

Preliminary SB 375 Emission Reduction Target Setting Report

San Luis Obispo Council of Governments



Presented to the
California Air Resources Board (CARB)
Regional Targets Advisory Committee (RTAC)

May 25, 2010

What is our future?



Mike McCoy

Regional Blueprints



Mike McCoy

If Traffic Models determined our future.....



Mike McCoy

Regional Blueprints Forty Year Vision Plans

Regional Vision Planning

- Focus: better integration of land use & transportation
- Voluntary
- Scenario based
- Incentive approach

Results:

more concentrated development patterns, reduced VMT & emissions, address housing needs, reduce infrastructure costs and preserve sensitive lands



Planning and Visioning Efforts

- ✘ **Aesthetics of the Rural Renaissance** - 1987
- ✘ **Growth Management Strategies and Policies for the Future of San Luis Obispo County** - 1989
- ✘ **Rural Settlement Pattern Strategy** - 1990
- ✘ **Designing the Future** - 1993
- ✘ **Creating Transportation Choices**
Through Development Design and Zoning - 1995
- ✘ **Focus on the Future** - 1997
- ✘  **It Takes A Region**
CREATING REGIONAL SOLUTIONS TO THE CHALLENGES OF GROWTH
- ✘ **Community 2050** - 2005
- ✘ **Preliminary Sustainable Community Strategy** - 2009



SAN LUIS OBISPO REGION
COMMUNITY 2050

Community residents envision the future through workshops

Mapped Alternatives

Interactive Polling

Ranked Summary Concepts

Evaluated Next Steps



SLOCOG Regional Blueprint:
Community 2050

- Regional Data Collection & Spatial Data Development
- Goal-setting (Strategic Growth Principles)
- Regional Growth Strategy & Vision
 - Future Land Use Scenarios
 - ✓ Policies, Projects, and Programs
 - ✓ Concentrate Development in Urban Areas
 - ✓ Discourage Development in Sensitive Lands, Rural Areas, etc



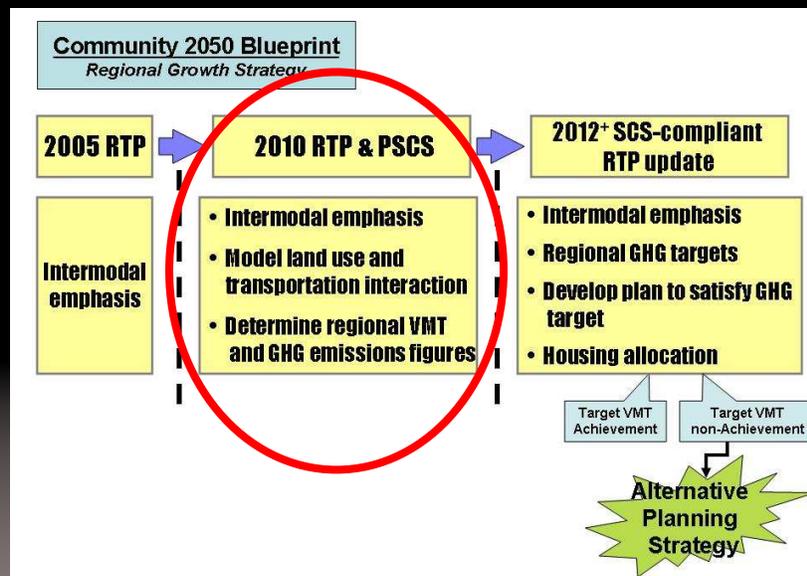
Developing a Sustainable Communities Strategy

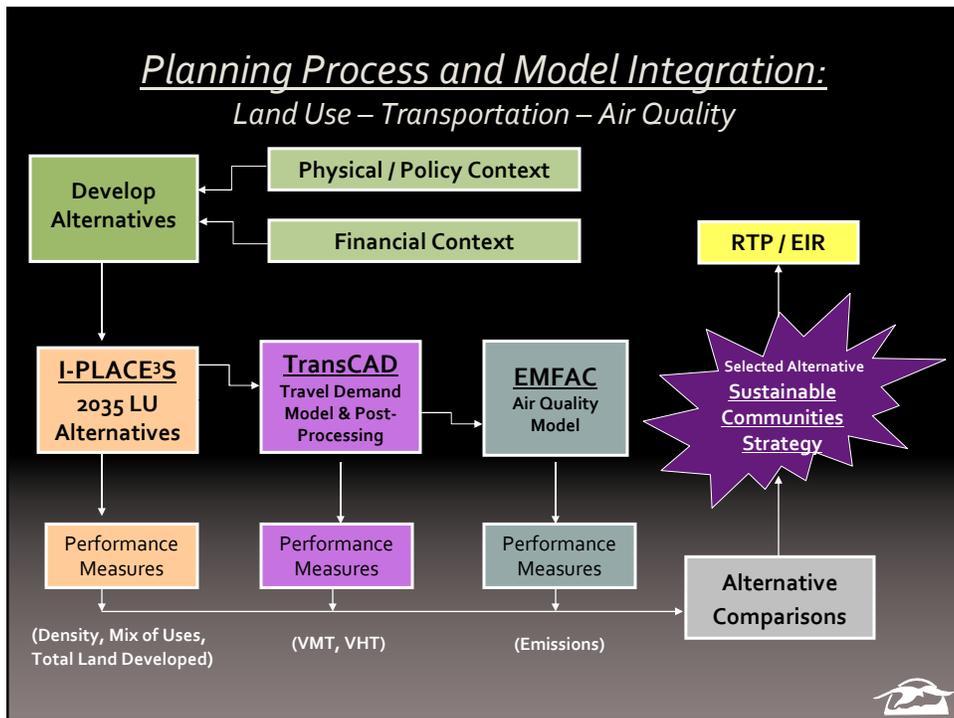
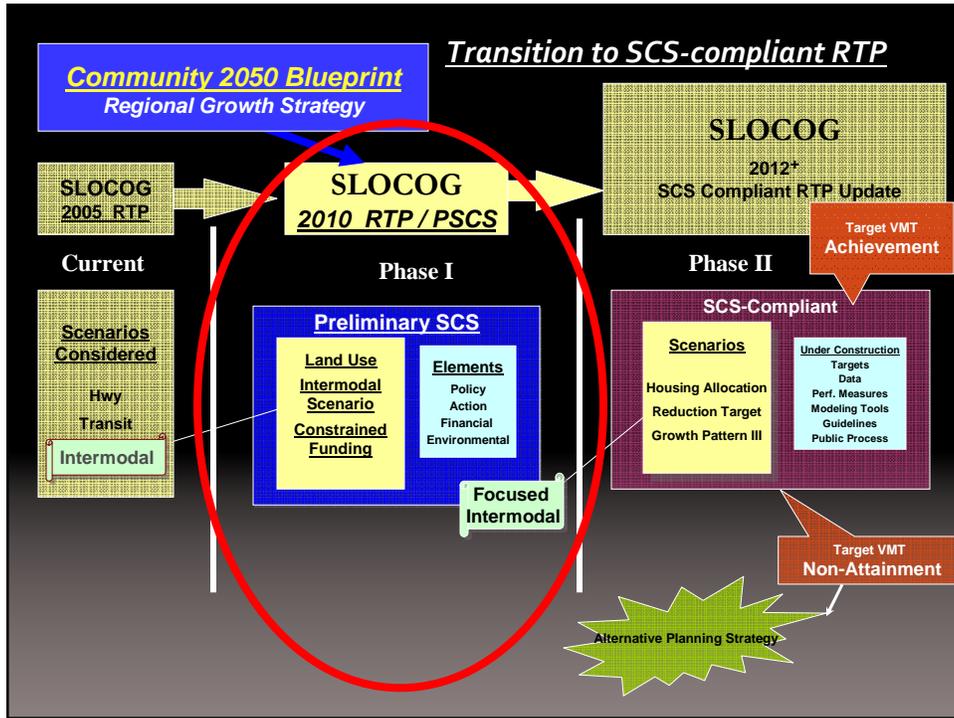
San Luis Obispo Region Experience

- Regional Vision Planning - *Community 2050
Regional Growth Strategy*
- Integration into SLOCOG 2010 RTP
 - Phased planning effort
 - Land use, traffic and air quality model integration
 - Preliminary Sustainable Communities Strategy (PSCS)
 - ✓ Interagency Coordination
 - Performance Indicators
 - ✓ *Emission Reductions*
 - ✓ *Smart Mobility Framework*

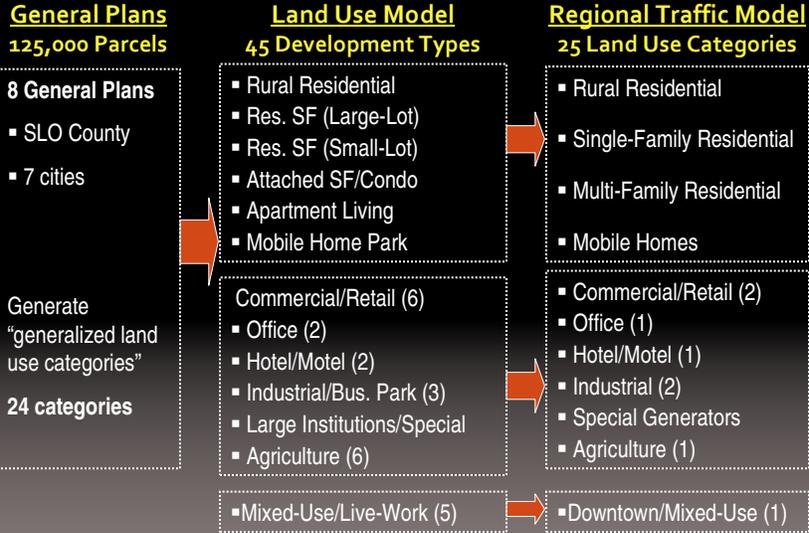


Transition to SCS-compliant RTP





Land Use-Transportation Model Integration

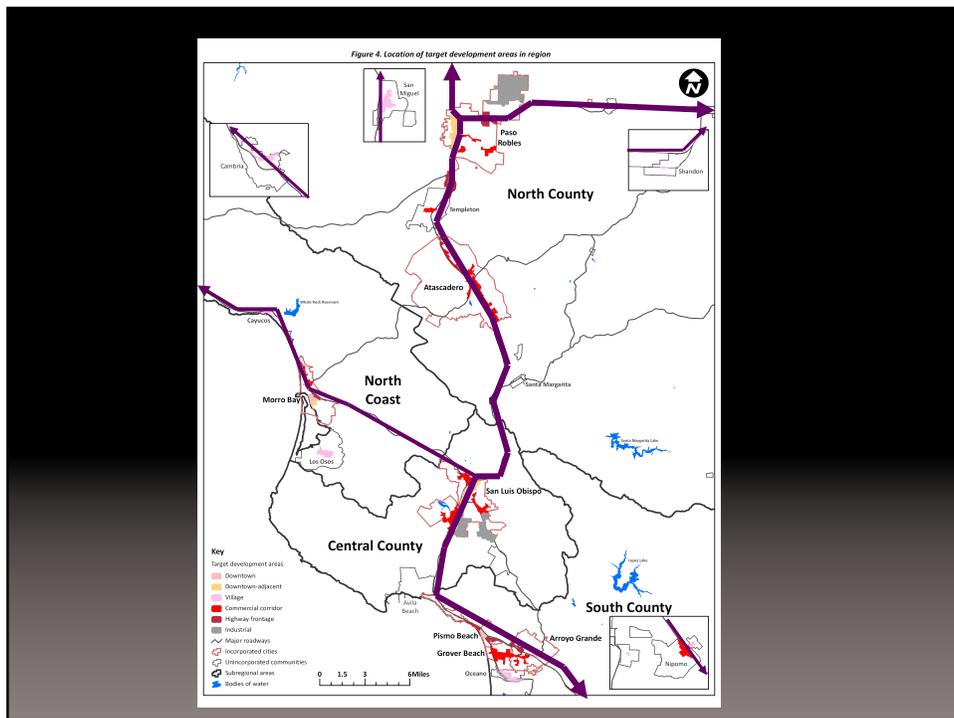
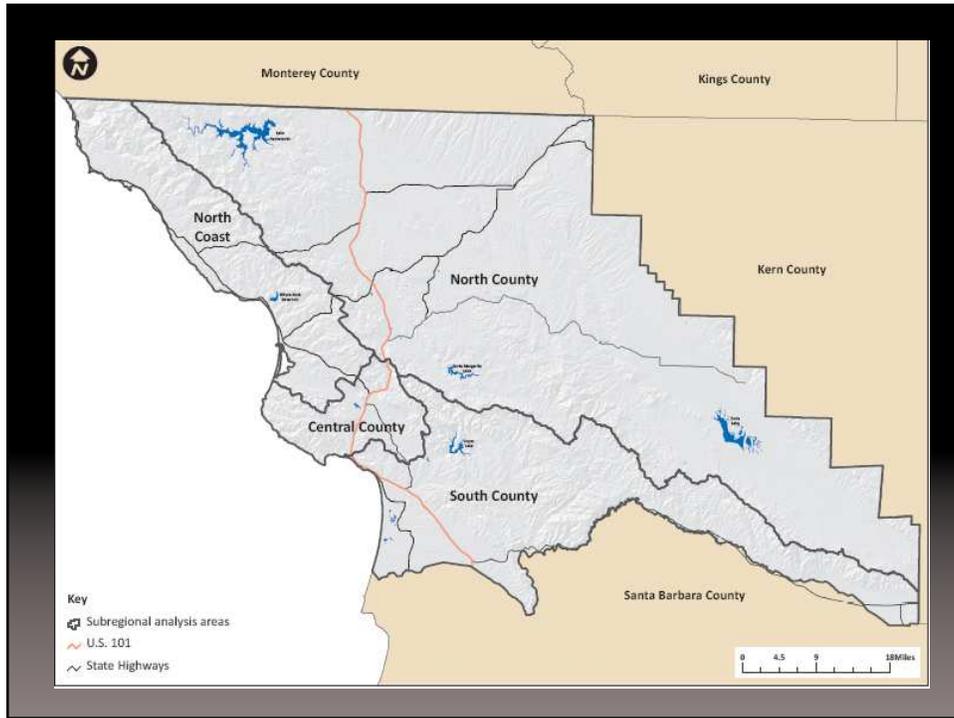


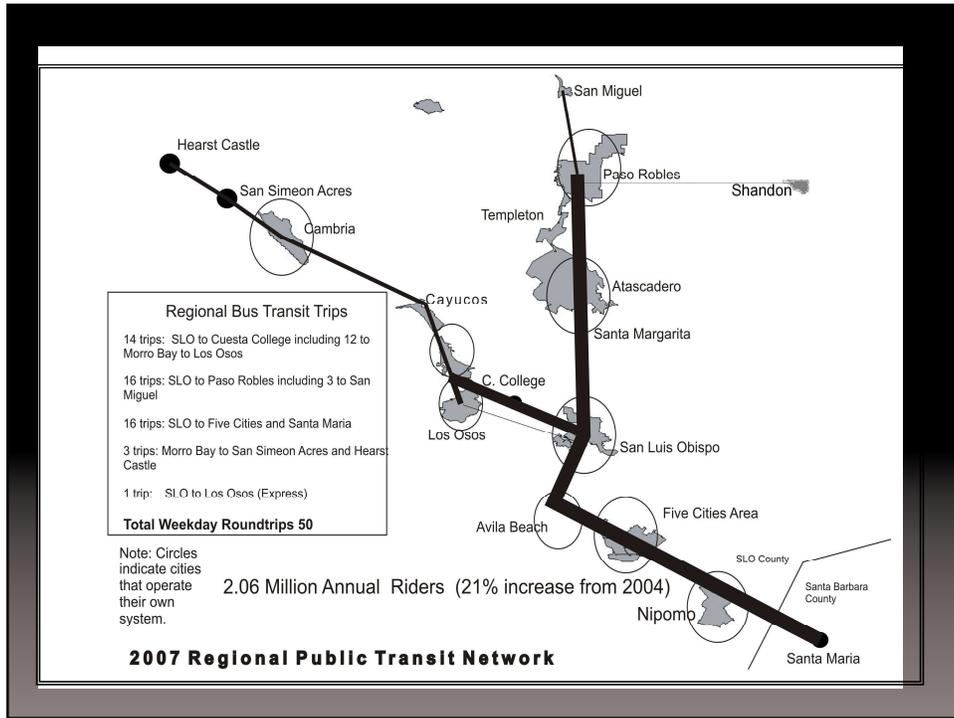
VMT Quick Response Tool

Transit and TDM post-processor

- Transit:** average fare, transit headway, transit coverage
- TDM:** Rideshare enrollment, park-and-ride spaces, vanpools, bike facility miles, telecommute/work at home, cost of parking







SLO Regional Rideshare – Since 1980

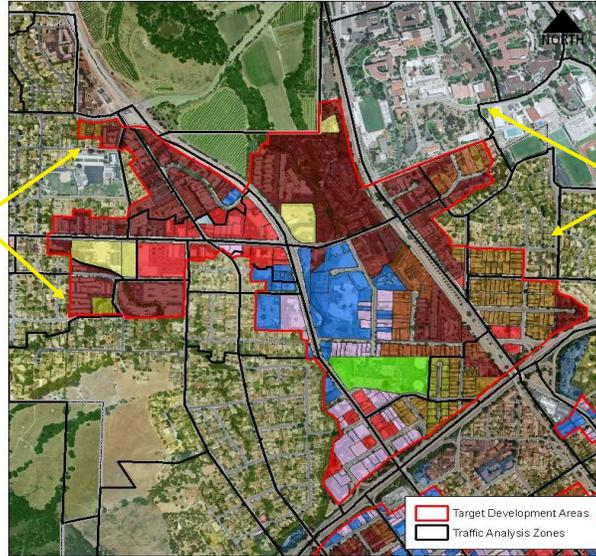
Transportation
Choices
Program



Target Development Areas

San Luis Obispo: North Area

Target
Development
Area

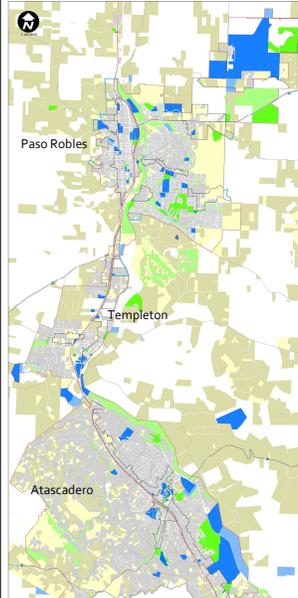


Traffic
Analysis
Zones

SLOCOG Land Use Scenarios: Paso Robles – Atascadero Area

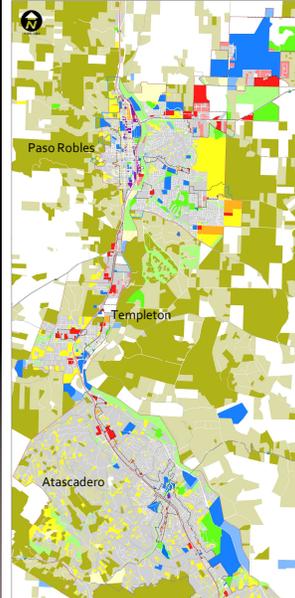
2008 Existing Conditions

Extent of existing development (North County)



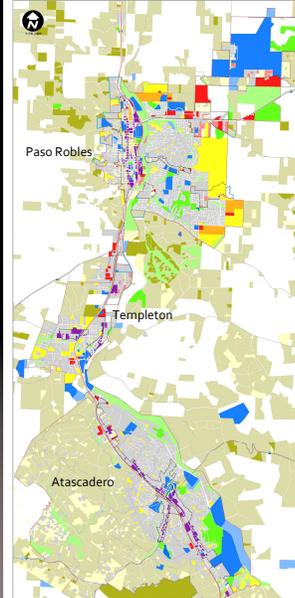
2035 Scenario 1

Location and type of growth (North County)

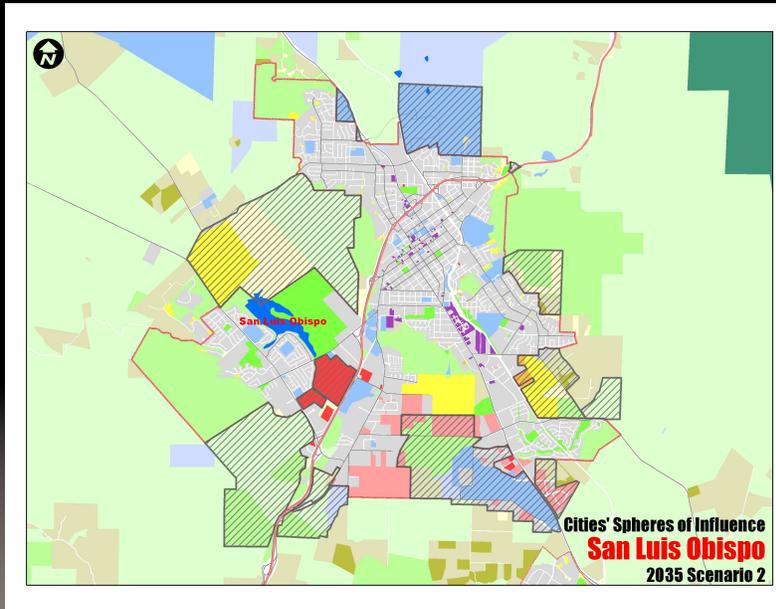


2035 Scenario 2

Location and type of growth (North County)



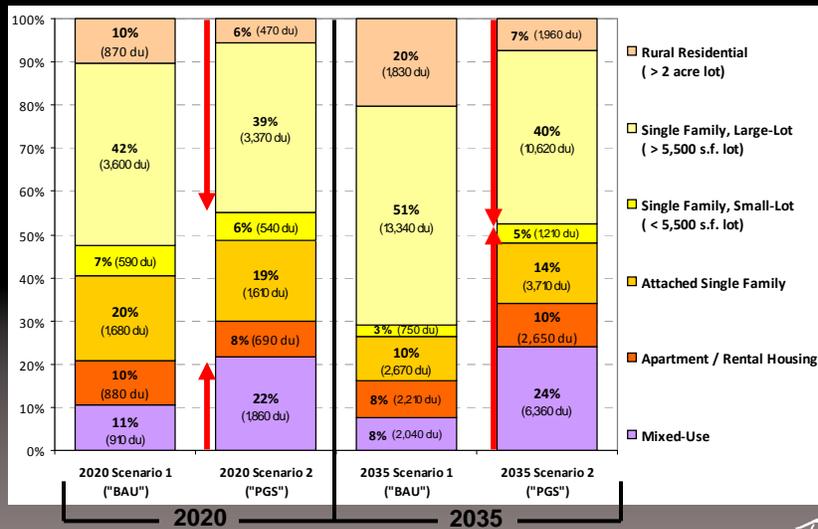
Community Growth Patterns



Land Use Model Results: NEW UNITS

Housing Mix of New Housing Units

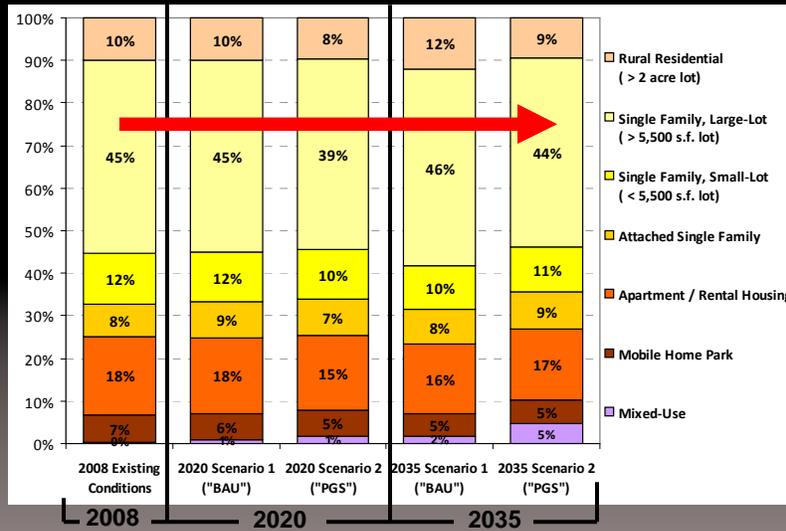
Comparison of 2020 Scenarios 1 & 2 and 2035 Scenarios 1 & 2



Land Use Model Results: TOTAL UNITS

Total Housing Type Distribution

Comparison of 2020 Scenarios 1 & 2 and 2035 Scenarios 1 & 2



Preliminary Traffic Model Results

Daily VMT, Daily VMT per capita, GHG per capita

- (1) Land use & 4-D improvements
- (2) Land use, 4-D improvements & transit/TDM post-processor

Table ES-2:

Baseline comparison of VMT and GHG figures for 2008 Base Year and 2020 Interim Year.

Evaluation Criteria (2008 base year vs. 2020 interim year)	2008 Base Year	2020 Scenario 1 "Business-As-Usual"	2020 Scenario 2 "Preferred Growth Scenario"	% Increase / % Reduction		
				2008 BY vs. 2020 S1	2008 BY vs. 2020 S2	2020 S2 vs. 2020 S1
Population	269,300	288,000	288,000	6.9%	6.9%	0.0%
Daily VMT (land use and 4-D improvements only)	8,016,501	8,070,899	8,013,341	0.7%	-0.04%	-0.7%
Daily VMT per capita (land use and 4-D improvements only)	29.8	28.0	27.8	-5.9%	-6.5%	-0.7%
Quick Response Tool reduction rate (applied to Daily VMT to account for transit and TDM improvements)	--	-1.00%	-1.68%	--	--	--
Daily VMT (land use, 4-D and transit and TDM improvements)	8,016,501	7,990,190	7,878,717	-0.3%	-1.7%	-1.4%
Daily VMT per capita (land use, 4-D and transit and TDM improvements)	29.8	27.7	27.4	-6.8%	-8.1%	-1.4%
Daily CO ₂ emissions per capita (kg per capita)	12.2	11.4	11.3	-6.6%	-7.4%	-0.9%

Note: SLOCOG did not apply adjustments for Pavley II or the Low Carbon Fuel Standard in this planning scenario exercise.

Preliminary Traffic Model Results

Daily VMT, Daily VMT per capita, GHG per capita

- (1) Land use & 4-D improvements
- (2) Land use, 4-D improvements & transit/TDM post-processor

Table ES-1:

Baseline comparison of VMT and GHG figures for 2008 Base Year and 2035 Horizon Year.

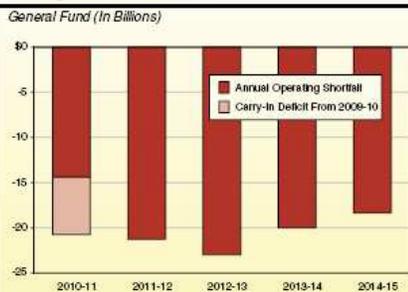


Evaluation Criteria (2008 base year vs. 2035 horizon year)	2008 Base Year	2035 Scenario 1 "Business-As-Usual"	2035 Scenario 2 "Preferred Growth Scenario"	% Increase / % Reduction		
				2008 BY vs. 2035 S 1	2008 BY vs. 2035 S 2	2035 S 2 vs. 2035 S 1
Population	269,300	330,800	330,800	22.8%	22.8%	0.0%
Daily VMT (land use and 4-D improvements only)	8,016,501	9,293,131	9,068,851	15.9%	13.1%	-2.4%
Daily VMT per capita (land use and 4-D improvements only)	29.8	28.1	27.4	-5.6%	-7.9%	-2.4%
Quick Response Tool reduction rate (applied to Daily VMT to account for transit and TDM improvements)	--	-3.38%	-3.46%	--	--	--
Daily VMT (land use, 4-D and transit and TDM improvements)	8,016,501	8,979,023	8,755,069	12.0%	9.2%	-2.5%
Daily VMT per capita (land use, 4-D and transit and TDM improvements)	29.8	27.1	26.5	-8.8%	-11.1%	-2.5%
Daily CO ₂ emissions per capita (kg per capita)	12.2	11.4	11.2	-6.6%	-8.2%	-1.8%

Note: SLOCOG did not apply adjustments for Pavley II or the Low Carbon Fuel Standard in this planning scenario exercise.

CHALLENGES

Figure 2
Huge Operating Shortfalls Projected
Throughout Forecast Period



Continuing State Deficits

Figure 2
Modest Growth Expected During Recovery



Lower Growth Projections



CHALLENGES

Transportation Funding and Demands

\$ 1.8B in Revenues

\$ 4.0B Requested - projects and programs



CHALLENGES

- Changing the status quo is difficult
- Modeling Capabilities, data, and imperfect tools
- Planning Funding is lacking
- High Cost of Infrastructure - Lack of Funding
 - Highways, Streets and Roads, Transit, TDM
 - Public Infrastructure
- State Diversion of Funding
 - Transit, Gas Taxes, Vehicle Fees, Williamson Act, Redevelopment Fees.
- Public Opposition (NIMBY)
- Skewed Fiscal Incentives, tax base, financing, et al.



Preliminary Findings

- **A 6.1% reduction in VMT per capita** may result from "**2020 Preferred Growth Scenario**" changes in land use from 2008 Base Year (29.8 to 27.8 VMT per capita)
- **A 7.9% reduction in VMT per capita** may result from the "**2035 Preferred Growth Scenario**" changes in land use from 2008 Base Year (29.8 to 27.4 VMT per capita)
- **Slow growth rates and small scale challenges implementation**
- **No single variable can generate a significant shift** in VMT alone



Preliminary Findings

- **Additional investments in transit and TDM will produce further reduction** in VMT per capita
- **Pricing adjustments have noticeable impacts** on VMT; SLOCOG has limited authority to adjusting pricing.
- **Affordable 'Location Efficient' Housing** will be the greatest challenge.
- **Process requires consistency** for inter-regional travel, application of post-processor results, metrics used.



What can RTPA / MPO do?

- Prioritize funding to direct development toward existing communities and “target development areas”
- Require regional plan consistency and oppose or restrict regional funding for projects inconsistent with SCS
- Allocate “seed” funding to leverage other \$
- Restrict funding and improvements
- Establish mitigation banks



Entering a new paradigm that is moving in a positive direction.

- ✓ Strong emerging State policy direction & support
- ✓ Analytic tools are developing
- ✓ Emerging Sustainable Communities Federal policy
- ✓ Increasing emphasis on funding intermodal, alternatives.
- ✓ Good examples, best practices
- ✓ Emerging political and community support

San Luis Obispo Council of Governments
SLOCOG

Ronald L. De Carli, Executive Director

The **SB 375 Regional Greenhouse Gas Emission Reduction Target Setting Report**
for the **San Luis Obispo Region**

was prepared by staff in the
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QUESTIONS



