



SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

TECHNICAL WORKING GROUP (TWG)

Thursday, November 20, 2014: 10:00 a.m.

SCAG Offices
818 West 7th Street, 12th Floor
Board Room
Los Angeles, CA 90017
(213) 236-1800

Teleconferencing Information: Number: 1-800-832-0736 – Participant Code: 7334636

Please use for web connection: <http://scag.adobeconnect.com/twg91814/>

AGENDA

Introductions

Receive and File

1. Meeting Summary 10-16-14 (Attachment)
2. Agenda Outlook for the Development of the 2016 RTP/SCS (Attachment)

Information Items

3. Existing and Proposed Performance Measures (Naresh Amatya/Ping Chang) (Attachment)
4. Public Health Work Program (Sarah Jepson) (Attachment)
5. Scenario Planning - 2016 RTP/SCS – Overview and Emerging Themes – (Peter Brandenburg) (Attachment)
6. SCAG Clean Cities Coalition/Alternative Fuel Vehicle Program/Alternative Mobility Map Research (Marco Anderson) (Attachment)



TECHNICAL WORKING GROUP (TWG)

October 16, 2014

Meeting Summary

The following is a summary of discussions of the Technical Working Group meeting of October 16, 2014.

Receive and File

- 1. Meeting Summary 9-18-14**
- 2. 2016 RTP/SCS Agenda Outlook**

Discussion Items

3. 2016-2040 RTP/SCS Local Review/Input Results

- Overview of SCS in the 2012 RTP/SCS**

Peter Brandenburg, Acting Manager of Sustainability, presented the key strategies of the 2012 SCS, stating that one of the key elements is concentrating growth in high-quality transit areas. Other key strategies include land use, active transportation, innovative funding mechanisms, and clean fuel technology. Mr. Brandenburg emphasized that the goal for 2016 is to update and refine the SCS without changing the fundamental land use policy. He further stated that innovative transportation technologies, such as Uber and car technology, will be significant components of the scenario planning for the 2016 RTP/SCS.

Steve Smith, representing SANBAG, inquired as to when the SCS will be ready for modeling and testing. Mr. Brandenburg stated that this should occur sometime in July 2015.

Dr. Frank Wen, Manager of Research and Analysis, provided an update on the growth forecast.

- Local Jurisdiction Implementation Survey**

Ping Chang, Program Manager of Land Use and Environmental Planning, provided highlights of the survey results, stating that although this is a voluntary survey, 76% of the jurisdictions have responded. Mr. Chang thanked the local jurisdictions and the subregions for their assistance in this effort.

Deborah Diep, representing the Center for Demographic Research, suggested that the initial survey results should be noted as 'preliminary'. She further suggested annotating the number of jurisdictions and the size of the universe.

Gail Shiomoto-Lohr, representing the City of Mission Viejo, suggested adding qualitative language to the report indicating the context of the different periods, (i.e., 2-year, 5-year, and 10-year) and what they represent.

- **Open Space Survey**

India Brookover, Assistant Regional Planner of Sustainability, stated that as part of the Local Implementation Survey, an Open Space Survey was also included. Ms. Brookover noted that this was administered because the 2012 RTP/SCS contains a commitment to develop open space conservation planning strategies. Consequently, this survey was an assessment of the current state of open space programs and policies in the SCAG region, and will better inform the direction staff will take with open space in the 2016 RTP/SCS. Ms. Brookover stated that 74% of the jurisdictions have responded.

4. Environmental Justice Analysis and Outreach for 2016 RTP/SCS

Kimberly Clark, Senior Regional Planner, provided an overview of the planned Environmental Justice Analysis and Outreach for the 2016 RTP/SCS. Ms. Clark noted that the analysis is required by Federal legislation, Title VI, as well as a number of executive orders and federal circulars. Ms. Clark stated that staff considers the impacts of the RTP/SCS on various communities, particularly minority and low income populations. She further stated that staff continues to monitor and respond to environmental justice issues that arise during and after the implementation of the regional plan. SCAG will host a workshop on November 20, 2014. Video-conferencing will be available at SCAG's regional offices.

5. FHWA/FTA NPRM on NEPA Streamlining

Jonathan Nadler, Manager of Compliance & Performance Monitoring, and Lijin Sun, Senior Regional Planner, provided a high-level summary of the FHWA/FTA NPRM on NEPA Streamlining.

6. SB 743 Update

Ping Chang, Program Manager of Land Use and Environmental Planning, stated that the preliminary discussion draft of CEQA guidelines for SB 743 updated in August of this year proposed to use a VMT based metric to replace the level of service based methodology to analyze transportation impacts. Comments are due on November 21, 2014. Mr. Chang noted that OPR has announced that a workshop will be held in Sacramento on November 3, 2014 at the Cal/EPA Building from 1:30 PM to 3:30 PM.

7. Cap and Trade Funding Opportunities

Jonathan Nader, Manager of Compliance & Performance Monitoring, provided an overview of the FY14-15 state budget that includes the first investment plan for the Cap-and-Trade Greenhouse Gas Reduction Fund (GGRF). Mr. Nadler noted that the Budget permanently allocates 35% of future auction proceeds to public transit, affordable housing, and sustainable communities, and 25% to high-speed rail. The remaining proceeds will be allocated in future budgets. Mr. Nadler announced that in lieu of the Policy Committee meetings on November 6, 2014, SCAG will host a workshop with state agencies responsible for these programs. The Strategic Growth Council will host a workshop at SCAG on October 27, 2014, wherein they will discuss and seek input on the draft guidelines for the affordable housing and sustainable communities program component of the GGRF.

Agenda Outlook for the Development of the 2016 RTP/SCS

(Note: Revised to put the outlook in chronological order as suggested at the Sept. 2014 TWG)

(Updated 11/13/14)

June 2013

- Potential approach/process, coordination between various technical working groups and policy committees, and updated overall schedule for the development of the 2016 RTP/SCS

January 2014

- System Preservation and system operation focus in the 2012 RTP/SCS and our current efforts on Pavement and Bridge condition database/management

February 2014

- System Performance Measures and MAP-21 requirements under Performance Based Planning and implications of MAP-21
- Local Input Process for Growth Forecast/Land Use (Scenario Planning) for 2016 RTP/SCS, including growth forecast and technology

March 2014

- Performance Based Planning and implications of MAP-21: Safety Performance Measures
- Overview of baseline and innovative funding sources adopted in the 2012 RTP/SCS including underlying technical assumptions/methodology/analysis under Transportation Finance
- Overview of cost assumptions/cost modal for the 2012 RTP/SCS under Transportation Finance
- Model and Tools and Datasets to be used in the 2016 RTP/SCS
- Overview of Aviation program in the 2012 RTP/SCS with a focus on ground transportation improvements

May 2014

- OCTA Draft Long Range Plan Update
- System Preservation Update
- Draft Paper on TOD benefits, challenges and best practices
- Active Transportation Program Update
- Local Input Survey Update
- MAP-21 Safety NPRM Update
- CalEnviro Screen Tool

June 2014

- SCAG Active Transportation Results from the 2011 Household Travel Survey
- 2016 RTP/SCS Modeling variables matrix
- Statewide and MPO Planning Rules NPRM Update
- California Active Transportation Program Update

July 2014

- 2016 RTP/SCS Modeling Variables Matrix

September 2014

- 2016 RTP/SCS Development Agenda Outlook
- Status of Local Input for the 2016 RTP/SCS; Growth Forecast Update
- Modeling Update
- CAL LOTS Update

October 2014

- Overview of SCS in the 2012 RTP/SCS
- Current status of SCS implementation (Local Implementation survey)
- Environmental Justice (First EJ Workshop will be held on 10/23)
- Map Collaborator Database (A web based tool to collect data and develop open space plan.)

November 2014

- Discussion on existing and proposed Performance Measures
- Role of Technology in the 2016 RTP/SCS
- Development of alternative scenarios (Scenario Planning) for 2016 RTP/SCS, including growth forecast, technology
- Emerging issues/themes that could influence 2016 SCS
- Zero/Near Zero/Clean Technology Applications, including Slow Speed/ Electric Vehicle programs (Nov. 2014)
- Emerging New Technology Applications

December 2014

- Technical assumptions/methodology/data/analysis in the 2012 RTP/SCS
- Potential changes in the 2016 RTP/SCS to technical assumptions/methodology/data/analysis
- Updated forecast/land use distribution for 2016 RTP/SCS
- Updated SCS for 2016 RTP/SCS
- Overview of Active Transportation Strategy in the 2012 RTP/SCS
- Progress update on Active Transportation Strategy and emerging issues and their implications to the 2016 RTP/SCS

January 2015

- Asset Management and Infrastructure Performance Measures
- Overview of Goods Movement (GM) Strategy in the 2012 RTP/SCS with a focus on technical assumptions (including technology assumptions)/data/analysis
- Progress update on the GM Strategy with focus on emerging issues and implications on the 2016 RTP/SCS

February 2015

- Program EIR
- Public Participation Plan
- Overview of Transit Strategy in the 2012 RTP/SCS
- Progress update on the Transit Strategy and emerging issues/challenges that could influence the 2016 RTP/SCS

March 2015

- Overview of Highway/HOV/HOT/Toll Roads/Express Lanes proposed in the 2012 RTP/SCS with a focus on technical assumptions/analysis
- Progress update and emerging issues related to highways/HOV/HOT/Toll Roads/Express Lanes

May 2015

- Progress update on the current status of the Aviation component of the 2012 RTP/SCS and emerging issues that may influence the 2016 RTP/SCS
- Overview of TDM/TSM in the 2012 RTP/SCS, including underlying assumptions
- Progress status of TDM/TSM and emerging issues

June 2015

- Progress update on 2012 RTP/SCS revenue/cost
- Potential changes/focus areas and emerging issues in the 2016 RTP/SCS

July 2015

- Transportation Conformity

August 2015

- Finance Plan for 2016 RTP/SCS
- Updated GM Strategy for the 2016 RTP/SCS
- Updated Transit Strategy for the 2016 RTP/SCS
- Updated Active Transportation Strategy for the 2016 RTP/SCS
- Highways Improvement Element in the 2016 RTP/SCS
- Updated Aviation Element of the 2016 RTP/SCS
- Updated TDM/TSM Element for the 2016 RTP/SCS

Note: The Agenda Outlook is intended as a reference for TWG and is subject to change as needed and appropriate as things progress.



**SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS**

Item 3 Attachment:

Existing and Proposed Performance Measures

**Southern California Association of
Governments**

2016 Regional Transportation Plan (RTP)/Sustainable Community Strategy (SCS) Overview

Performance Measures Overview

Los Angeles, CA
November 20, 2014

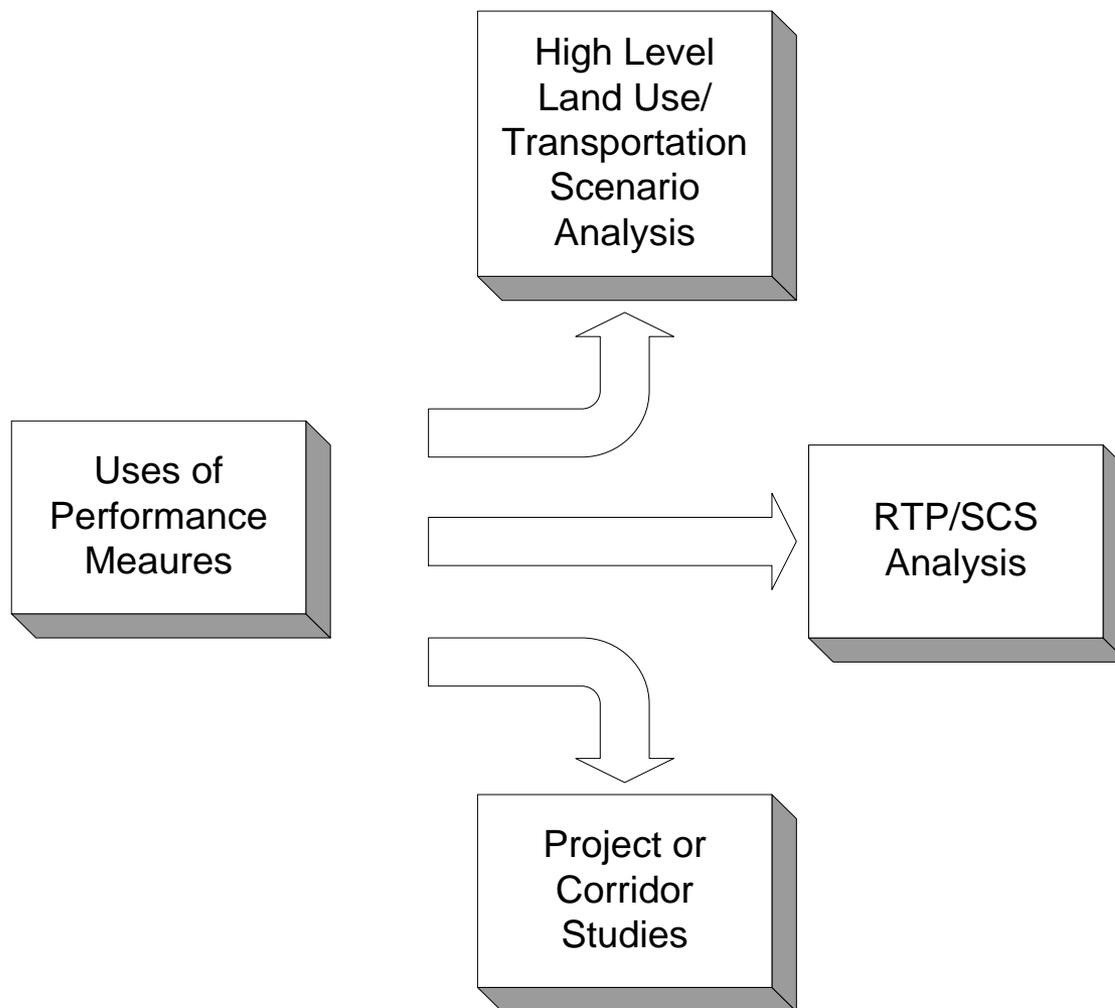
System Metrics Group, Inc.

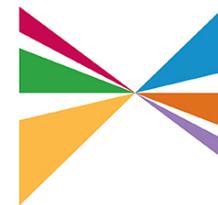
Today, we will

- Summarize the types and uses of performance measures
- Present the framework for performance measurement for the 2016 RTP/SCS update process
- Present a brief refresher on MAP-21 performance measurement requirements
- Provide a preservation performance update
- Provide a safety performance update
- Answer your questions

**Performance Measurement Framework
for the 2016 RTP/SCS Update**

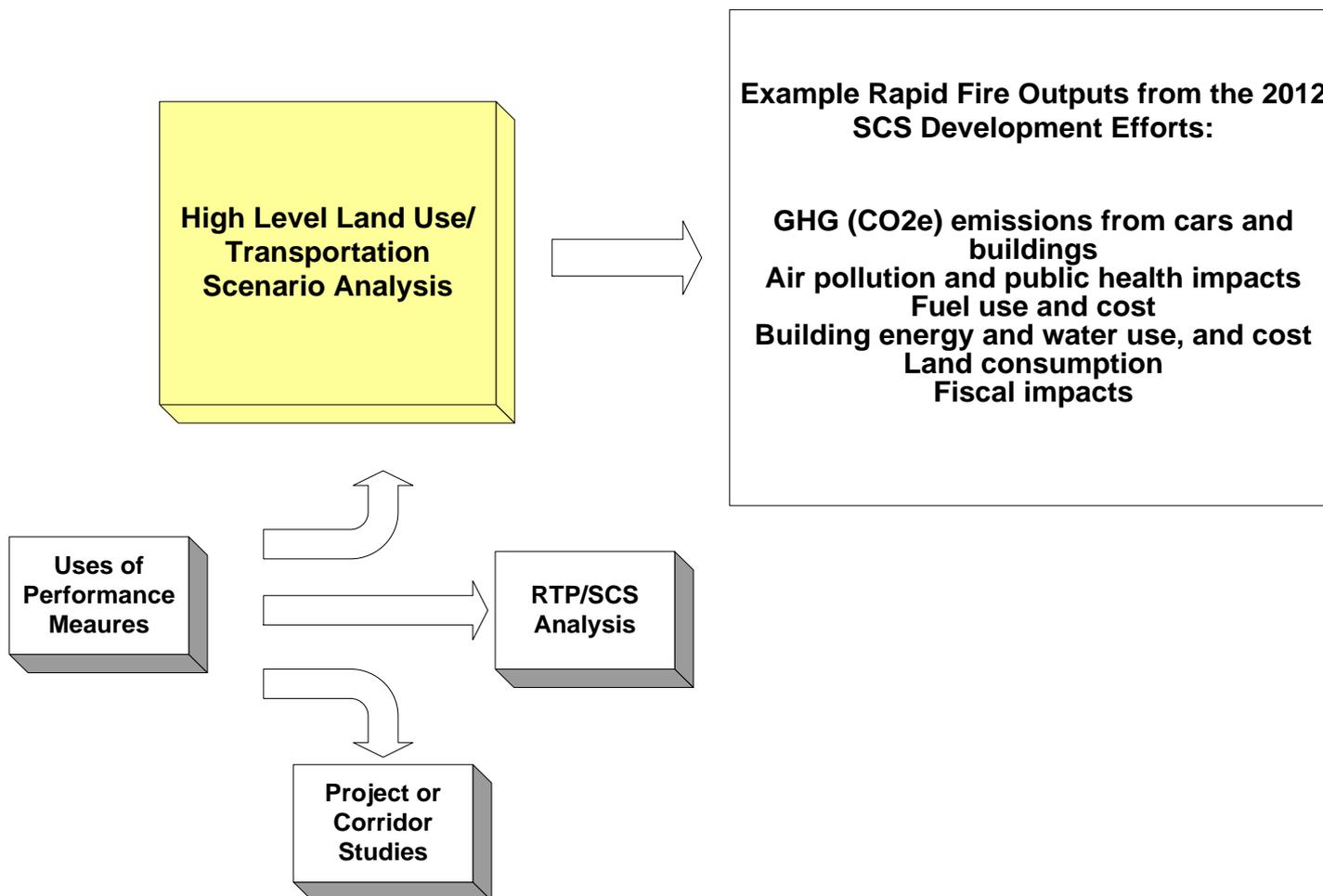
Uses of Performance Measures

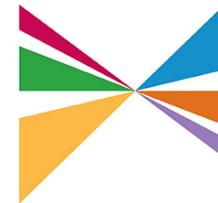




High Level Scenario Analysis

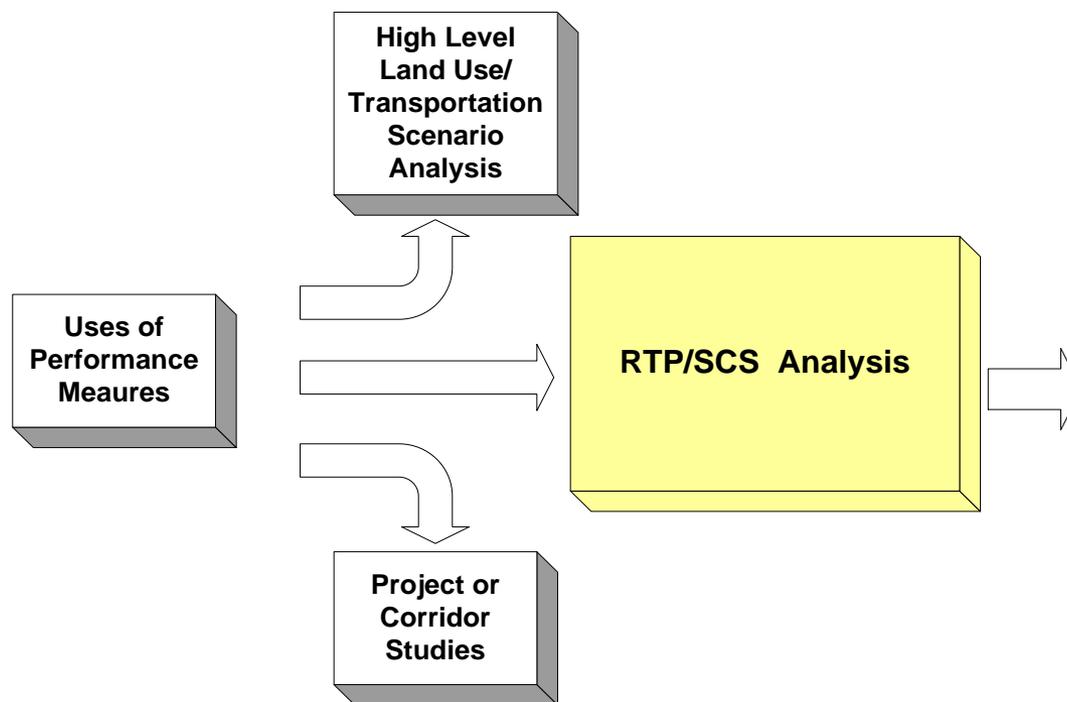
Rapid Fire Tool: Analyzing Land Use and Investment Allocations





RTP/SCS Analysis

Comprehensive Regional Evaluation Based on SCAG's Regional Travel Demand Model



RTP/SCS Performance Measures:

- Statutory Requirements
 - * Meeting the Clean Air Act (Transportation Conformity)
 - * SB 375 (Per Capita GHG Emission Targets 8% by 2020 and 13% by 2035)
- Meeting Broad Regional Goals
- Regional Policies, Strategies, Projects (Managed Lanes, East West Freight Corridor, Mileage-Based User Fee)
- All Rely Primarily on Regional Travel Demand Model



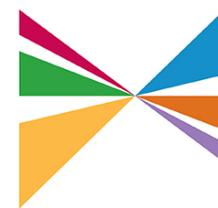
Performance measurement also involves tracking plan progress

- Performance measures used to monitor performance outcomes may be different from those used to analyze scenarios or final plan.
- Performance outcomes are impacted by both policies and other variables, such as demographic changes and business cycles.
- Results of the monitoring as related to policies could serve as a basis to modify existing policies or developing new policies.

Performance Measures should reflect the regional goals such as the ones in the 2012 RTP/SCS

- Align the plan investments and policies with improving regional economic development and competitiveness
- Maximize mobility and accessibility for all people and goods in the region
- Ensure travel safety and reliability for all people and goods in the region
- Preserve and ensure a sustainable regional transportation system
- Maximize the productivity of our transportation system
- Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)
- Actively encourage and create incentives for energy efficiency, where possible
- Encourage land use and growth patterns that facilitate transit and non-motorized transportation
- Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies

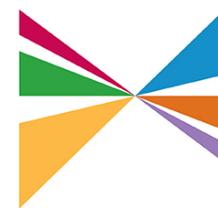




2012 RTP/SCS Outcomes and Performance Measures Location Efficiency Added in 2012

Outcome	Performance Measure/ Indicator	Definition	Performance Target
Location Efficiency	Share of growth in High Quality Transit Areas (HQTAs)	Share of the region's growth in households and employment in HQTAs	Improvement over No Project Baseline
	Land consumption	Additional land needed for development that has not previously been developed or otherwise impacted, including agricultural land, forest land, desert land, and other virgin sites	Improvement over No Project Baseline
	Average distance for work or non-work trips	The average distance traveled for work or non-work trips separately	Improvement over No Project Baseline
	Percent of work trips less than 3 miles	The share of total work trips which are fewer than 3 miles	Improvement over No Project Baseline
	Work trip length distribution	The statistical distribution of work trip length in the region	Improvement over No Project Baseline



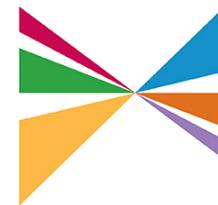


2012 RTP Transportation Outcomes and Performance Measures ... continued

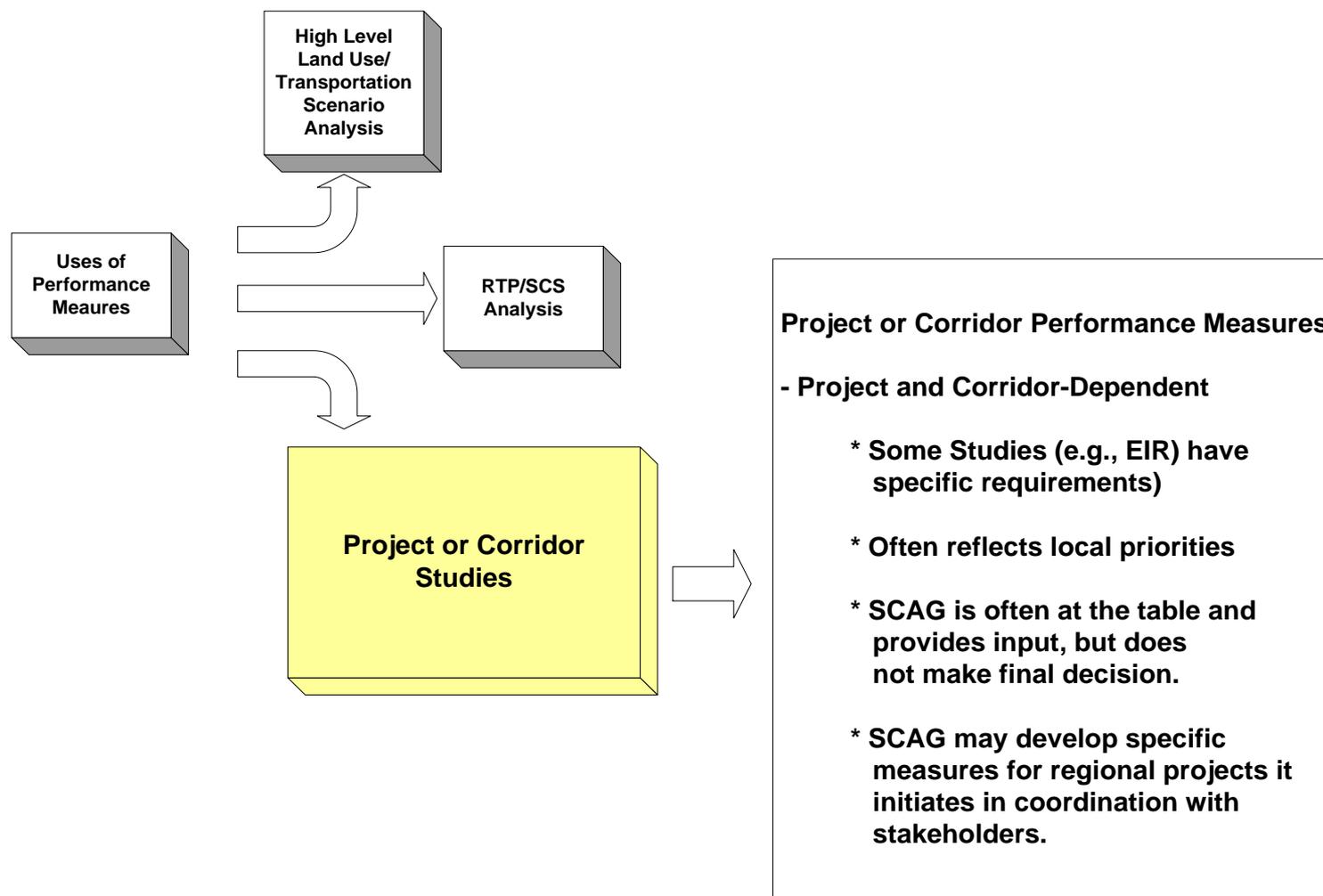
Preservation became a sustainability focus area

Outcome	Performance Measure/ Indicator	Definition	Performance Target
Mobility and Accessibility	Person delay per capita	Delay per capita can be used as a supplemental measure to account for population growth impacts on delay	Improvement over No Project Baseline
	Person delay by facility type (mixed flow, HOV, arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed	Improvement over No Project Baseline
	Truck delay by facility type (Highway, Arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed	Improvement over No Project Baseline
	Travel time distribution for transit, SOV, HOV for work and non-work trips	Travel time distribution for transit, SOV, HOV for work and non-work trips	Improvement over No Project Baseline
Safety and Health	Collision/accident rates by severity by mode	Accident rates per million vehicle miles by mode (all, bicycle/pedestrian and fatality/killed)	Improvement over Base Year
	Criteria pollutants emissions	CO, NO _x , PM _{2.5} , PM ₁₀ , and VOC	Meet Transportation Conformity requirements
Environmental Quality	Criteria pollutant and greenhouse gas emissions	CO, NO _x , PM _{2.5} , PM ₁₀ , and VOC Per capita greenhouse gas emissions (CO ₂)	Meet Transportation Conformity requirements and SB 375 per capita GHG reduction targets
Economic Well Being	Additional jobs supported by improving competitiveness	Number of jobs added to the economy as a result of improved transportation conditions which make the region more competitive	Improvement over No Project Baseline
	Additional jobs supported by transportation investment	Total number of jobs supported in the economy as a result of transportation expenditures	Improvement over No Project Baseline
	Net contribution to Gross Regional Product	Gross Regional Product due to transportation investments and increased competitiveness	Improvement over No Project Baseline
Investment Effectiveness	Benefit/Cost Ratio	Ratio of monetized user and societal benefits to the agency transportation costs	Greater than 1.0
System Sustainability	Cost per capita to preserve multi-modal system to current and state of good repair conditions	Annual costs per capita required to preserve the multi-modal system to current conditions	Improvement over Base Year





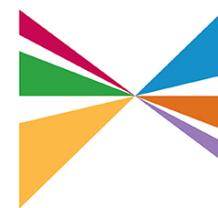
In addition, performance measures are also often driven by statutory requirements



**Refresher on MAP-21 performance
measurement requirements**

MAP-21 also establishes specific performance measures that address the goals

National Goals	MAP-21 Performance Measures
Safety	Highway Safety Improvement Program: Serious injuries and fatalities per vehicle mile travelled (VMT)
	Highway Safety Improvement Program: Number of serious injuries and fatalities
	Transit Safety Plan with minimum safety performance criteria for all modes of public transportation
Infrastructure Condition	Condition of Pavements on the Interstate System
	Condition of Pavements on the remaining National Highway System
	Condition of Bridges on National Highway System
	Establish state of good repair (SGR) standards for measuring the condition of capital assets of recipients including: Equipment, rolling stock, infrastructure, facilities
Congestion Reduction/ System Reliability	Performance of the National Highway System
	Congestion Mitigation and Air Quality (CMAQ) Improvement Program: Traffic Congestion
Freight Movement & Economic Vitality	National Freight Movement on the Interstate System
Environmental Sustainability	Congestion Mitigation and Air Quality (CMAQ) Improvement Program: On-road mobile source emissions

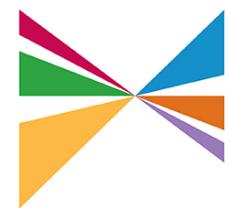


SCAG's current measures map well to the national goals and measurement areas

SCAG RTP/SCS Outcome	MAP-21 Goal Area & Performance Measures SCAG Performance Measures	Safety			Infrastructure Condition				Congestion Reduction/ System Reliability		Freight/ Economic Vitality	Env. Sustainability
		Hwy Safety Improvement Program: Serious injury & fatality rates	Hwy Safety Improvement Program: Serious injuries & fatalities	Transit Safety Plan	Condition of Pavements on the IS	Condition of Pavements on the remaining NHS	Condition of Bridges on NHS	State of good repair standards for transit capital assets	Performance of the NHS	CMAQ Improvement Program: Traffic Congestion	National Freight Movement on the IS	CMAQ Improvement Program: On-road mobile source emissions
Location Efficiency	Land consumption (total & per capita)	Not required under MAP-21, but many of these measures could address environmental sustainability										
	Median distance for work and non-work trips											
	Percent of work trips less than 3 miles											
	Share of growth in transit priority areas											
	Work trip length distribution											
Mobility/ Accessibility	Person delay per capita								◆	◆		
	Person delay by facility type (mixed flow, HOV, arterials)								◆	◆		
	Truck delay by facility type (Highway, Arterials)										◆	
	Travel time distribution for transit, SOV, HOV for work and non-work trips								◆	◆		
Safety and Health	Collision/accident rates by severity by mode	◆	◆	◆								
	Tons of pollutants											◆
Environmental Quality	Net tons of pollutants (criteria pollutants) and green house gas emissions											◆
Economic Well Being	Additional jobs supported by improving competitiveness	Not required under MAP-21										
	Additional jobs supported by transportation investment											
	Net contribution to Gross Regional Product											
Investment Effectiveness	Benefit/Cost Ratio	Not required under MAP-21										
System Sustainability	Cost per capita to preserve multi-modal system to current and state of good repair conditions. The 2012 RTP/SCS summarized asset condition of highways, arterials, and bridges				◆	◆	◆	◆	◆			

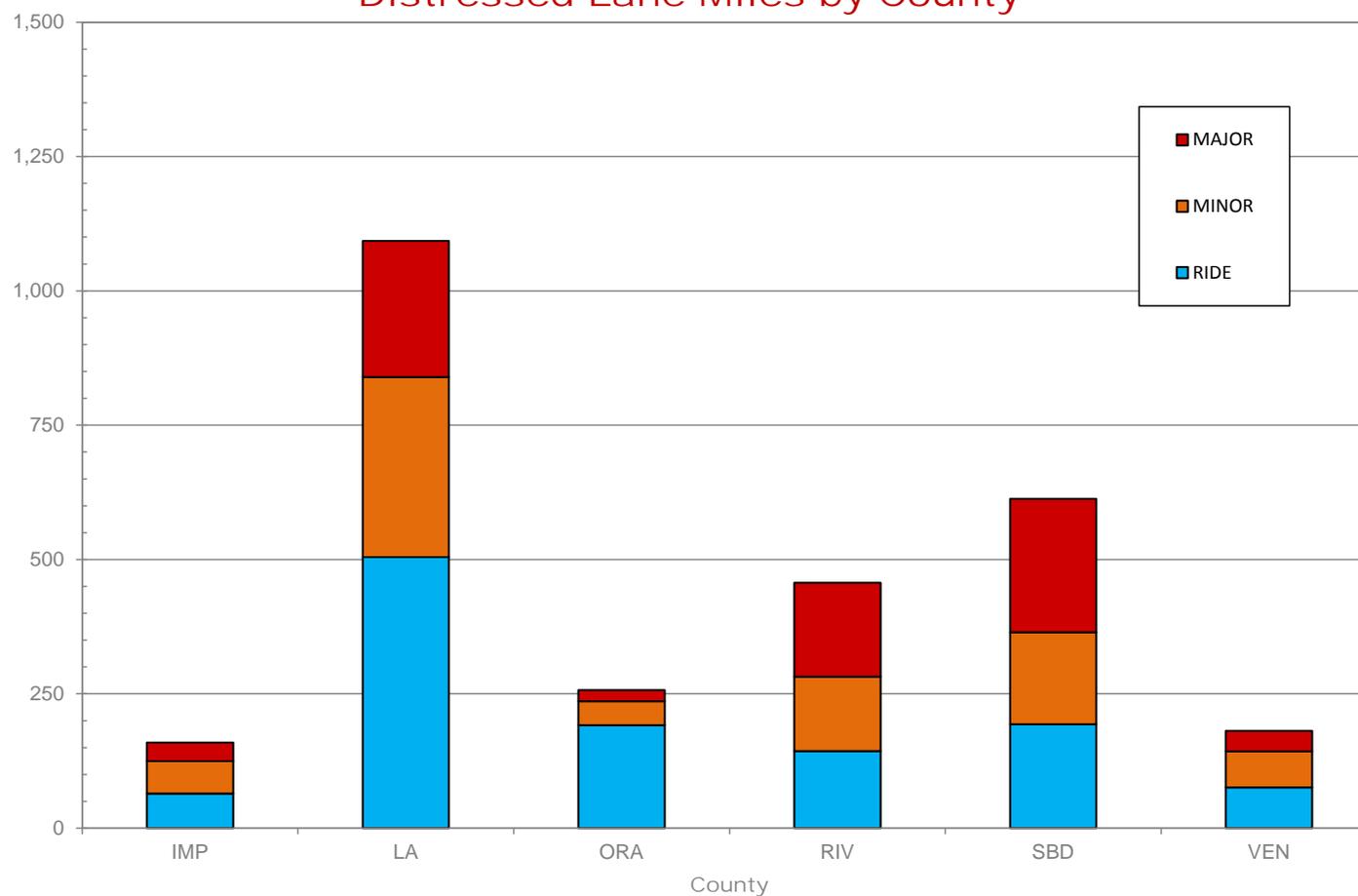
Preservation Performance Update

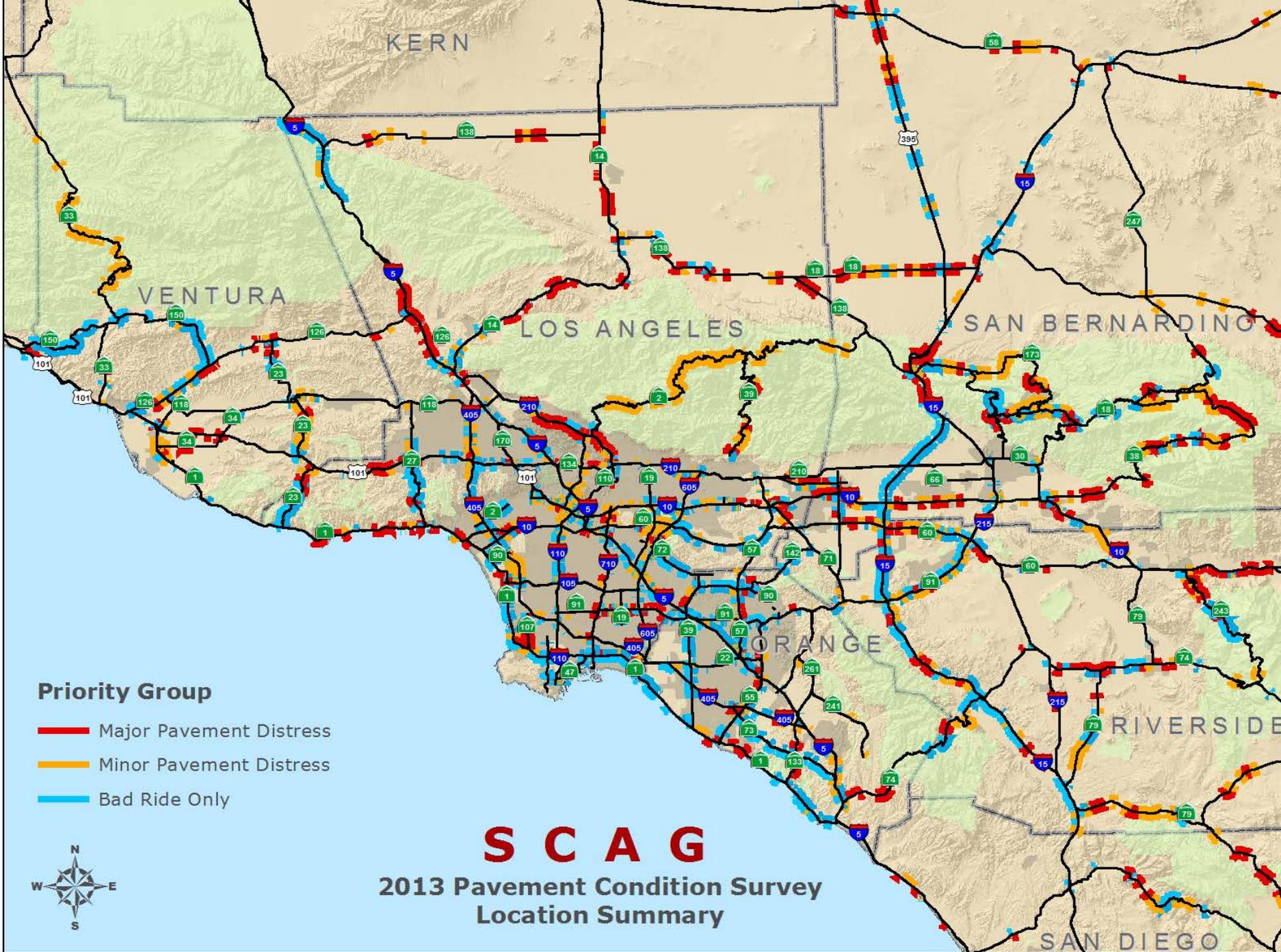




State Highway Pavement Condition 2013 Survey – Distressed Lane Miles

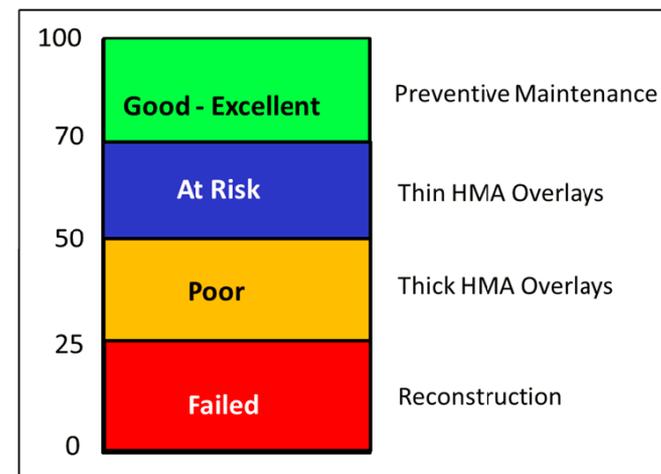
2013 Pavement Condition Survey Distressed Lane Miles by County





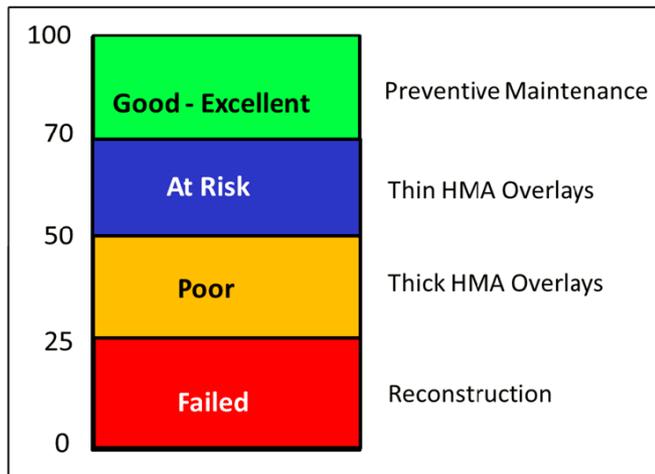
Local Roads 2014 Statewide Survey augmented by SCAG

County	Paved Centerline Miles	Unpaved Centerline Miles	2014 PCI
Imperial	3,001	1,250	57
Los Angeles	21,330	213	66
Orange	6,600	-	77
Riverside	7,563	313	70
San Bernardino	9,108	717	71
Ventura	2,513	2	70
Total	50,115	2,495	69



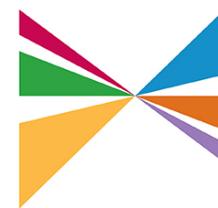
Local Roads

Costs go up significantly as PCI deteriorates



Classification	Unit Costs (\$/square yard)			
	Preventive Maintenance	Thin HMA Overlay	Thick HMA Overlay	Reconstruction
Major Roads	\$4.85	\$18.82	\$29.73	\$68.48
Local Roads	\$4.61	\$18.04	\$28.44	\$60.31





Local Roads

Needs are estimated through 2035 ... will be updated shortly through 2040

Figures in Nominal Dollars
(Year of Expenditure)

Unpaved Centerline Miles	Unpaved Needs (\$M)
1,250	\$ 391.6
213	\$ 66.7
	\$ -
313	\$ 98.1
717	\$ 224.6
2	\$ 0.6
2,495	\$ 781.68

Total Miles	Total 21 year Needs (\$M)
4,251	\$ 2,439
21,543	\$ 26,267
6,600	\$ 7,005
7,876	\$ 7,576
9,825	\$ 9,476
2,515	\$ 2,702
52,610	\$ 55,466



Local Roads

Current expenditures based on survey and trends

Current Expenditure Estimates

County	Annual Pavement Expenditures (\$M)		
	2012/13	2013/14	Future
Imperial	\$35	\$37	\$31
Los Angeles	\$394	\$409	\$395
Orange	\$130	\$118	\$115
Riverside	\$135	\$143	\$134
San Bernardino	\$96	\$104	\$90
Ventura	\$35	\$33	\$28
Totals	\$825	\$843	\$794

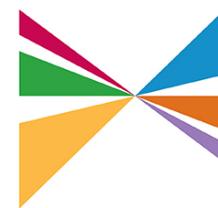
Local Roads Funding Shortfall through 2035

County	Total Miles	Total 21 year Needs (\$M)	Total 21 year Funding (\$M)	Shortfall (\$M)
Imperial	4,251	\$ 2,439	\$ 654	\$ (1,785)
Los Angeles	21,543	\$ 26,267	\$ 8,300	\$ (17,967)
Orange	6,600	\$ 7,005	\$ 2,417	\$ (4,588)
Riverside	7,876	\$ 7,576	\$ 2,822	\$ (4,754)
San Bernardino	9,825	\$ 9,476	\$ 1,889	\$ (7,587)
Ventura	2,515	\$ 2,702	\$ 581	\$ (2,121)
Total	52,610	\$ 55,466	\$ 16,664	\$ (38,802)

Safety Performance Update

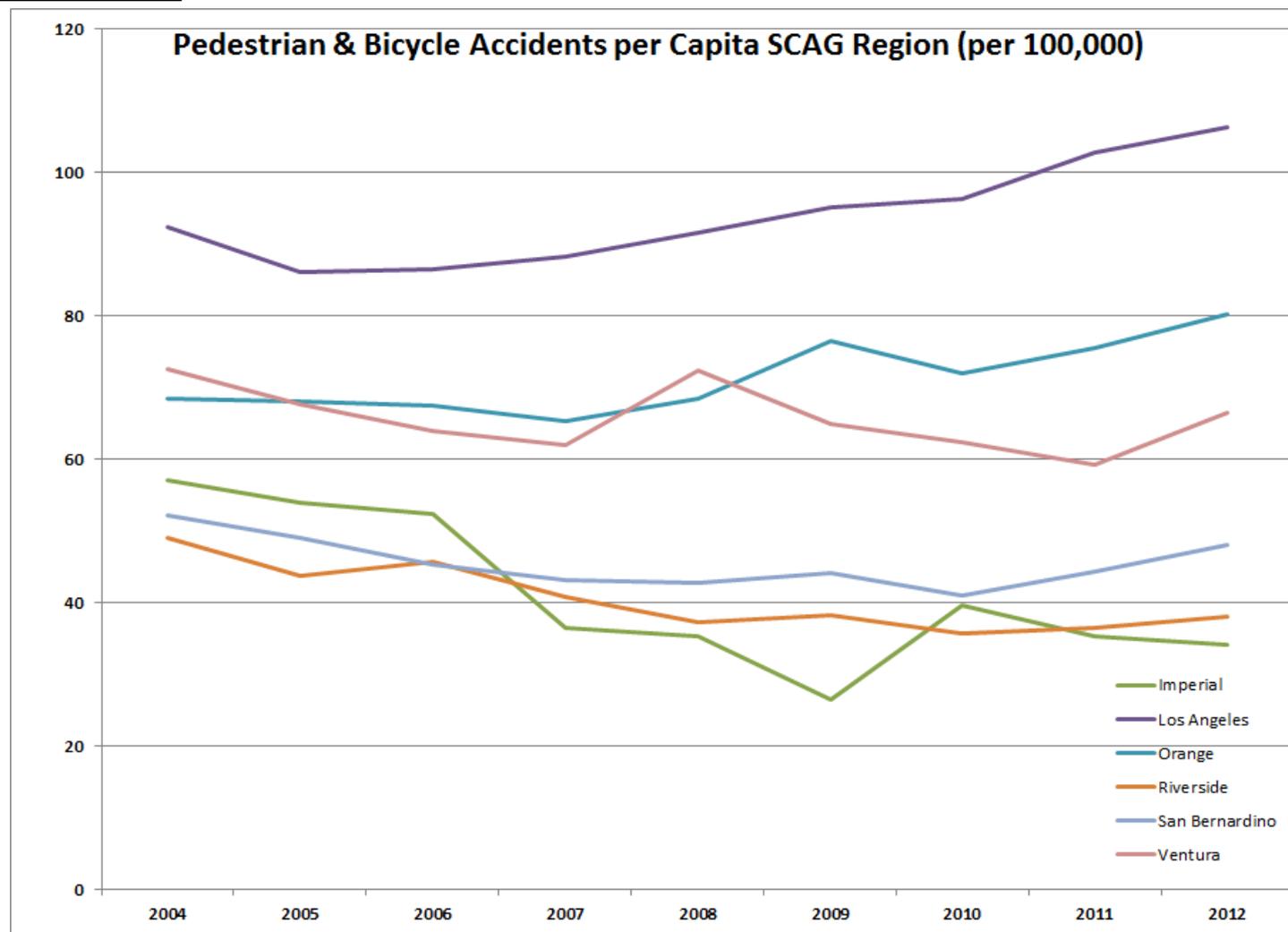
Safety Analysis Update

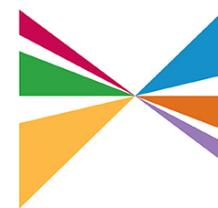
- We previously presented preliminary safety results (based on SWTRS) and received two primary comments:
 - Can we identify active transportation related rates?
 - Can we double-check 2012 numbers, since the reduction looked surprising?



Active Transportation Accident Rate Trends

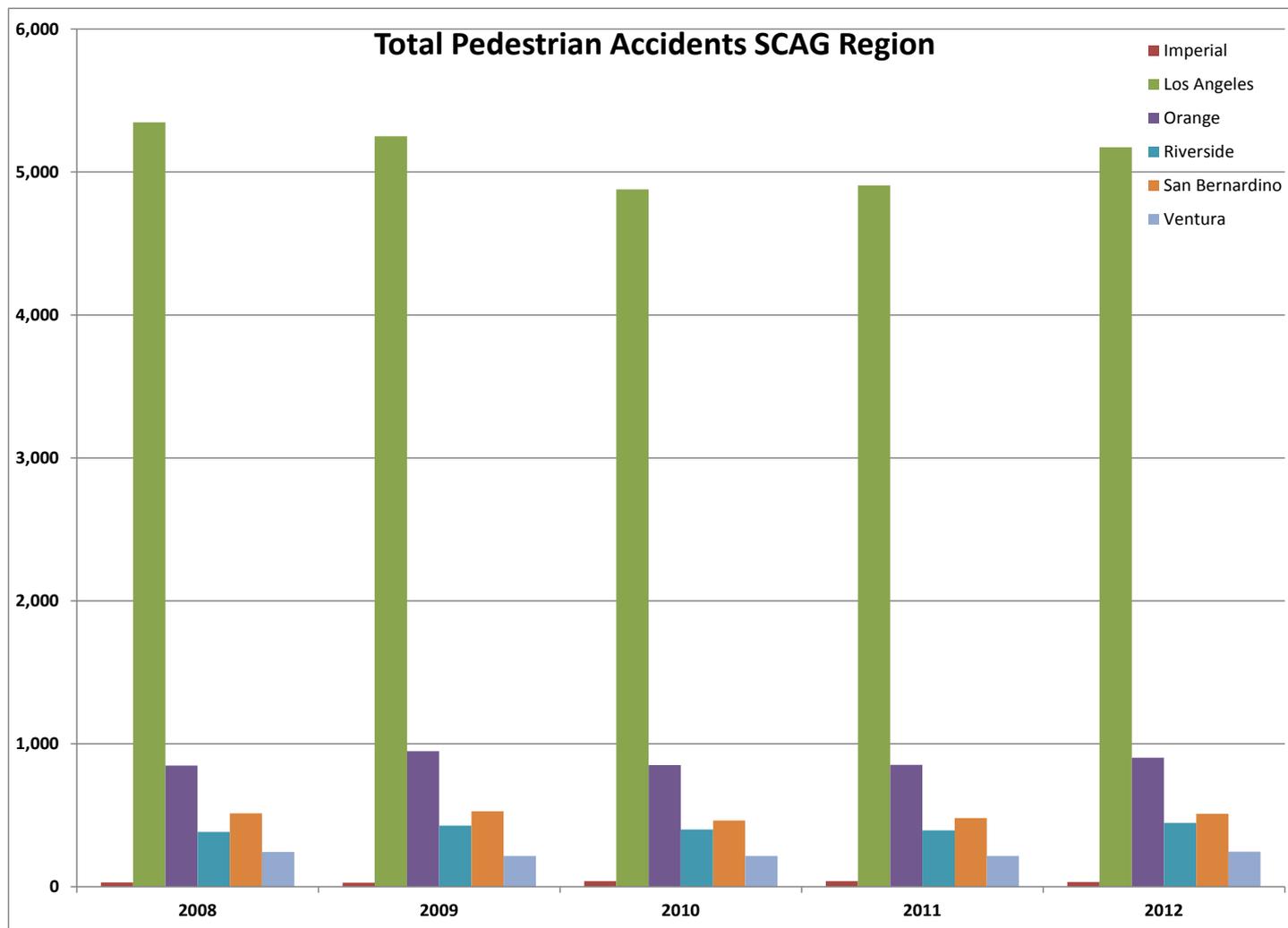
Increasing trend may be related to increased trips

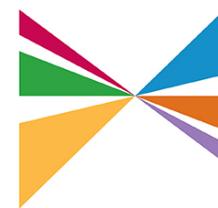




Active Transportation Accident Rate Trends

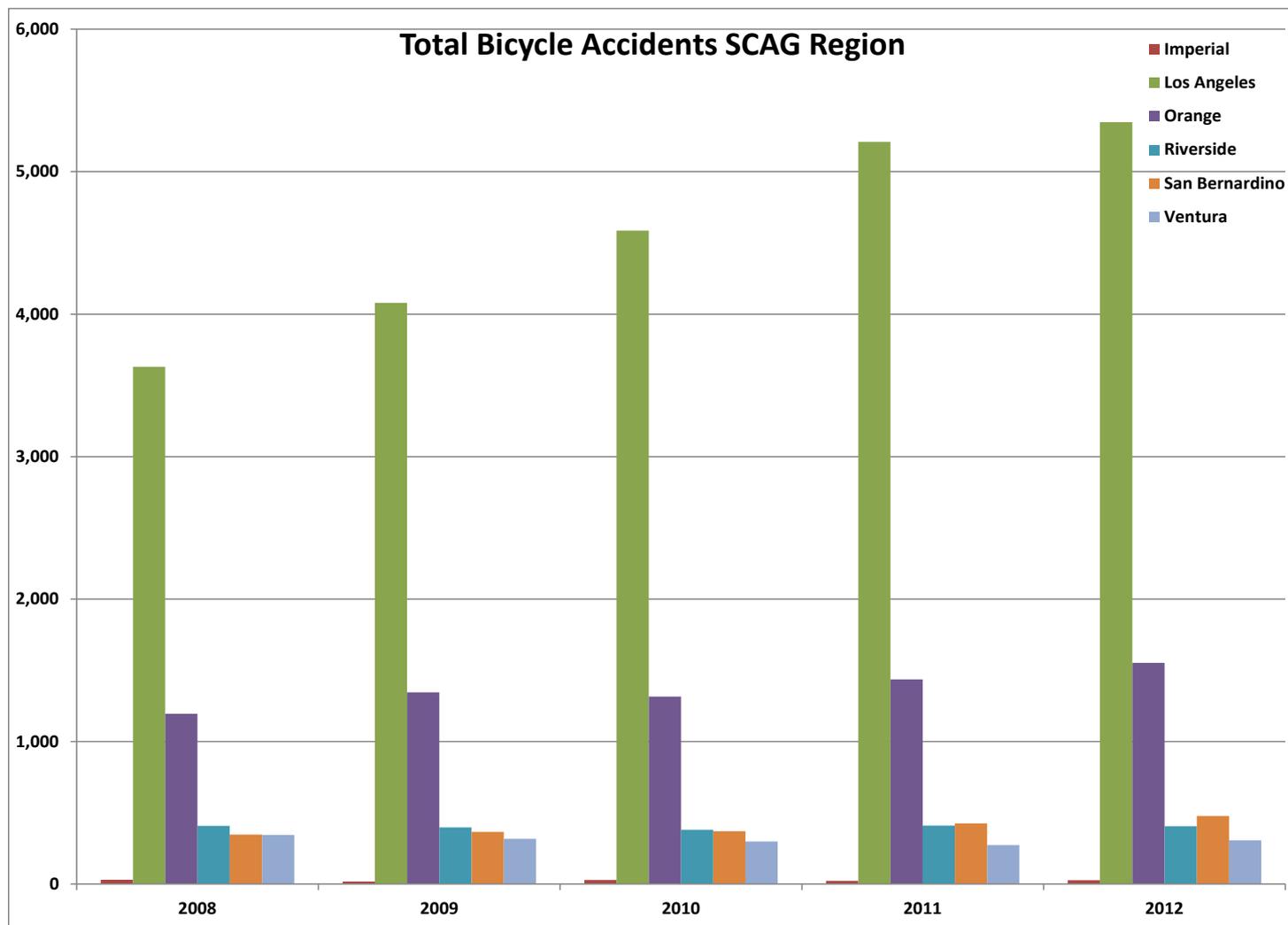
Pedestrian Accident Trends

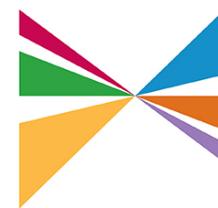




Active Transportation Accident Rate Trends

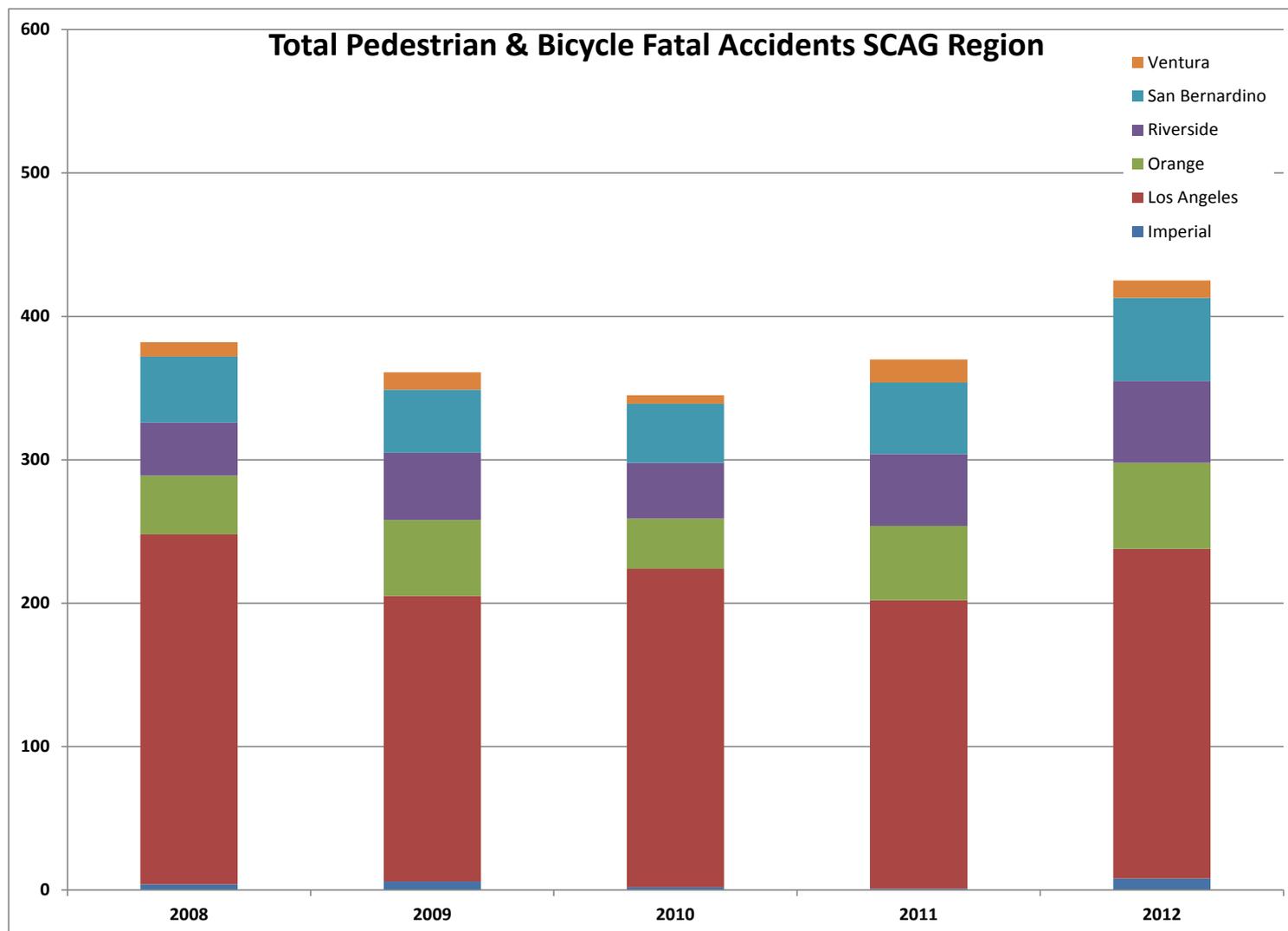
Bike Accident Trends

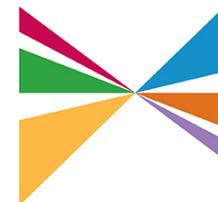




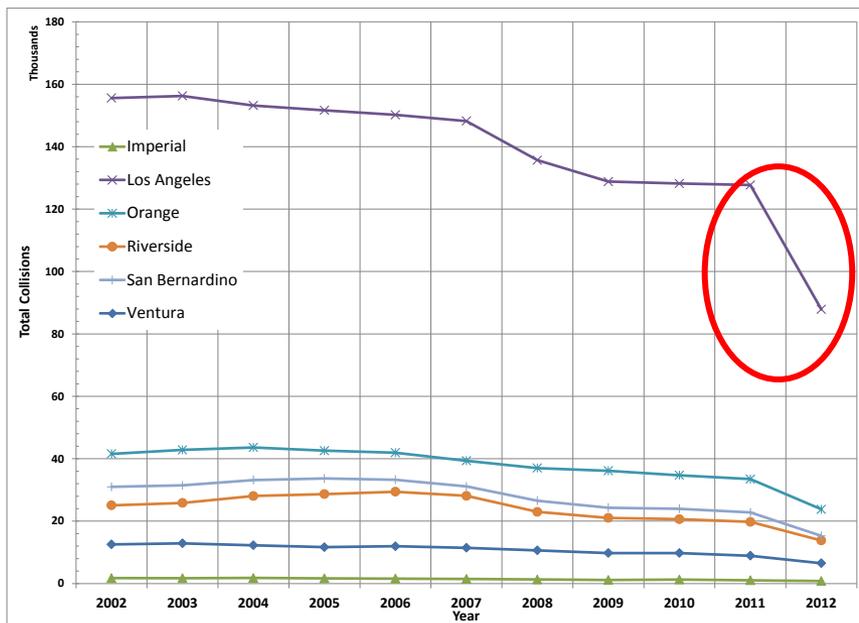
Active Transportation Accident Rate Trends

Active Transportation Fatality Trends

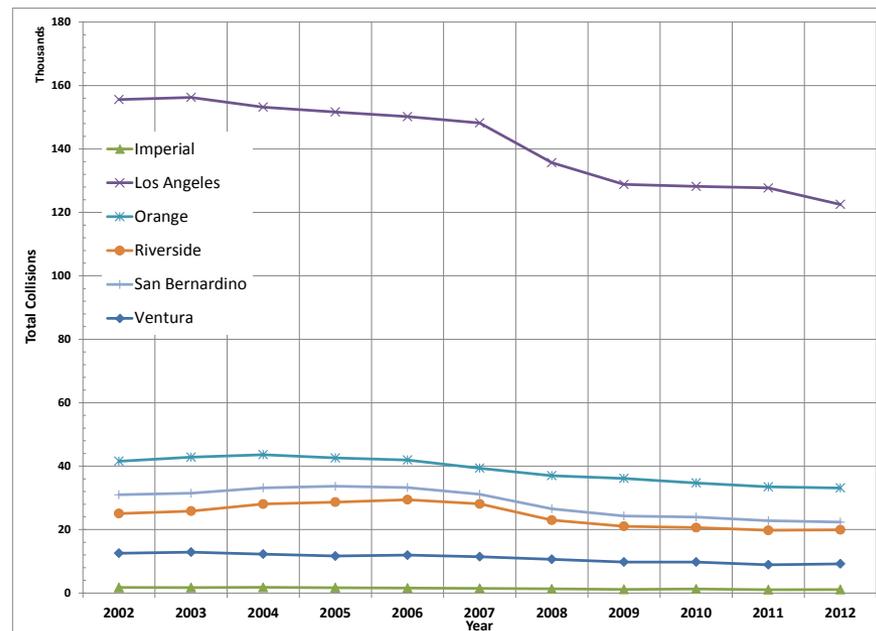




Updated Total Collisions and Percent Change 2002-2012 – Still promising trends

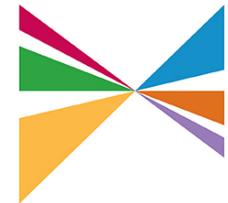


February Total Collisions by County

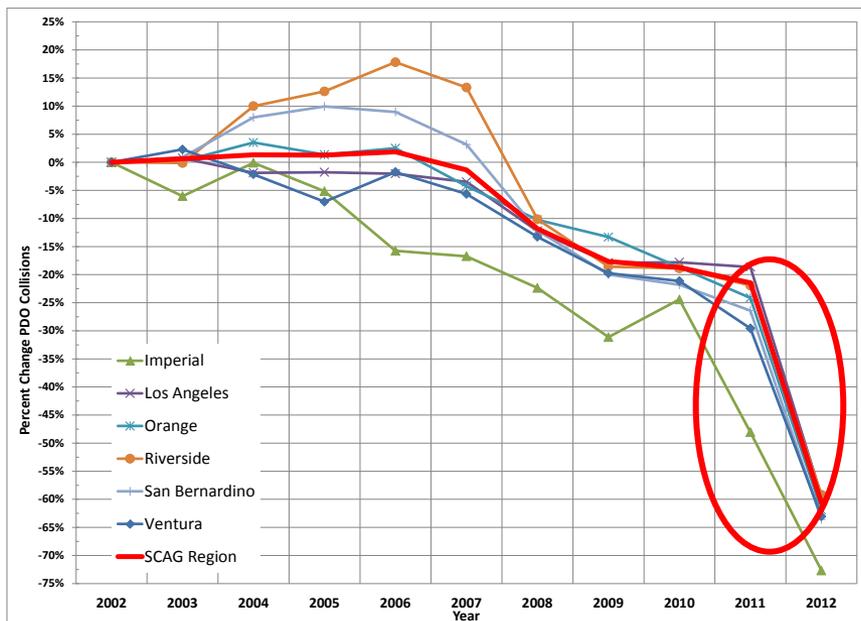


Revised Collisions by County

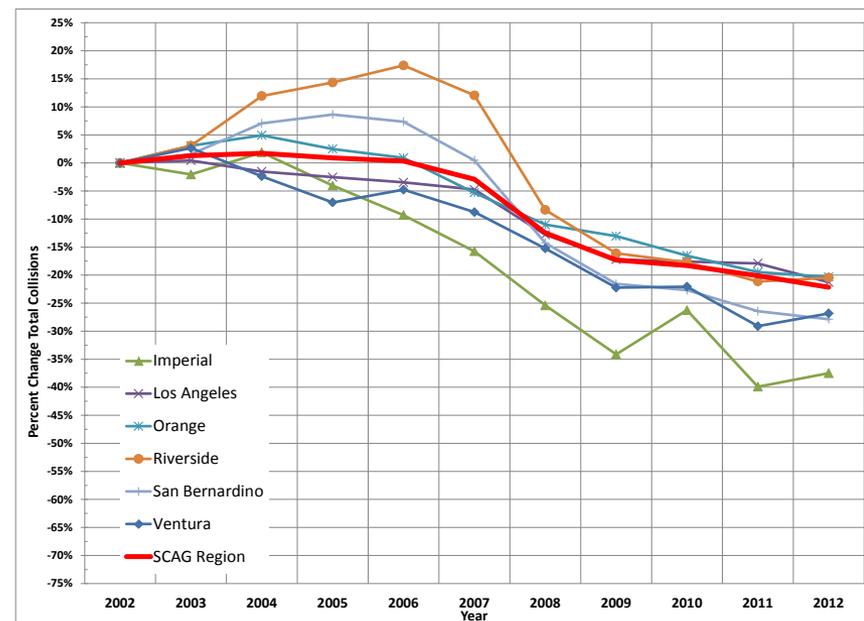




Updated PDO Collisions Percent Change 2002-2012 – Similar trends for property damage



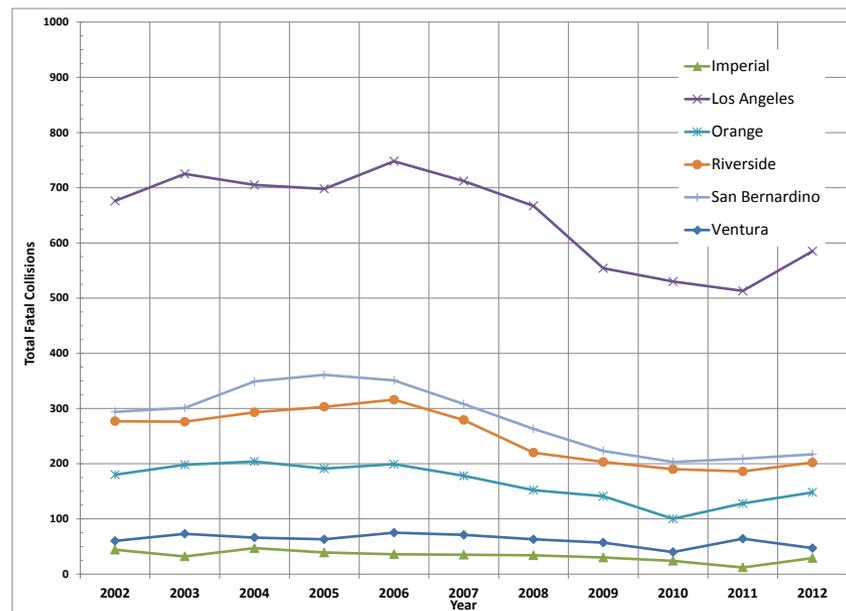
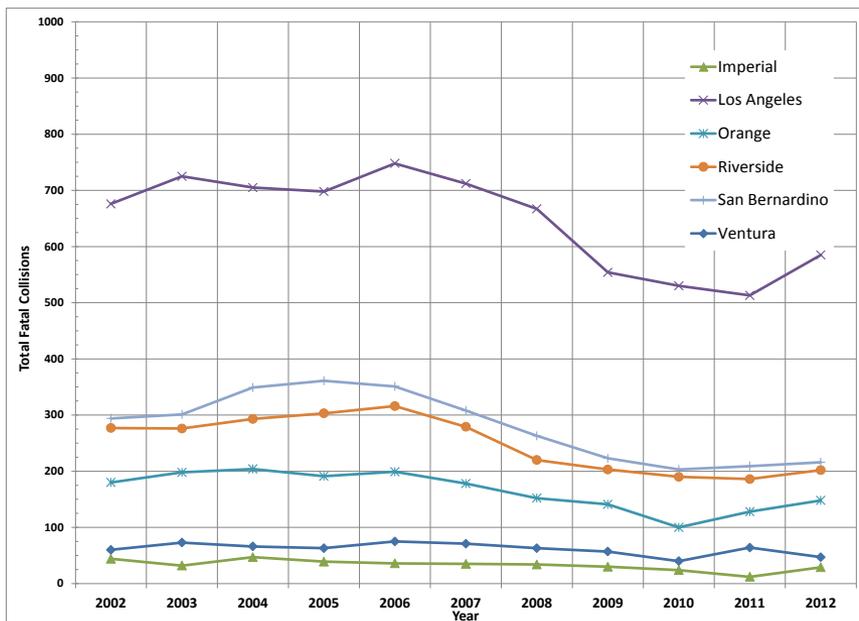
February Percent Change in PDO Collisions by County from 2002



Revised Percent Change in PDO Collisions by County from 2002



Updated Fatal Collisions 2002-2012 – no changes



February Total Fatal Collisions by County



Monitoring Performance (Outcome) Measures

- New category beginning in the 2012 RTP/SCS
- Include the following categories
 - Location Efficiency
 - Mobility and Accessibility
 - Reliability
 - Safety and Health
 - Productivity
 - Environmental Quality

Monitoring Performance (Outcome) Measures is Part of Monitoring Progress

- Monitoring Progress includes monitoring implementation actions as well as performance outcomes
- Implementation actions, relative to the RTP/SCS, may include, for example:
 - Local general plan updates
 - Zoning updates
 - Development of specific plans
 - Development of bike plans, pedestrian plans, complete street policies
 - Development of parking management ordinance, TDM
 - Timely implementation of transportation or development projects
 - Others: funding, tools

Considerations to Update Monitoring Performance (Outcome) Indicators

- Stakeholders input: TWG, CTCs, etc.
- MAP-21 performance measures (in progress)
- Statewide Performance Monitoring Indicators for Transportation Planning (June 2013)
- California Healthy Communities Data & Indicators Project (2013)
- CalEnviroScreen indicators (August 2014)
- California Transportation Plan 2040 (expected 2015)
- Research on MPOs' performance indicators in the nation (in progress)

Statewide Performance Monitoring Indicators for Transportation Planning (June 2013)

- VMT per capita
- Percent of Congested Freeway/Highway Vehicle Miles (PeMS)
- Mode Share (Travel to work)
- State of Good Repair (for highways, local streets, highway bridges, transit assets)
- Freeway/Highway Buffer Index (PeMS)
- Fatalities/serious injuries per VMT and per capita

Statewide Performance Monitoring Indicators for Transportation Planning (June 2013) (cont'd)

- Transit accessibility (Housing and jobs within 0.5 mile of transit stop with frequent transit service)
- Travel Time to Jobs
- Change in Agricultural Land
- CO2 Emissions Reduction per capita (modeled data)

Examples of Possible Additions to the Monitoring Performance (Outcome) Indicators

- MAP-21 Performance Measures (TBD)
- VMT per capita
- Mode Share (Travel to work)
- Annual transit boardings per capita
- Population within $\frac{1}{4}$ mile of bike facilities
- Share of multi-family housing units

Questions



SOUTHERN CALIFORNIA
ASSOCIATION of GOVERNMENTS

Item 4 Attachment:
Public Health Work Program

SCAG PUBLIC HEALTH PROGRAM

SCAG is committed to the development of policies and plans that balance regional goals for mobility, livability, prosperity and sustainability. Public health is closely linked with each of these goals. It is a key indicator of regional prosperity and sustainability, and an outcome of the mobility and livability strategies pursued in the region. Studies have consistently shown that the built environment affects a range of chronic health conditions including obesity, hypertension, heart disease, diabetes, cancer, and asthma. Further evidence suggests that land-use and transportation planning and policy decisions can play a role in public health outcomes by improving air quality, reducing greenhouse gas emissions, increasing opportunities for physical activity, reducing the risk of injury, and creating access to jobs, education and everyday necessities such as health care.

SCAG has a long history of supporting the region in achieving Federal and state mandates designed to protect public health as it relates to air quality, safety, and environmental justice. However, more recent research and guidance released by federal and state agencies suggests that earlier engagement between health practitioners and transportation professionals in a collaborative process can improve decision-making and help balance competing interests. SCAG can guide and influence the evolution of federal and state policies related to health and built environment by strengthening its technical capacity and leadership related to public health.

POLICY DIRECTION

The 2012 RTP/SCS supports SCAG in taking a more proactive role in public health. The plan seeks to “Protect the environment and health of our residents by improving air quality and encouraging active transportation.” It also calls on SCAG to: “Collaborate with the region’s public health professionals to enhance how SCAG addresses public health issues in its regional planning, programming, and project development activities.” Following the adoption of the 2012 RTP/SCS, the Regional Council convened a Public Health Subcommittee and adopted policy recommendations that further define SCAG’s public health role. The recommendations include supporting transportation investments with an active transportation component, providing robust public health data and information to support regional policy and the development of the 2016 RTP/SCS, and promoting ongoing partnerships with regional partners, local public health departments and other stakeholders.

GOALS

- 1) Provide leadership to measure and improve public health outcomes by expanding the knowledge base and increasing awareness of the relationship between health and the built environment throughout the region.
- 2) Develop and implement balanced policies in the 2016 Regional Transportation Plan/Sustainable Communities Strategy that drive positive health outcomes related to physical activity from walking and bicycling, collision related injuries and fatalities, air quality impacts and emissions, accessibility, climate adaptation, environmental justice, job creation and economic development.
- 3) Provide regional support, including data, statistics, benchmarks, and analysis tools, to help local agencies integrate public health into the multimodal transportation, economic development, job creation and land use planning processes.

STRATEGIES

1) REGIONAL COLLABORATION AND PARTNERSHIPS (ENGAGEMENT AND EDUCATION)

Increase regional engagement and collaboration on the issue of public health as related to the built environment and SCAG core planning functions by raising awareness among policy leaders, agency staff, business, and the public.

- a) **Regional Convenings:** Facilitate information exchange through SCAG Committees, health forums, issue integration within other SCAG-led forums (active transportation, poverty, economy, etc...)
- b) **Partnerships:** Develop and sustain partnerships with agencies, foundations, and stakeholder groups to accelerate economic development, improve public health, support environmental justice, and reduce socio-economic disparities
- c) **Support Active Transportation Education:** Implement GA resolution to create partnerships between county public health departments and county transportation commissions that promote roadway safety and encourage active transportation by supporting public education and co-benefit research
- d) **Expand Regional Capacity:** Support opportunities to collaborate with partners and stakeholders to expand the knowledge base and momentum for integrating public health considerations into local and regional planning activities

2) PUBLIC HEALTH IN REGIONAL PLANNING (INTEGRATION)

Measure and improve health outcomes in the region by incorporating consideration of health in the regional transportation/SCS planning process.

- a) **Sustained Engagement and Collaboration:** Engage with policy makers, partners and stakeholders around health-specific topics to inform policy and planning discussions
- b) **Performance Measurement:** Develop information on the performance of alternatives across broad spectrum of health issues through data/statistics collection, modeling enhancements and research
- c) **Public Health Policy Development:** Build off of existing policies to close policy gaps and incorporate public health into regional transportation planning efforts

3) TECHNICAL ASSISTANCE (SUPPORT AND ENCOURAGEMENT)

Provide technical assistance to local agencies to support implementation of the 2012 RTP/SCS.

- a) **Planning Resources:** Continued support through Sustainability Program Grants for transportation, land-use, and sustainability planning focused on improved health outcomes
- b) **Access to Expertise:** Toolbox Tuesdays, Website Resources
- c) **Communications:** Fact Sheets, Best Practices Documentation, Sustainability Awards

FY 2014-2015 PUBLIC HEALTH ACTION PLAN

SCAG plans to engage in the following activities in FY 2014-2015 to implement the public health program. These activities will complement other efforts being performed related to active transportation, the 2016 RTP/SCS and the county Joint Work Programs.

1) REGIONAL COLLABORATION AND PARTNERSHIPS

- a) **Randall Lewis Health Policy Fellows:** Support placement of Randall Lewis Health Policy Fellows local cities to engage, educate and support local and regional efforts aimed at integrating public health into land use and planning activities.

Deliverables & Schedule

- i. Fellows Placed in Cities (October 2014-May 2015)
- ii. Public Health Forum (Spring 2015)

- b) **Active Transportation Safety and Encouragement Campaign (ATP Grant):** SCAG will conduct planning activities to prepare for a Fall 2015 media campaign to reduce bicycle and pedestrian collisions.

Deliverables & Schedule

- i. Caltrans Contract (Sept-Dec 2015)
- ii. Procure Consultant (Oct 2014-Jan 2015)
- iii. Steering Committee Meetings (January-June 2015)
- iv. Draft Outreach and Communications Plan (April 2015)
- v. Final Outreach and Communications Plan (June 2015)

- c) **Public Health Working Group:** Coordinate a public health working group including members of the county transportation commissions, county departments of public health and stakeholders to provide input to SCAG staff related to implementation of SCAG's Public Health Program.

Deliverables & Schedule

- i. Quarterly Meetings (Starting November 2014)

2) PUBLIC HEALTH IN REGIONAL PLANNING

- a) **Active Transportation Health & Economic Impact Study:** This study will fill a key knowledge gap related to the economic and health benefits generated regionally from current levels of active transportation trips. The results will be used to inform the 2016 RTP/SCS. (Funding Approved through 2014-2015 OWP – Fall 2014 to Summer of 2015)

Deliverables & Schedule

- i. Develop Scope of Work (July –Oct 2014)
- ii. Procure Consultant (Oct 2014-Jan 2015)
- iii. Conduct analysis (January-May 2015)
- iv. Draft, Final Report (June 2015)

- b) 2016 RTP Update Public Health White Paper:** Staff will develop a public health white paper exploring opportunities to integrate analysis of health impacts into the policy and technical components of 2016 RTP/SCS, including Scenario Planning, Sustainable Communities Strategy, Performance Measurement, Transportation Strategies, and Environmental Justice. The white paper will be used to inform internal strategy and to communicate to stakeholders the agency's plans for integrating health in the planning process.

Deliverables & Schedule

- i. Review SCAG 2012 Plan (October 2014))
- ii. Literature Review (October-November 2104)
- iii. Draft White Paper (January 2014)
- iv. Final White Paper (February 2015)

3) TECHNICAL ASSISTANCE

- a) Trainings Toolkits (ATP Grant):** The training toolkits activity builds off of deliverable 1.C to expand support for active transportation across the region. In partnership with the county public health departments and county transportation commissions, SCAG will develop Active Transportation Trainings and Training Toolkits for 3-4 target audiences. The trainings will create and empower local champions in key sectors to lead education and encouragement programs in their communities.

Deliverables & Schedule

- i. Targeted Trainings Strategy (April May 2015)
- ii. Develop RFP (May- June 2015)
- iii. Procure Consultant (June -August 2105)
- iv. Prepare Toolkits/Conduct Trainings (FY15-16)

- b) Website Upgrades:** SCAG will develop a website to track and provide information to stakeholders on SCAG's public health related initiatives. Developed with existing staff resources.

Deliverables & Schedule

- i. Develop site design with Communications team (October-November 2014)
- ii. Develop Content/Text (December 2014-January 2015)
- iii. Website Launch (Spring 2015)



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Item 5 Attachment:
Scenario Planning - 2016 RTP/SCS
Overview and Emerging Themes

Scenario Planning for the 2016 RTP/SCS Overview and Emerging Themes

Technical Working Group
November 20, 2014



SOUTHERN CALIFORNIA
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2012 RTP/SCS Key Strategies:



- Concentrate growth in high quality transit areas (HQTA)
- Enhanced Transit Service
- Active Transportation
- Innovative Funding
- Invest in clean fuel technology
- East/West Freight Corridor



2016 RTP/SCS – Emerging Themes

- Progress report on implementation of 2012 strategies
- Update and refine 2012 strategies
 - Active transportation, public health, etc.
- Study and integrate innovative transportation technologies
- Respond to changing demographics – millennials, aging
- Best practices
- Set the stage for 2020 RTP/SCS

2016 RTP/SCS – Scenario Planning

- July 2014 – July 2015 (approx.)
- Scenario Planning Model/Urban Footprint
- 4 Initial scenarios – Spring 2015
 - “Local Input”
 - “2012 Plan Updated”
 - “Policy Scenario A”
 - “Policy Scenario B”
- Stakeholder workshops – Late Spring 2015
- 1 Revised/Draft 2016 Plan scenario – Summer 2015
- Draft 2016 RTP/SCS – Fall 2015

2016 RTP/SCS – Scenario Planning

Potential policy questions to explore

- Are local governments adopting 2012 RTP/SCS policy?
- Will emerging technologies support or conflict with our transportation, land use, other policies?
- Implications of fast vs. slow implementation (e.g. active transportation funding)?
- Will demographic trends significantly effect transportation, land use needs?
- What will it take to meet more aggressive targets?

2016 RTP/SCS – Scenario Planning

Potential variables

- Land use
 - Location
 - Dev. type, density
- Transport Innovation/Technology
 - Public investment/private investment/supportive policy
 - Rate & depth of penetration
- Demographics
 - Various travel behavior, locational changes
- Active Transportation
 - Rate of investment
 - Supportive policies
 - New applications
- Transportation investments
- Transportation finance
- Others (?)

2016 RTP/SCS – Scenario Planning

Transport Innovations/Technology research

- What's out there?
- How will it effect travel behavior?
- What data is out there?
- How will we model it?
- Best candidates – Alt. fuel vehicles, 1st/Last Mile, Complete Streets, ITS Roadway
- More questions...
 - Policy – who makes it happen? (public and/or private sectors)
 - Implications for land use? Transportation investments?



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Item 6 Attachment:

SCAG Clean Cities Coalition

Alternative Fuel Vehicle Program/Alternative Mobility Map Research

SCAG Clean Cities Coalition, Alternative Fuel Vehicle Program, and Alternative Mobility Map research

Technical Working Group
Thursday, November 20, 2014

Marco Anderson, SCAG



SCAG Clean Cities Coalition

The SCAG (Southern California) Clean Cities Coalition includes parts of Los Angeles County, Orange, San Bernardino, Ventura and Imperial

The Coalition was originally formed (designated) in 1996

Coalition Structure:

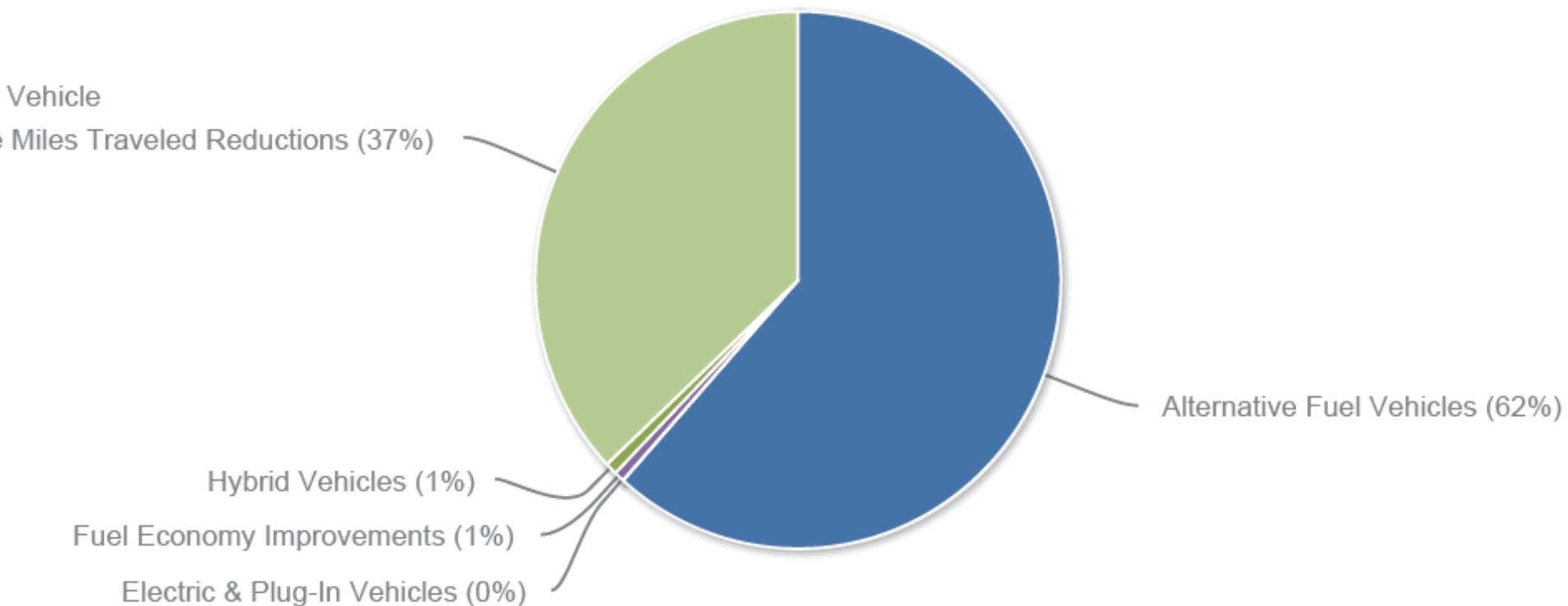
- Clean Cities is SCAG program component (since 2010)
- The Coalition reports to SCAG's Energy & Environment Policy Committee & RTTAC
- 200 + stakeholders/ members
- Coalition funded through DOE program contract and available CEC Grant Funding



2013 Gallons of Gasoline Equivalent (GGe) Reductions

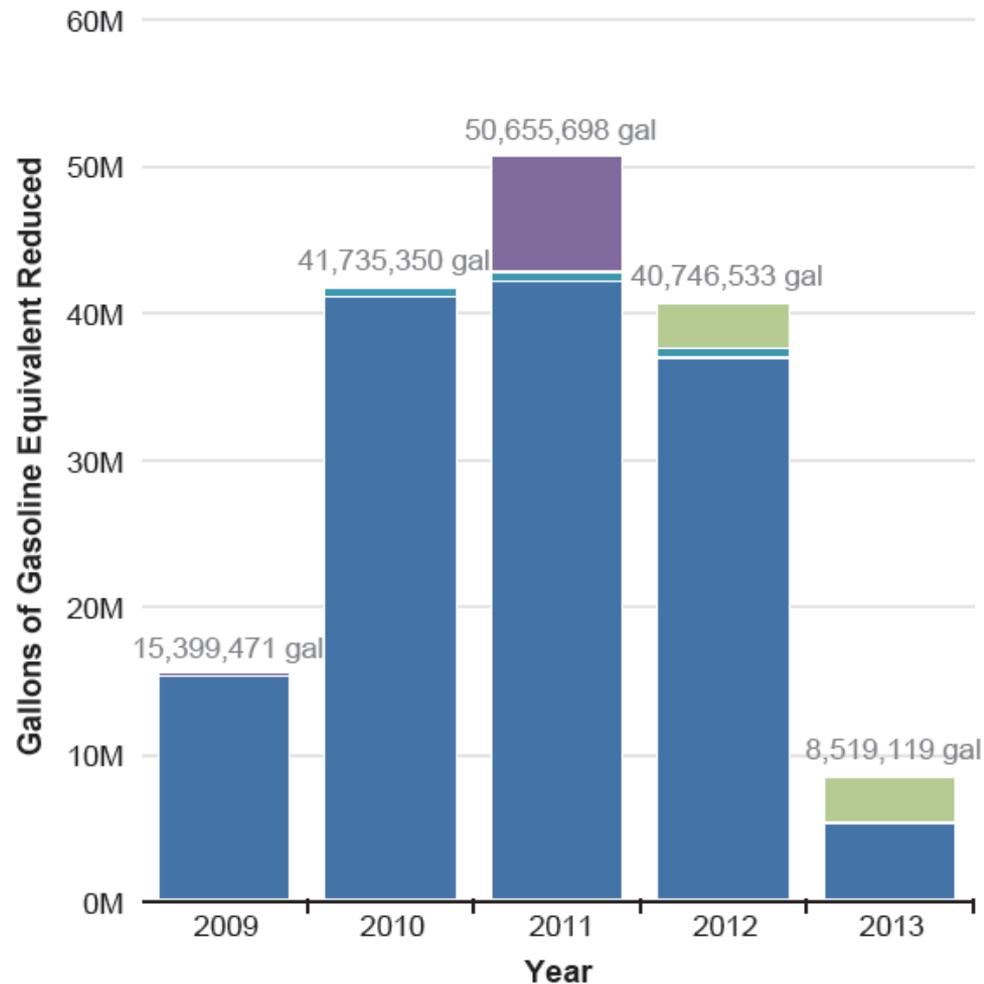
2013 Gallons of Gasoline Equivalent Reduced

8,519,119 gallons



Gallons of Gasoline Equivalent (GGe) Reductions

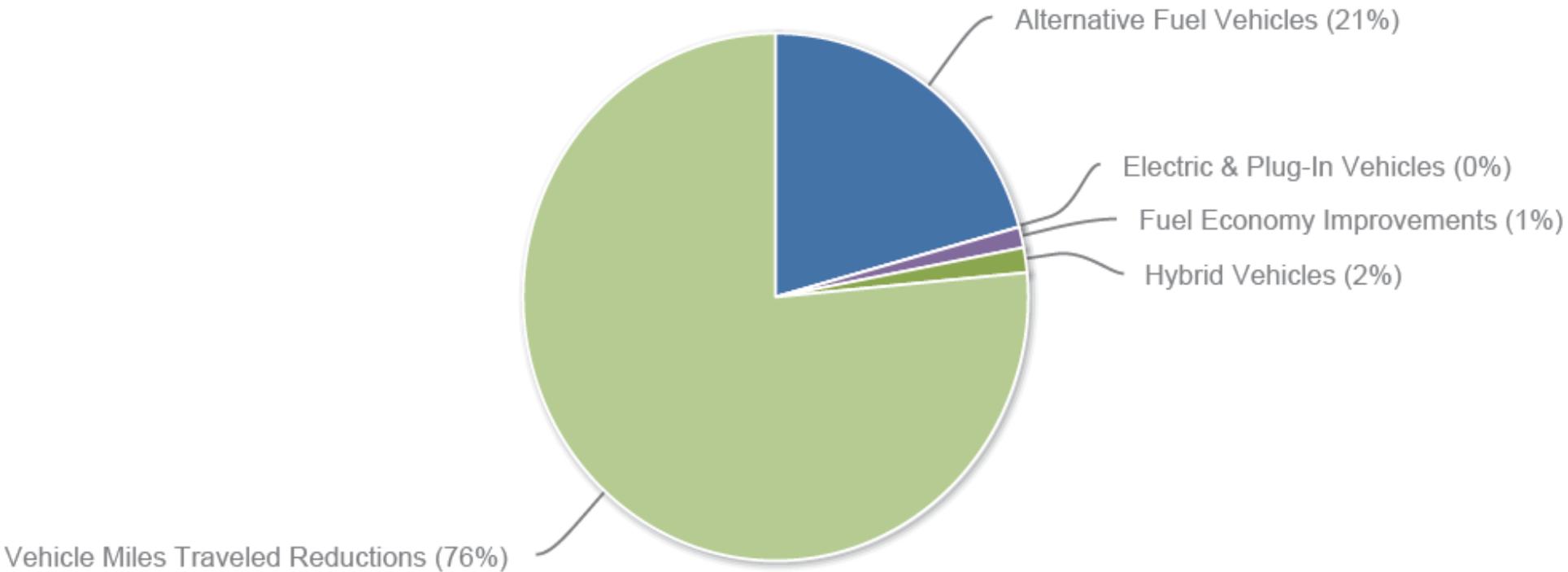
Historical Gallons of Gasoline Equivalent Reduced



2013 Greenhouse Gas Emissions (GHG) Reductions

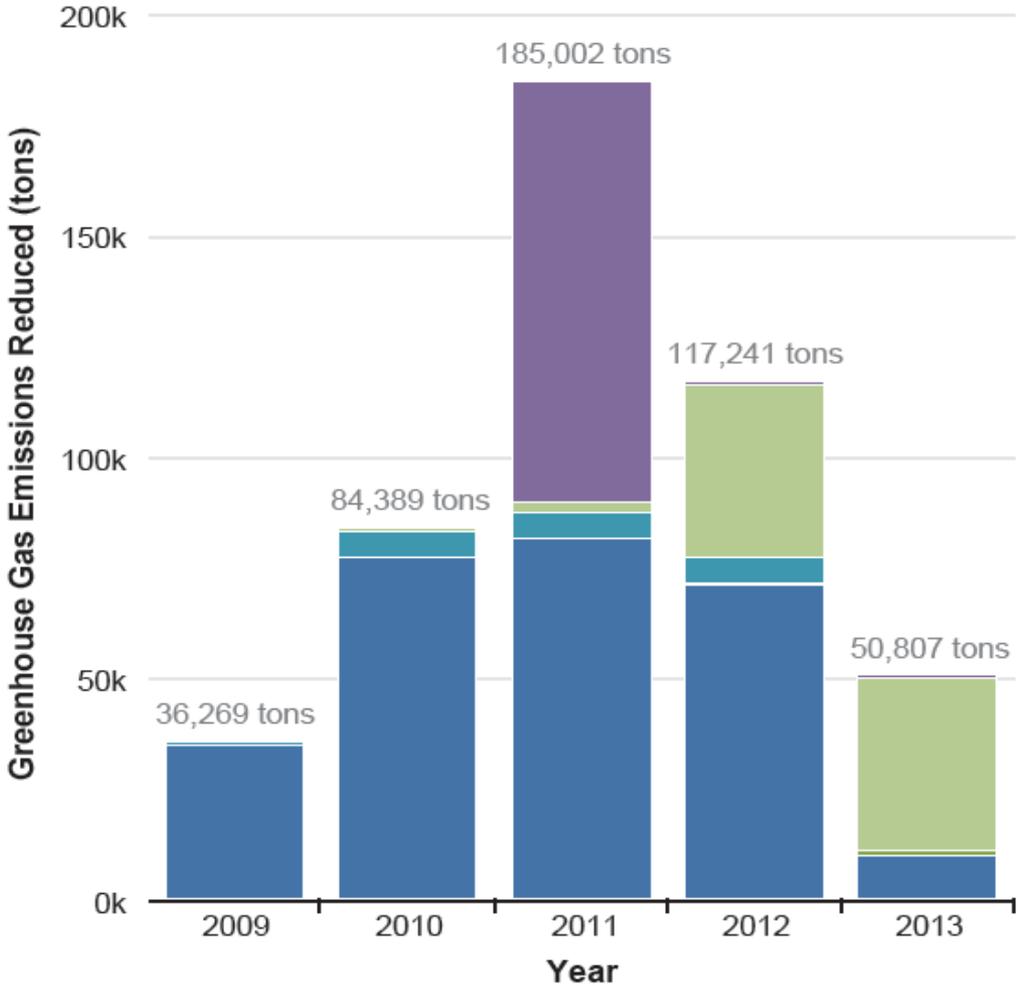
2013 Greenhouse Gas Emissions Reduced

50,807 tons



Greenhouse Gas Emissions (GHG) Reductions

Historical Greenhouse Gas Emissions Reduced



Next Steps

- 2014 Survey – Solicitation begins January 2015 Survey Complete March 2015
- Upcoming Coalition Activities
 - Managing Mixed Fuel Fleets Webinar
 - Renewable Natural Gas Briefings
- One-on-One Stakeholder Interviews
 - Funding opportunities
 - Information distribution
 - Additional input?
 - Questions?

PEV Plan Recommendations

Local Agency Focus

- Workplace Charging
 - Employer Outreach
 - Pre-Connection Commitments
- Multi-Family Buildings
 - Demonstration Projects
- Retail Fast Charging
 - Parking Issues



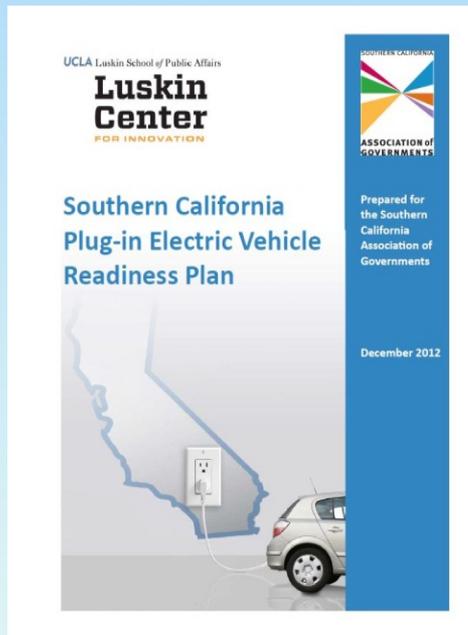
Local Agency Recommendations

- General Outreach and Awareness
 - PEV Events, Ride-&-Drives,
- Consumer Friendly Installation Permits
 - Model Ordinances, Zoning Changes, Streamlined On-line Permits
- Targeted Outreach to Audiences
 - Employers, Building Owners, PEV Owners
- Direct Participation in Pilot Projects
 - Multi-Family Dwelling Unit Installation to understand policy issues

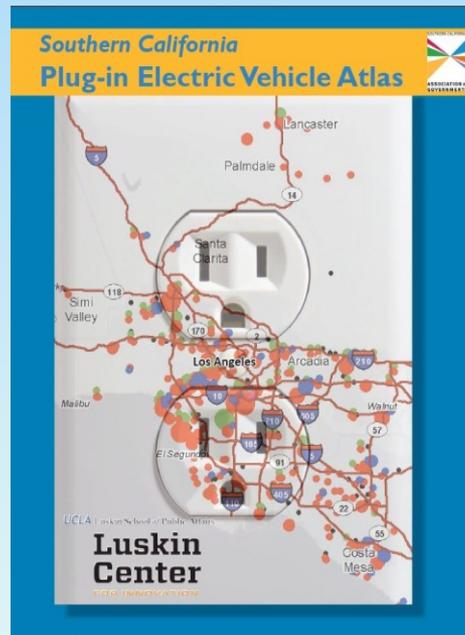


Regional PEV Resources

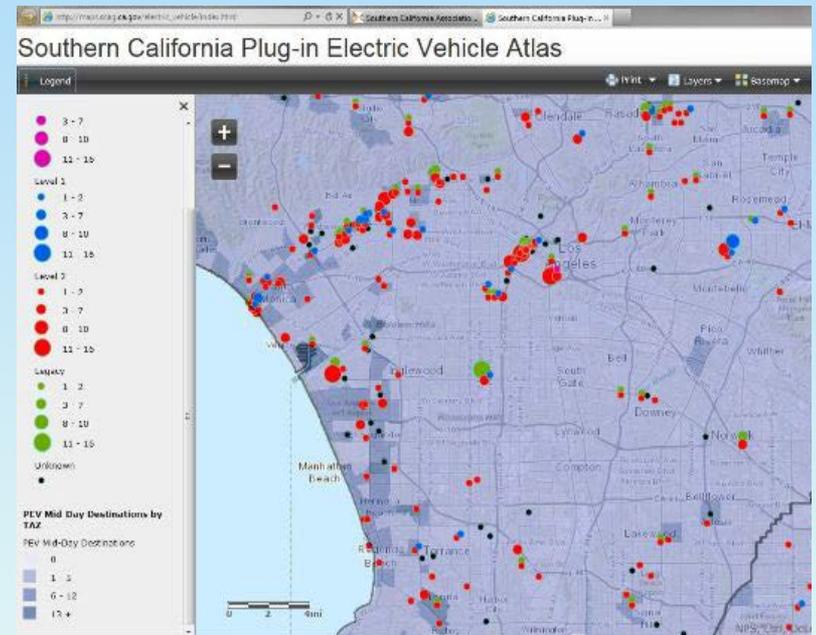
SCAG Funded Products and Resources available:
www.scag.ca.gov/programs/Pages/RegionalElectric.aspx



SCAG PEV Readiness Plan



SCAG PEV Readiness Atlas



SCAG Interactive PEV Readiness Atlas

Regional NEV/Alt Mobility Friendliness

- NEVs
- Urban Mobility Platforms
- eBikes
- Car Sharing
- Travel Planning Apps
- Fully Autonomous Vehicles



Polaris GEMs



Renault Twizy



Madsen Cargo eBike



Car 2 Go Car Share Network



Google Self Driving Prius



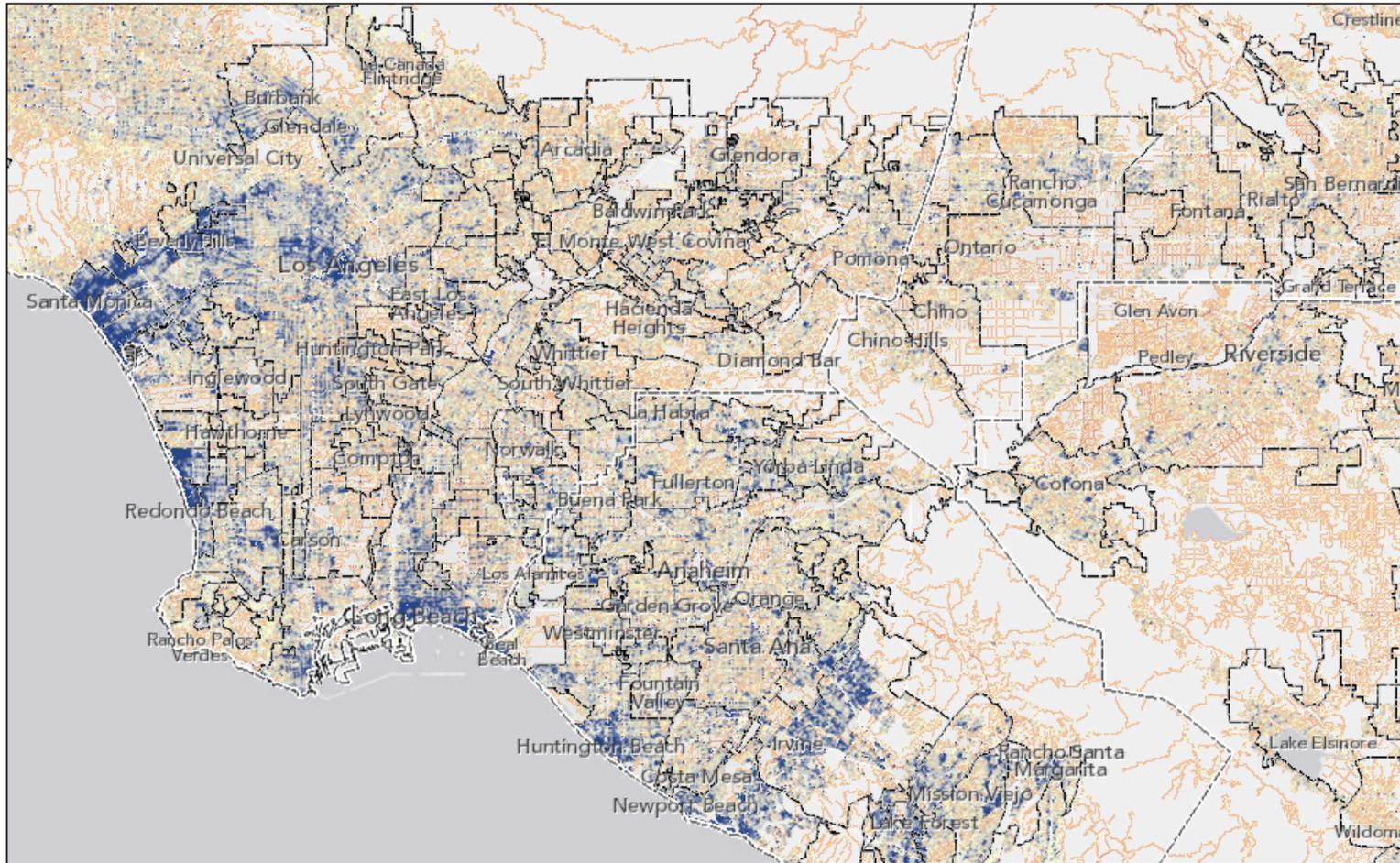
Google Self-driving Prototype

Regional NEV/Alt Mobility Friendliness

Index comprised of eight different factors

1. Roadway Speed (actual NOT posted)
2. Average Roadway Class
3. Intersection Density
4. Household Density
5. Employment Density
6. Population Density
7. Retail Employment Density
8. Density of EV Registrations

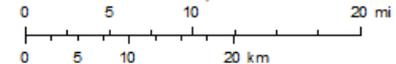
Regional NEV/Alt Mobility Friendliness



September 14, 2014

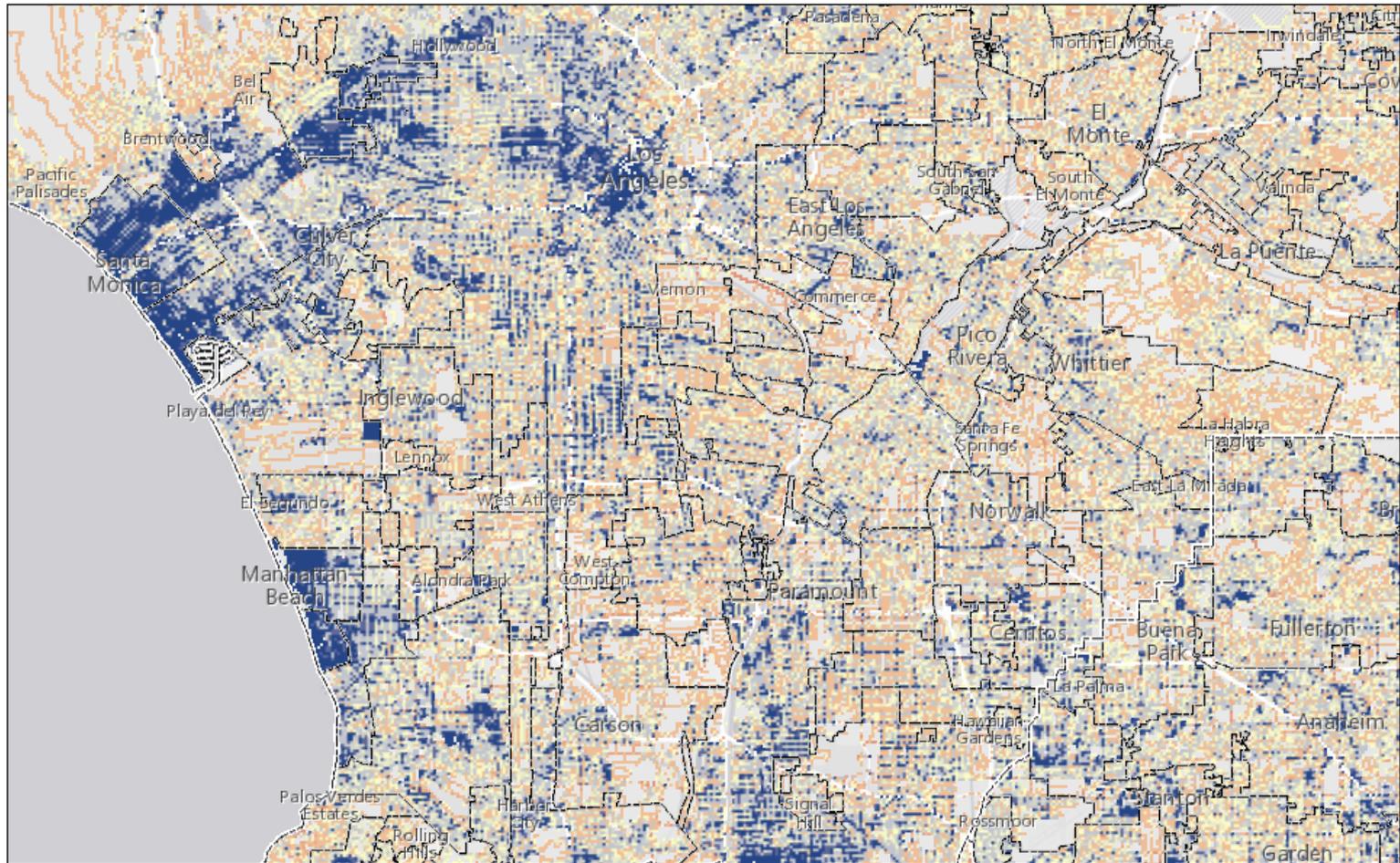


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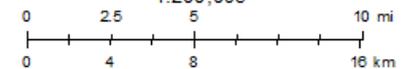
Regional NEV/Alt Mobility Friendliness



September 14, 2014



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Marco Anderson
Sr. Regional Planner
anderson@scag.ca.gov

