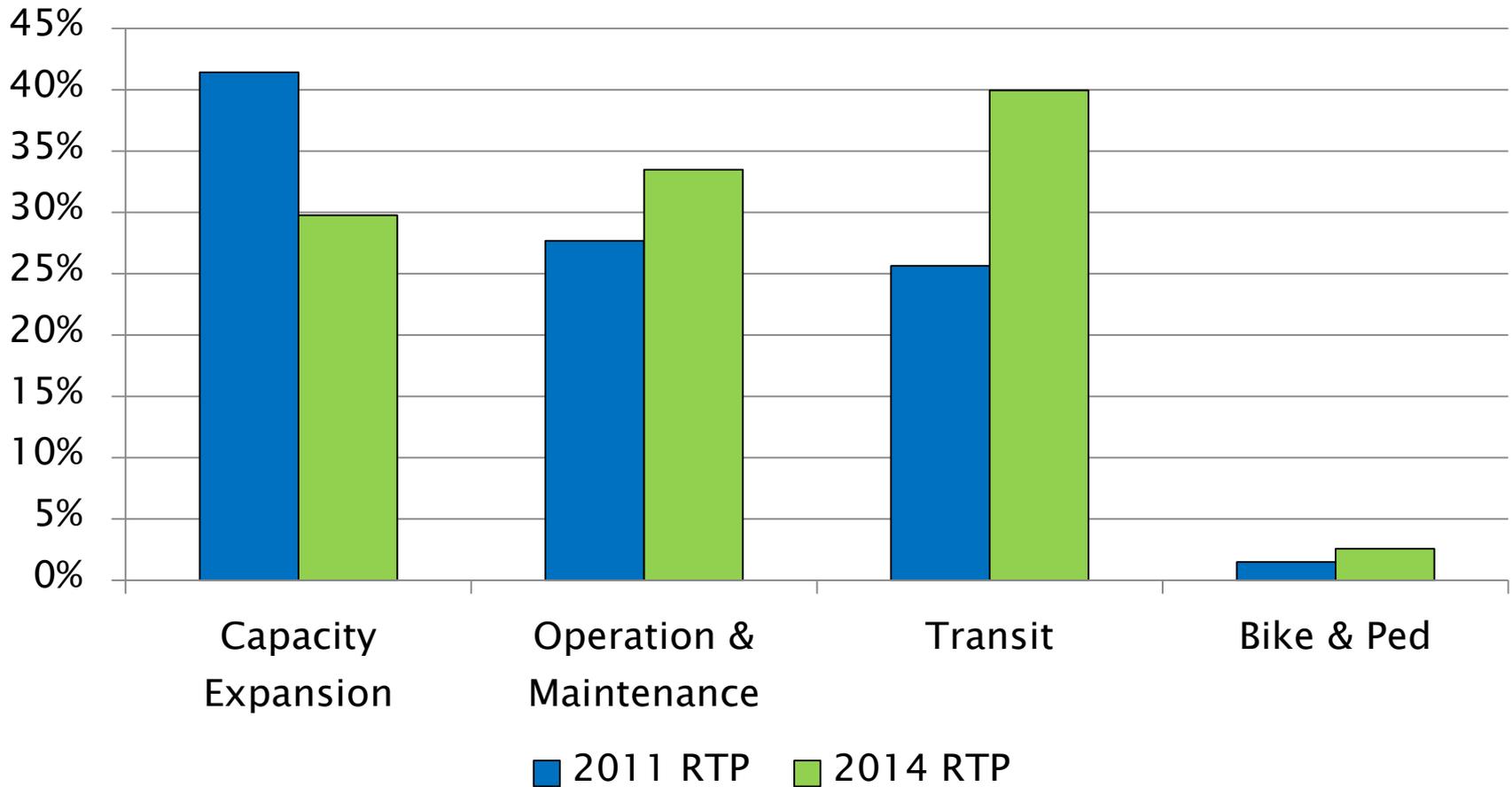
More New Housing and Jobs Near Transit in 2035



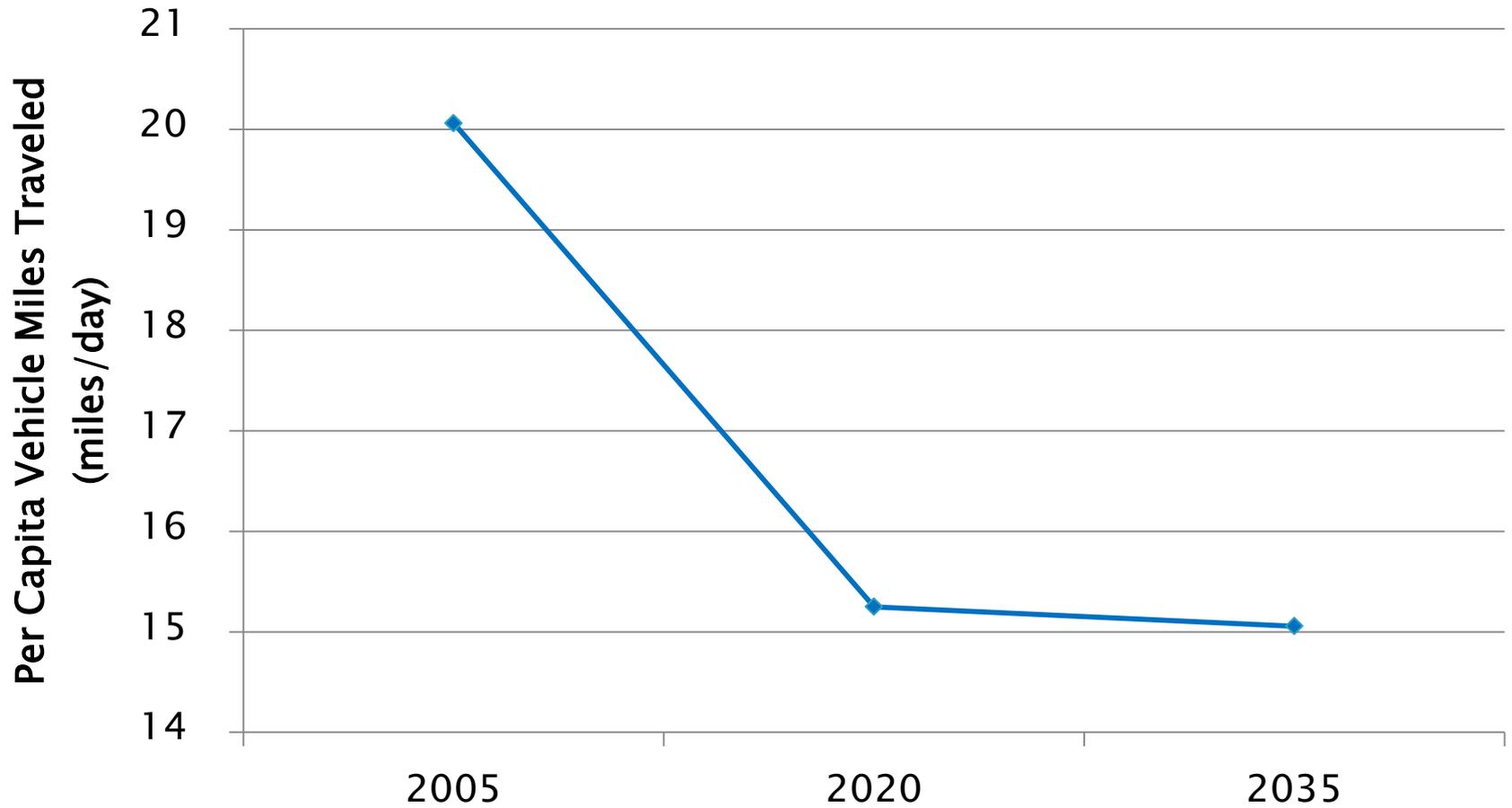
Less Farmland Consumed in 2035



Greater Investment in Transit and Active Transportation



Decrease in Per Capita VMT



ARB Technical Review Methodology

- ▶ Staff's evaluation focuses on four core aspects of the model
 - Modeling tools
 - Model inputs and assumptions
 - Model sensitivity to SCS strategies
 - Performance indicators

Modeling Tools and Assumptions

- ▶ Single model for three northern SJV counties
- ▶ Similar to travel models of other Valley MPOs
- ▶ Envision Tomorrow used to evaluate alternative land use patterns
- ▶ SJCOG assumptions are comparable to those of other MPOs
- ▶ ARB evaluation included running SJCOG's model

Model Sensitivity

- ▶ ARB and SJCOG 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

Sensitivity to Interregional Travel

- ▶ SJCOG's estimated per capita GHG reduction in 2035 is large compared to other MPOs
- ▶ The region has significant interregional travel
 - Major north-south corridors carry large volumes of pass-through traffic
 - Proximity to major job centers increases commute travel
- ▶ Proportion of interregional travel an important factor in GHG quantification

Results of Interregional Travel Sensitivity Test

- ▶ ARB staff ran the model to evaluate sensitivity to interregional travel data
- ▶ Smaller proportion of interregional travel in sensitivity test lowered the per capita VMT reduction
- ▶ Staff concludes that the nature of SCS strategies, performance indicators, and model sensitivity tests provide weight of evidence that SJCOG would achieve targets

Staff Recommendation

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