UPDATE ON SUSTAINABLE COMMUNITIES STRATEGIES (SB 375)

September 22, 2011

California Environmental Protection Agency
Air Resources Board

Purpose of Today's Presentation

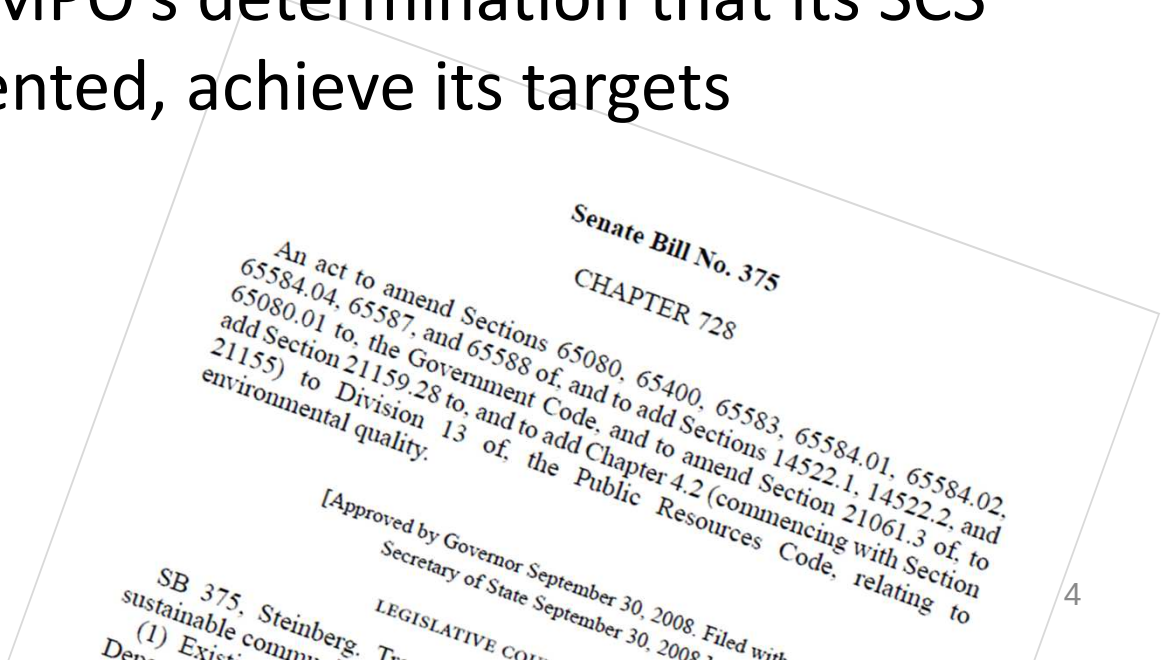
- Brief the Board on SANDAG's draft SCS
- Describe staff's evaluation methodology and results
- Provide recommendations
- Report on SCS development in other regions

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



Senate Bill No. 375

CHAPTER 728

An act to amend Sections 65080, 65400, 65583, 65584.01, 65584.02, 65584.04, 65587, and 65588 of, and to add Sections 14522.1, 14522.2, and 65080.01 to, the Government Code, and to amend Section 21061.3 of, to add Section 21159.28 to, and to add Chapter 4.2 (commencing with Section 21155) to Division 13 of, the Public Resources Code, relating to environmental quality.

[Approved by Governor September 30, 2008. Filed with Secretary of State September 30, 2008.]

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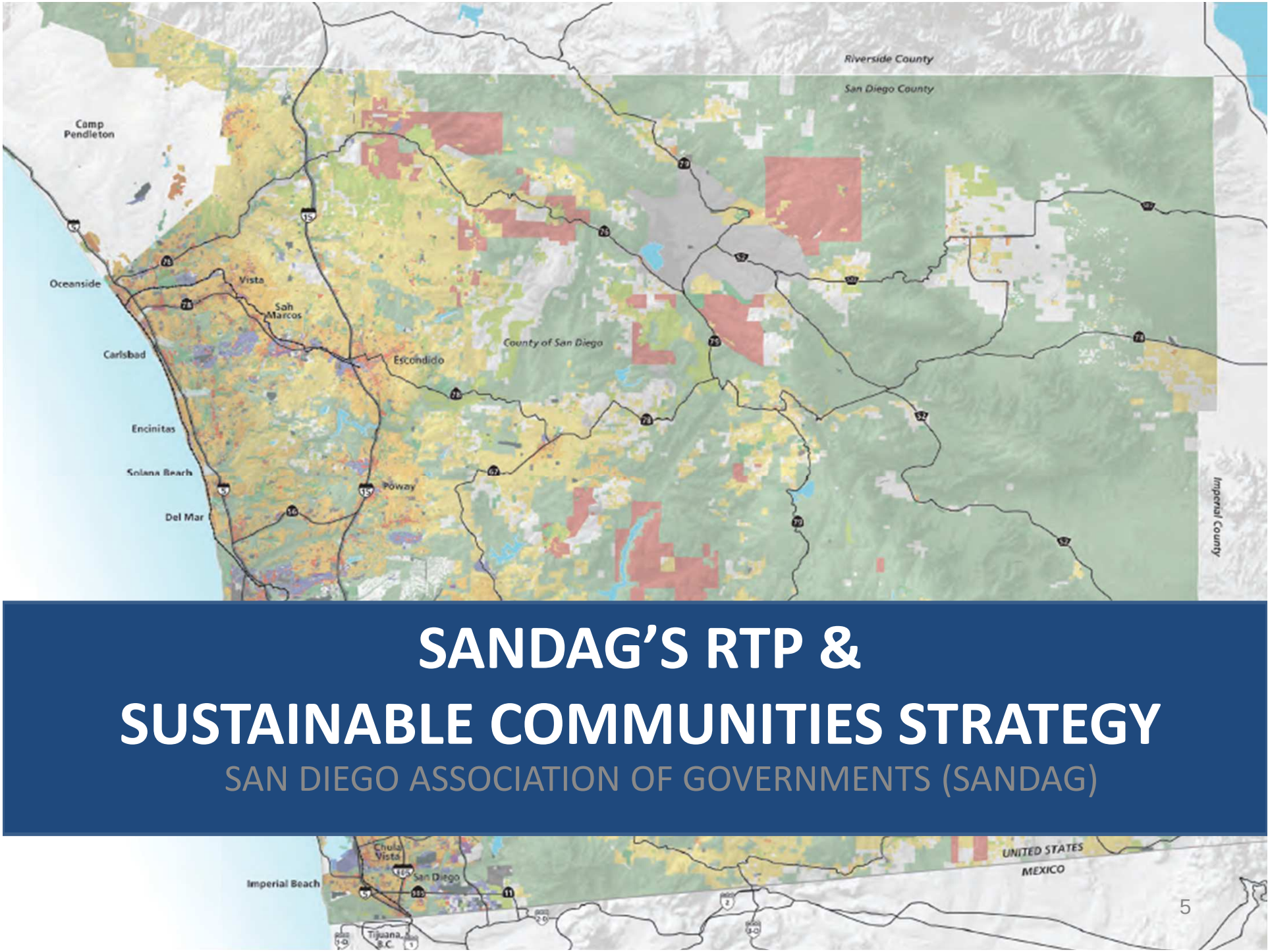


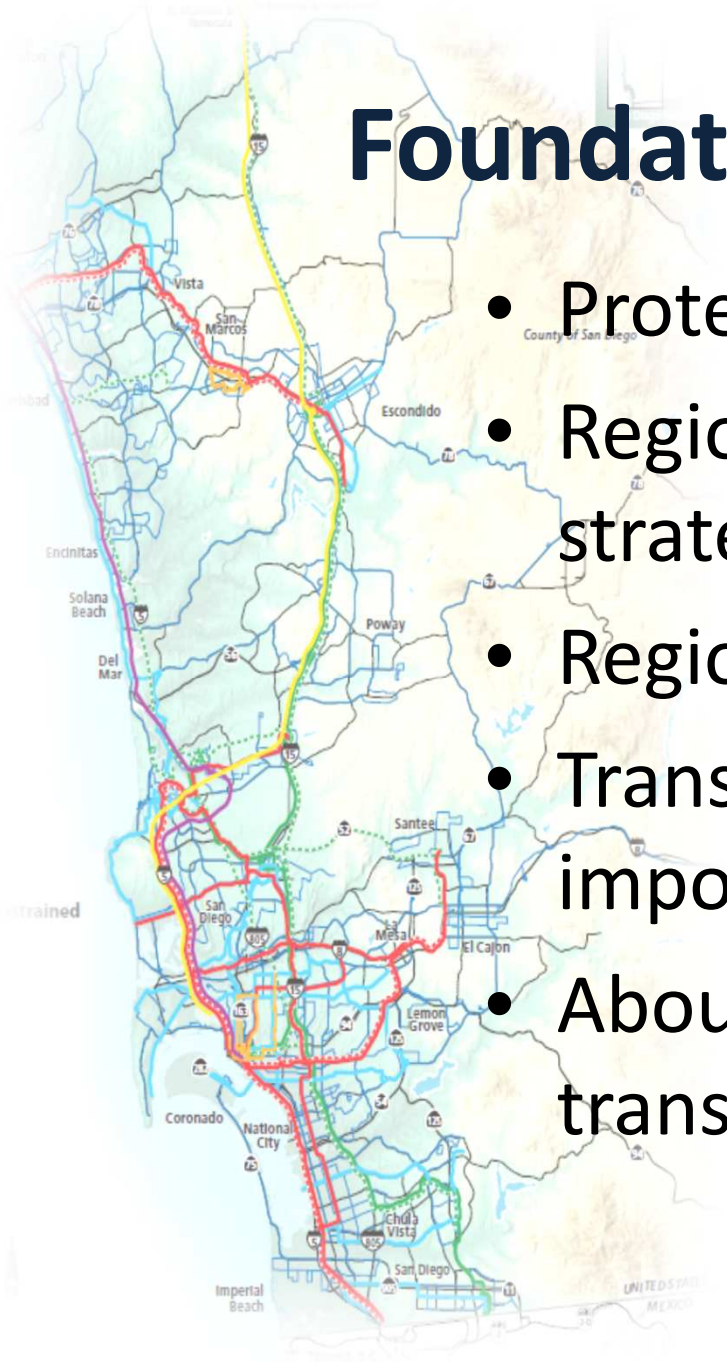
SANDAG'S RTP & SUSTAINABLE COMMUNITIES STRATEGY

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)
- Regional Comprehensive Plan (2004)
- 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

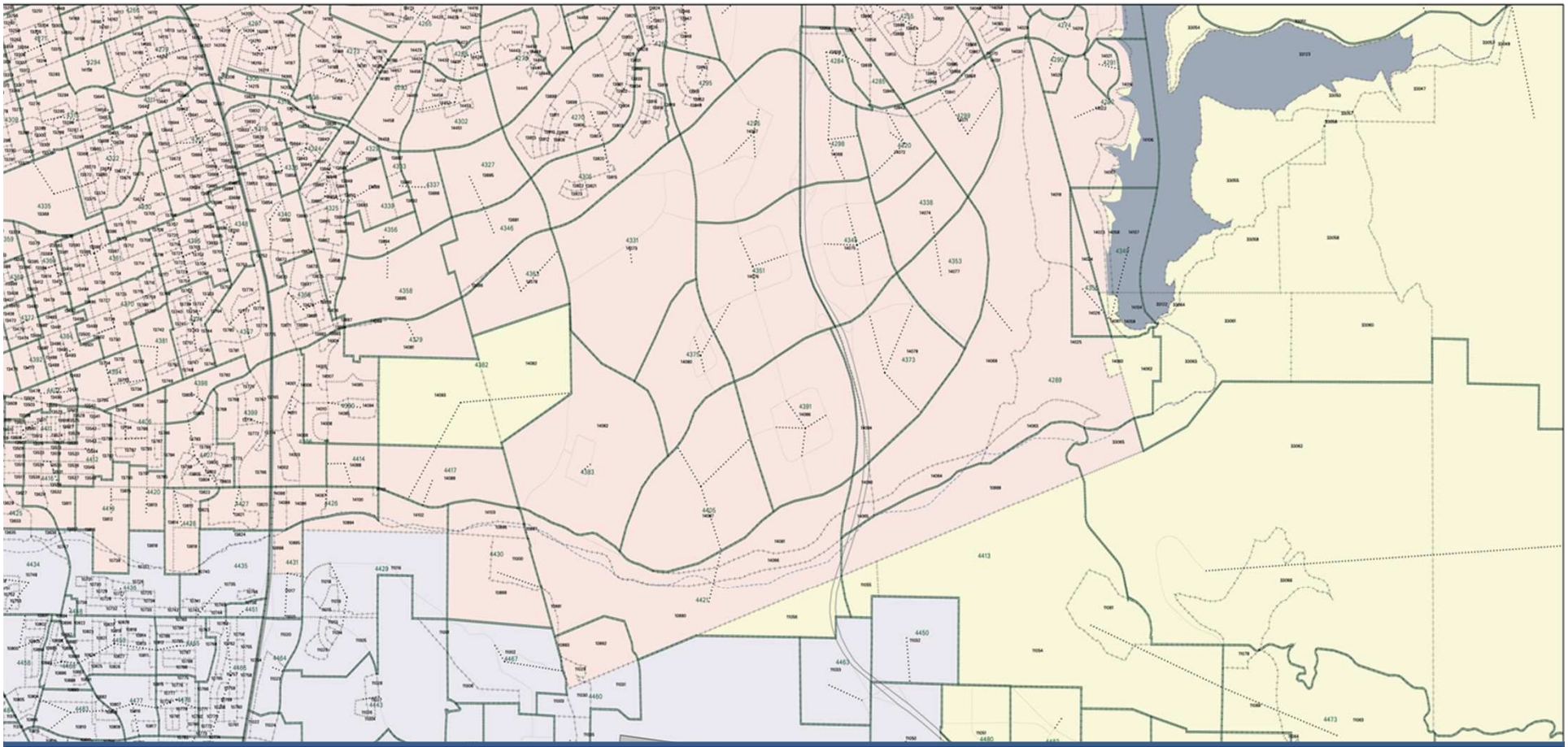
- Targets were set as a percent reduction in per capita CO2 emissions from 2005 levels
- The draft SCS meets the targets but the post-2020 trend is unexpected
- ARB staff reviewed SANDAG's technical methodology and its application to the draft SCS
- ARB staff evaluation identifies improvements for future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

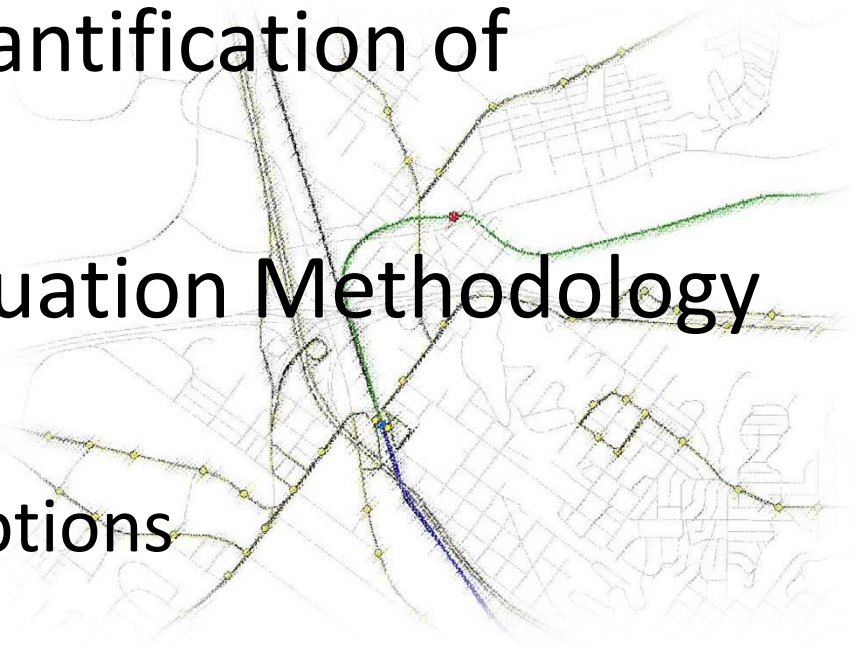


ARB'S TECHNICAL EVALUATION

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