Presentation Outline

• Background – SCAG and Our Role in 2016 South Coast AQMP
• Why Update the RTP/SCS - What’s New Since 2012?
• RTP/SCS Scenario Planning
• Key 2016 RTP/SCS Strategies and Policies
• Key Performance Outcomes
• Next Steps
Background

• **SCAG and SCAG Region**
  - MPO for Six-County Southern California
  - Four Air Basins, Five Air District, and 19 Nonattainment and Maintenance Areas

• **SCAG’s Role in 2016 South Coast AQMP**
  - Conducting Socioeconomic Growth Forecast
  - Projecting Travel Activities
  - Developing Regional Transportation Strategies and Control Measures (Appendix IV-C)
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Why Update the RTP/SCS?
Meet 2016 RTP/SCS Performance Objectives

• Move people & goods more efficiently
• Increase accessibility
• Meet all legal & statutory requirements
  • ARB targets
  • Transportation air quality conformity
• Enhance sustainability through integrating land use and transportation resulting in numerous co-benefits
• Align with major trends in demographics & technology
Why Update the RTP/SCS? What’s New Since 2012?
Changes in Growth and Demography

EMERGING TRENDS
- Slower Growth
- Fewer Children
- A Soaring Senior Population
- Increased Demand for Multifamily Housing
- Rapid Technological Advancements

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2040</th>
<th>Change</th>
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<tbody>
<tr>
<td>Jobs</td>
<td>7</td>
<td>9</td>
<td></td>
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<tr>
<td>Households</td>
<td>6</td>
<td>7</td>
<td></td>
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<tr>
<td>People</td>
<td>18</td>
<td>22</td>
<td>3.8 MILLION</td>
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</table>

Change of 3.8 MILLION
Change of 1.5 MILLION
Change of 2.4 MILLION

Millions
Jobs
Households
People

2012
2040
Why Update the RTP/SCS? - What’s New Since 2012? Changes in Growth and Demography

Current & Future Population by Age Group

- **65 and Older**: 11% \(+2.73 \text{ mil}\)
- **35-64**: 46% \(+1.13 \text{ mil}\)
- **Under 35**: 43% \(-0.11 \text{ mil}\)

CA 1990: 33% 
SCAG 2010: 46% 
SCAG 2040: 57%

**EMERGING TRENDS**

- Slower Growth
- Fewer Children
- A Soaring Senior Population
- Increased Demand for Multifamily Housing
- Rapid Technological Advancements

Source: CA Department of Finance, 2014
Why Update the RTP/SCS? - What’s New Since 2012? Changes in Growth and Demography

EMERGING TRENDS

- Slower Growth
- Fewer Children
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- Increased Demand for Multifamily Housing
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Source: California Home Builders Foundation and SCAG Building Permits Database
Why Update the RTP/SCS? What’s New Since 2012?

Housing Preference by Age Group

EMERGING TRENDS

- Age groups 18-29 and 60 & Above have the highest preference for multifamily housing

Source: National Association of Realtors (2011)
Why Update the RTP/SCS? What’s New Since 2012?

Changes in Housing Preferences

<table>
<thead>
<tr>
<th></th>
<th>CA 1990</th>
<th>1991 Building Permits</th>
<th>SCAG 2010</th>
<th>2011 Building Permits</th>
<th>SCAG 2040</th>
<th>2040 Building Permits (Plan)</th>
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</thead>
<tbody>
<tr>
<td>65 and Older</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Under 35</td>
<td>6</td>
<td>6</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>35 - 64</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**EMERGING TRENDS**

- The preference for multifamily housing units is expanding

Source: CA Department of Finance, SCAG RTP/SCS Growth Forecast and SCAG Building Permits Database
Why Update the RTP/SCS? - What’s New Since 2012?
Rapid Advancements in Technology

EMERGING TRENDS
• Slower Growth
• Fewer Children
• A Soaring Senior Population
• Increased Demand for Multifamily Housing
• Rapid Technological Advancements
Why Update the RTP/SCS? - What’s New Since 2012?  
New Federal and State Guidance

<table>
<thead>
<tr>
<th>Federal</th>
<th>Climate Goal</th>
<th>State</th>
<th>Transportation Financing</th>
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</thead>
<tbody>
<tr>
<td>Moving Ahead for Progress in the 21st Century (MAP-21) signed into law by President Obama in June 2012</td>
<td>Governor Brown’s Executive Order B-30-15, Call to Action for Greater Reduction in GHG Emissions</td>
<td>SB 1077: Road Usage Charge Pilot Program</td>
<td></td>
</tr>
<tr>
<td>• Funding surface transportation programs at over $106 billion for FY 2013 and 2014</td>
<td>• New greenhouse gas (GHG) target of 40% below 1990 levels by 2030</td>
<td>• Pilot Program to tax motorists by vehicle miles traveled (VMT)</td>
<td></td>
</tr>
<tr>
<td>• MAP-21 is the first long-term (two years) highway authorization enacted since 2005</td>
<td>• Most aggressive benchmark enacted by any government in North America</td>
<td>• Moves the Innovative Funding initiatives of 2012 RTP/SCS a step forward</td>
<td></td>
</tr>
<tr>
<td>• Creates performance-based surface transportation program</td>
<td>• Will help ultimate goal of reducing emissions 80 percent below 1990 levels by 2050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Builds on highway, transit, bike, and pedestrian programs and policies established in 1991</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Why Update the RTP/SCS? What’s New Since 2012?
Building from the 2012 RTP/SCS

• Studied and analyzed these emerging demographic and technological trends
• Addressed new Federal and State guidance
• Created six subcommittees to follow up critical issues identified in the 2012 RTP/SCS
• Worked closely with local governments to develop a growth forecast consistent with general plans and aligned with regional policies
• Collaborated with CTCs to ensure consistency with county plans and projects
• Hosted 23 RTP/SCS Open Houses to get feedback from residents throughout Southern California
• Held dozens of policy discussions with three Policy Committees and Regional Council to get final direction on all facets of the Plan
• Utilized all of this information to recommend the 2016 RTP/SCS
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  • Key Performance Outcomes
• Next Steps
Options for Our Future - RTP/SCS Scenario Overview

Housing Mix - New Growth (2012-2040)

- **Multifamily**
- **Townhome**
- **Single Family Smaller Lot (<5,500sf)**
- **Single Family Larger Lot (>5,500sf)**

### Transportation Investments
- **✓ 2012 RTP/SCS Network**
- **✓ Updated 2012 RTP/SCS Network**
- **✓ HQTA/TPA Focus per local plans**
- **✓ Updated 2012 RTP/SCS Network**
- **✓ Additional HQTAs**
- **✓ Active Transport Investment**
- **✓ Improved Walkability**
- **✓ ‘Last-Mile’ Focus**
- **✓ Updated 2012/SCS RTP Network + NEW**
- **✓ Increase in bus headways**
- **✓ Additional Active Transport Investment**
- **✓ Improved Walkability**
- **✓ ‘Last-Mile’ Focus**
# Options for Our Future - RTP/SCS Scenario Overview

## SCS Co-Benefits – Reduction from Trend Baseline

<table>
<thead>
<tr>
<th>SCS Co-Benefits</th>
<th>Scenario 1: Trend Baseline</th>
<th>Scenario 2: 2012 RTP/SCS Update with Local Input (S2)</th>
<th>Scenario 3: Making Further Progress (Draft Plan)</th>
<th>Scenario 4: Exceeding Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Consumption</td>
<td>N/A</td>
<td>-10%</td>
<td>-23%</td>
<td>-41%</td>
</tr>
<tr>
<td>Respiratory Health Cost</td>
<td>N/A</td>
<td>-9%</td>
<td>-13%</td>
<td>-19%</td>
</tr>
<tr>
<td>Per Household Transportation Costs (fuel + auto)</td>
<td>N/A</td>
<td>-9%</td>
<td>-13%</td>
<td>-19%</td>
</tr>
<tr>
<td>Fiscal Impacts (O&amp;M+ Capital)</td>
<td>N/A</td>
<td>-6%</td>
<td>-8%</td>
<td>-11%</td>
</tr>
<tr>
<td>Per Household Utilities Costs (energy + water)</td>
<td>N/A</td>
<td>-4%</td>
<td>-9%</td>
<td>-11%</td>
</tr>
<tr>
<td>Building Energy Use, cumulative (2012-2040)</td>
<td>N/A</td>
<td>-2%</td>
<td>-4%</td>
<td>-5%</td>
</tr>
<tr>
<td>Building Water Use, cumulative (2012-2040)</td>
<td>N/A</td>
<td>-0.4%</td>
<td>-0.6%</td>
<td>-1.0%</td>
</tr>
</tbody>
</table>
Presentation Outline

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Continue the 3% Strategy

• Principles of the 3% Strategy
• Induce growth in the areas well served by transit such as livable corridors and in neighborhood mobility areas
• Avoid new developments in sensitive habitats
• Promote mixed-use walkable communities
• Continue supporting sustainable planning and implementation through SCAG’s Sustainability Planning Grants
Land Use Strategies: Household and Employment Growth from 2012 to 2040 Plan in HQTAs*

The 3% of regional land area that comprise HQTAs accommodate over 50% of projected growth

- Focus 50% of Growth in 3% of the Region’s Land Area
- Increase First/Last Mile Investments within HQTAs

Percent of Regional Households and Jobs in HQTAs

- Households: 46%
- Jobs: 50%

* High Quality Transit Areas

Source: SANDAG 2018
2040 Transit Strategies

Selected Projects

• Purple Line Extension to Westwood
• Gold Line Eastside Extension Phase 2
• Airport Metro Connector
• Anaheim Rapid Connection
• Santa Ana-Garden Grove Fixed Guideway (OC Streetcar)
• Metrolink Perris Valley Line Extension to San Jacinto
• Redlands Rail

+ 2,300 Miles in Transit
2040 Passenger Rail System Strategies

Selected Projects

• Support California High Speed Rail Phase 1

• Improve Metrolink and the Los Angeles-San Diego-San Luis Obispo (LOSSAN) rail corridor as part of the “blended approach” to High Speed Rail

+ 350 Miles in Passenger Rail
2016 RTP/SCS Highway System Projects

Selected Projects

- Mixed-Flow Improvements
  - I-710
  - I-5
  - I-405
  - SR-91
  - SR-71

- HOV Lanes Improvements
  - US-101
  - I-5
  - I-15
  - I-215
  - SR-138
  - SR-79
  - SR-73
  - SR-118
  - SR-71
  - SR-138
  - SR-210
  - I-10
Express High Occupancy Toll (HOT) Lane Network

Selected Projects

- SR-91 to I-15
- I-15 in Riverside County
- I-15 and I-10 in San Bernardino County
- I-405 and I-605 in Orange and Los Angeles Counties
- I-105 in Los Angeles County
Existing and Proposed Bikeway Network

+ 4,900 Miles In Bike Lanes
Draft Updated Aviation Demand Forecasts (2040)
Airport Specific Demand (MAP, Million Annual Passengers)

Leakage: 0.5 MAP
Midpoint of 2040 Total Regional Aviation Demand: 136.2 MAP

1.65% annual growth rate
Goods Movement Projects and Strategies

$75 Billion

- East-West Freight Corridor
- Port access
- Freight rail capacity
- Grade separations
- Truck bottleneck projects
- Intermodal facilities
- Emission reduction strategies
Committed Transportation Control Measures (TCMs)

• Subset of transportation programs/projects in RTP/SCS committed for purpose of reducing criteria pollutant emissions

• Three Categories of Programs/Projects:
  ✓ High Occupancy Vehicle (HOV) and High Occupancy Toll/Express Lane
  ✓ Transit and Non-motorized Modes/Active Transportation
  ✓ Information-based Strategies (e.g., traffic signal synchronization)
How 2016 RTP/SCS Strategies Relate to 2016 AQMP?

• 2016 RTP/SCS strategies are the regional transportation strategies in the 2016 AQMP (Appendix IV-C)

• Committed TCMs in the RTP/SCS are SIP enforceable in the AQMP

• SCS strategies that focus on reducing GHG emission have co-benefits of reducing criteria pollutant emission

• RTP/SCS strategies complement other AQMP stationary and mobile source strategies
2016 RTP/SCS Financial Plan
$555.4 Billion (in nominal dollars)

FY16-FY40 RTP/SCS Revenue Sources
- Core Federal $37.7 (7%)
- Additional Federal $70.8 (13%)
- Core State $63.8 (11%)
- Additional State $65.4 (12%)
- Core Local $254.7 (46%)
- Additional Local $63.1 (11%)

FY15-FY40 RTP/SCS Expenditures
- Capital Projects $251.9 (45%)
- O&M Transit $156.7 (28%)
- Debt Service $30.7 (6%)
- O&M State Highways $65.3 (12%)
- O&M Passenger Rail $15.7 (3%)
- O&M Regionally Significant Local Streets and Roads $35.1 (6%)

Note: numbers may not sum to total due to rounding
Insufficient Core Revenues to Meet System Needs

2016 RTP/SCS Financial Plan $555.4 Billion (in nominal dollars)

- Capital Costs $251.9 (48%)
- Debt Service $30.7
- Operations and Maintenance $272.8 (52%)

Revenue Sources:
- Core Federal $37.7 (11%)
- Core State $63.8 (18%)
- Core Local $254.7 (71%)

Note: Numbers may not sum to total due to rounding
2016 RTP/SCS Financial Plan
$555.4 Billion (in nominal dollars)

FY16-FY40 RTP/SCS Core & Additional Revenue Sources

Core ($356.1 B)
- Federal, $37.7, 11%
- State, $63.8, 18%
- Local, $254.7, 71%

Additional ($199.3 B)
- Federal, $70.8, 35%
- State, $65.4, 33%
- Local, $63.1, 32%

Note: numbers may not sum to total due to rounding
2016 RTP/SCS Financial Plan
$555.4 Billion (in nominal dollars)

FY16-FY40 RTP/SCS Revenue Sources

- Core Federal: $37.7 billion (7%)
- Additional Federal: $70.8 billion (13%)
- Core State: $63.8 billion (11%)
- Additional State: $65.4 billion (12%)
- Core Local: $254.7 billion (46%)
- Additional Local: $63.1 billion (11%)

FY15-FY40 RTP/SCS Expenditures

- O&M State Highways: $65.3 billion (12%)
- Debt Service: $30.7 billion (6%)
- Capital Projects: $251.9 billion (45%)
- O&M Transit: $156.7 billion (28%)
- O&M Passenger Rail: $15.7 billion (3%)
- Regionally Significant Local Streets and Roads: $35.1 billion (6%)

Note: numbers may not sum to total due to rounding
2016 RTP/SCS Investment
$524.7 Billion (in nominal dollars, Excluding Debt Service)

Capital,
$251.9 , 48%

O&M,
$272.8 , 52%

Note: numbers may not sum to total due to rounding
2016 RTP/SCS Total Expenditures by Mode (Capital + O&M = $ 524.7 Billion)

- Arterials, $49.70, 10%
- Goods Movement, $74.80, 14%
- Other Roadway (Mixed-Flow, HOV/HOT, Toll), $101.30, 19%
- TSM, $9.20, 2%
- TDM, $6.90, 1%
- Active Transportation, $12.90, 3%
- Passenger Rail & Transit, $267.10, 51%

Note: numbers may not sum to total due to rounding
2016 RTP/SCS Capital Investment ($251.9 Billion) in the Strategic Multimodal Expansion of the System

- Goods Movement, $74.80, 30%
- Passenger Rail & Transit, $94.70, 38%
- Arterials, $19.40, 8%
- HOV/HOT, $15.50, 6%
- Mixed-Flow, $12.10, 5%
- Toll, $8.40, 3%
- TSM, $9.20, 4%
- TDM, $6.90, 3%
- Active Transportation, $8.10, 3%

Note: numbers may not sum to total due to rounding
2016 RTP/SCS O&M Expenditures ($272.8 Billion) in Preservation & Operating Existing Systems

- Transit-Rail, $15.7, 6%
- Arterial, $30.3, 11%
- Transit-Bus, $156.7, 57%
- AT, $4.8, 2%
- HWY (Mixed-Flow, HOV, Toll Lane), $65.3, 24%

Note: numbers may not sum to total due to rounding
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• Next Steps
Key Performance Outcomes

• Location Efficiency
• Mobility & Accessibility
• Safety & Health
• Environmental Quality
• Economic Well-being
• Investment Effectiveness
• Transportation System Sustainability
• Environmental Justice
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## Next Steps and Upcoming Schedule

<table>
<thead>
<tr>
<th>Date Range</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>December 3, 2015</td>
<td>Release of Draft 2016 RTP/SCS &amp; PEIR</td>
</tr>
<tr>
<td>December 2015</td>
<td>Draft 2016 South Coast AQMP Appendix IV-C</td>
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</table>
| December 4, 2015 – January 27, 2016 | Public comment period  
                              | Public outreach workshops  
                              | Elected official briefings |
| April 2016                    | Final adoption of 2016 RTP/SCS & PEIR and Cost-Benefit Analysis |
| April 2016                    | Final 2016 South Coast AQMP Appendix IV-C              |
Thank you!

Learn more by visiting www.scag.ca.gov.