UPDATE ON SUSTAINABLE COMMUNITIES STRATEGIES (SB 375)

September 22, 2011
Purpose of Today’s Presentation

• Brief the Board on SANDAG’s draft SCS
• Describe staff’s evaluation methodology and results
• Provide recommendations
• Report on SCS development in other regions
SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT OF 2008

Senate Bill 375
ARB’s Role Under the Sustainable Communities Act of 2008

- ARB to set and periodically update GHG targets for 2020 and 2035
- Review MPO technical methodologies
- Accept/reject an MPO’s determination that its SCS would, if implemented, achieve its targets
SANDAG’S RTP & SUSTAINABLE COMMUNITIES STRATEGY
SAN DIEGO ASSOCIATION OF GOVERNMENTS (SANDAG)
2050 Regional Transportation Plan

- Development began prior to targets
- Significant model and policy development work over the past two years
- Builds on over 30 years of planning
Foundational Plan Elements

- Protection of sensitive habitat
- Region2020 growth management strategy (2000)
- TransNet sales tax measure is an important source of funding
- About 45% of RTP expenditures for transit
Sustainable Communities Strategy: Land Use

• Strategy for implementing the smart growth vision in SANDAG’s Regional Comprehensive Plan
• Reflects local land use plans and commitments to more compact transit oriented development
• General Plan Updates needed to implement the regional vision for land use
Sustainable Communities Strategy: Transportation System

- Transportation investments to support development in smart growth areas
- RTP includes transportation system management, demand management, and pricing policies
- Accommodates regional growth in 2020 and 2035
Draft SCS Meets Targets

• Targets were set as a percent reduction in per capita CO2 emissions from 2005 levels
• The draft SCS meets the targets but the post-2020 trend is unexpected
• ARB staff reviewed SANDAG’s technical methodology and its application to the draft SCS
• ARB staff evaluation identifies improvements for future SCS development
Modeling Improvements and Regional Visioning

• SANDAG developing next generation travel models
• Regional Comprehensive Plan update begins in 2012 with next round of regional visioning
• Results of these efforts will set the stage for ARB’s 2014 target update
• Additional land use scenario planning would identify further GHG emission reduction opportunities
Performance Indicators

• Land use
  – Trends reflect increasing residential density and housing and employment near transit stations

• Transportation
  – VMT per capita trend tracks with GHG trend; differs from ARB staff’s expectation of steady decline over time
  – Trends reflect increasing carpool, transit, and bike/walk mode shares

• Performance trends support GHG reductions to meet targets
ARB’S TECHNICAL EVALUATION
SCS Quantification of Greenhouse Gas Reduction
ARB Staff Evaluation

• Reviewed SANDAG quantification of greenhouse gases
• Applied July 2011 Evaluation Methodology
  – Modeling tools
  – Data inputs and assumptions
  – Sensitivity tests
  – Performance indicators
• Evaluation process provides transparency
Modeling Approach

• SANDAG uses travel demand model and off-model tools
• Travel model responds reasonably to time, cost, and other factors affecting travel choices
• Improvements for future SCS development
  – Better integration of land use and travel models
  – Additional sensitivity runs (e.g. land use, HOV lanes)
  – Better accounting of how congestion relief influences travel and development (induced demand)
Model Inputs and Assumptions

• Staff reviewed model inputs that underlie most components of the model
  – Population, jobs, transportation system, travel cost
  – Inputs on how travel occurs and is influenced

• Inputs and assumptions used are reasonable for modeling of this SCS

• Improvements for future SCS development
  – Update demographic and transportation surveys
  – Increase sensitivity to changes in auto-ownership and household size
  – Update emissions factors for VMT activity
Emissions Trend Between 2020 and 2035

• ARB staff expected greater benefits in 2035 as a result of SCS strategies
• SANDAG’s SCS shows a 14% emission reduction in 2020, and a 13% reduction in 2035
• SANDAG attributes this trend to a slow economic recovery and early investments in public transportation
• SANDAG should address this issue in its next plan update
Recommendations on SANDAG SCS

• If SANDAG approves the draft SCS, staff recommends ARB acceptance of SANDAG’s GHG quantification
• If SANDAG modifies the draft SCS, ARB staff will review the impact on greenhouse gases
• Staff will inform the Board of the outcome, including any need to reconsider the greenhouse gas quantification
Recommendations for Next SCS

• Make improvements to travel modeling system to better reflect GHG reductions
• Make future travel modeling systems available to the public
• Work with local jurisdictions in the Regional Comprehensive Plan update to develop alternative land use planning scenarios
UPDATE ON SCS DEVELOPMENT AND MODEL IMPROVEMENTS

OTHER REGIONS
Southern California (SCAG)

- Compass Blueprint Program
- Model update and improvement underway
- Public engagement in scenario development
- New performance measures for land use and health
- Draft SCS in December 2011, Final adoption April 2012
Sacramento (SACOG)

- Blueprint and Rural Urban Connections Strategy
- HUD Grant for $1.5 million to focus on transit priority areas
- Draft SCS in November/December 2011, Final adoption April 2012
Bay Area (MTC)

• Regional Smart Growth and Sustainable Development Plan (FOCUS)
• Transportation for Livable Communities
  – $162 million for projects (1996-2009)
• Draft SCS in November/December 2012, Final adoption April 2013
San Joaquin Valley

• Eight county San Joaquin Valley Blueprint Planning Process complete
  – Web-based Blueprint Planner's Toolkit
  – Blueprint Awards

• Model Improvement Program
  – $2.5 million from SGC for Valleywide effort
  – 8 MPO models will be standardized
  – Advanced modeling demonstration projects

• Focus is on 2012 target update
Other Regions

- MPOs continue to coordinate as they prepare for their SCS development
- Some have begun consulting with ARB on GHG quantification methodologies
- RTP updates ongoing (2012 to 2015)
Looking Forward

• Expect improved modeling capabilities for future SCS development
• Future SCS review will look for stronger evidence to demonstrate target will be met
• For future target setting, MPOs should provide additional scenario analysis and model performance results