

# SPECIAL MEETING

# REGIONAL TRANSPORTATION CEOS COMMITTEE

Please Note Date and Time Friday, November 20, 2015 1:00 p.m. – 1:30 p.m.

# LACMTA Building One Gateway Plaza Highland Park Conference Room, 25<sup>th</sup> Floor Los Angeles, CA 90012 (213) 236-1800

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Tess Rey-Chaput at (213) 236-1908 or via email at REY@scag.ca.gov.

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 236-1908. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.

#### **Main Office**

818 West 7th Street 12th Floor

Los Angeles, California

90017-3435

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

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# Regional Transportation CEOs Committee Members List

1.	Hasan Ikhrata	Executive Director	SCAG
2.	Phillip A. Washington	Chief Executive Officer	LA Metro
3.	Darrel Johnson	Chief Executive Officer	OCTA
4.	Dr. Raymond W. Wolfe	Executive Officer	SANBAG
5.	Anne Meyer	Executive Director	RCTC
6.	Darren Kettle	Executive Director	VCTC
7.	Mark Baza	Executive Director	ICTC
8.	Gary Slater	Deputy District Director, Planning	Caltrans, District 7



# REGIONAL TRANSPORTATION CEO'S COMMITTEE SPECIAL MEETING – AB 1246 FRIDAY, NOVEMBER 20, 2015 1:00 p.m. – 1:30 p.m.

**AGENDA** 

The Regional Transportation CEOs Committee may consider and act upon any of the items listed on the Agenda regardless of whether they are listed as Information or Action Items.

<u>PUBLIC COMMENT PERIOD</u> – Members of the public desiring to speak on items on the Agenda, or items not on the Agenda, but within the purview of the Committee, must fill out and present a Public Comment Card to the Assistant prior to speaking. Comments will be limited to three (3) minutes per speaker provided that the Chair has the discretion to reduce this time limit based upon the number of speakers. The Chair may limit the total time for all public comments to twenty (20) minutes.

AGENDA Time Page No.

30 mins.

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Proposed Release of the Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) for the required 55-day Public Review and Comment Period (Hasan Ikhrata, Executive Director, SCAG)

# **ADJOURNMENT**





**DATE**: November 20, 2015

**TO**: Regional Transportation CEOs Committee

FROM: Hasan Ikhrata, Executive Director, SCAG, 213-236-1944, Ikhrata@scag.ca.gov

SUBJECT: Proposed Release of the Draft 2016 Regional Transportation Plan/Sustainable

Communities Strategy (2016 RTP/SCS) for the required 55-day Public Review

and Comment Period

#### **SUMMARY:**

In anticipation of the release of the Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) on December 3, 2015, the SCAG Executive Director will present the major components and performance results to the Regional CEOs. The attached staff report, dated November 5, 2015, from SCAG's Executive Director to SCAG's Joint Policy Committees provides a detailed summary of the contents of the Draft 2016 RTP/SCS.

#### **BACKGROUND:**

The Southern California Association of Governments (SCAG) is currently required under state law (Cal. Public Utilities Code 130058 and 130059, commonly referred to as "AB 1246") to convene meetings of representatives from each of the county transportation commissions, SCAG, and the California Department of Transportation (Caltrans) for the following purposes:

- (a) To review and discuss the near-term transportation improvement programs prior to adoption by the commissions.
- (b) To review and discuss the regional transportation plan prior to adoption by the agency.
- (c) To consider progress in the development of a region-wide and unified public transit system.
- (d) To review and discuss any other matter of mutual concern.

#### **ATTACHMENTS:**

- 1. SCAG Joint Policy Committees' Staff Report, dated November 5, 2015
- 2. PowerPoint Presentation: "2016 RTP/SCS A Plan For Our Future"





**DATE**: November 5, 2015

**TO**: Transportation Committee (TC)

Community, Economic and Human Development Committee (CEHD)

Energy and Environment Committee (EEC)

**FROM**: Hasan Ikhrata, Executive Director, 213-236-1944, Ikhrata@scag.ca.gov

**SUBJECT:** Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

(2016 RTP/SCS) – Proposed Major Components

# EXECUTIVE DIRECTOR'S APPROVAL:

#### **RECOMMENDED ACTION:**

Direct staff to prepare and finalize the Draft 2016 RTP/SCS document based upon the comprehensive summary of its major components and key policy recommendations as described in this staff report, and formally recommend that the Regional Council at its December 3, 2015 meeting release the Draft 2016 RTP/SCS for formal public review and comment.

#### **EXECUTIVE SUMMARY:**

In preparation of the Regional Council's formal release of the Draft 2016 RTP/SCS for public review and comment in early December, staff will provide the members of the TC, CEHD, and EEC with details on the major components of the proposed Draft 2016 RTP/SCS. Specifically, staff will speak to the critical issues, explain the scenarios being considered, and describe key policy recommendations and potential outcomes associated with the Plan. Staff is seeking additional direction and feedback from the Policy Committees as staff works to complete the Draft 2016 RTP/SCS.

It should be noted that the Policy Committees have previously reviewed and taken action on several of the Plan's major components. Last month, staff provided the Regional Council and Policy Committees with a recap of the progress made on the development of the Draft Plan, and noted the previous actions taken by the Policy Committees regarding various matters. This Joint Meeting today builds upon these past actions by providing additional information so that TC, CEHD, and EEC can collectively provide direction to staff and make a recommendation to the Regional Council to release the Draft 2016 RTP/SCS for public review and comment on December 3, 2015.

# **STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan, Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective: a) Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.



#### A. INTRODUCTION AND BACKGROUND:

Every four years, SCAG, as the Metropolitan Planning Organization (MPO) for the six-county region of Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial, is required by federal law (23 USCA §134 et seq.) to prepare and update a long-range (minimum of 20 years) Regional Transportation Plan (RTP) that provides for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. The process for development of the RTP takes into account all modes of transportation and is accomplished by a "continuing, cooperative and comprehensive" (the 3 C's) planning approach which is also performance-driven and outcome-based. In addition, because the SCAG region is designated as nonattainment for ozone or carbon monoxide under the Clean Air Act (42 U.S.C. §7401 et seq.), the RTP must conform to applicable air quality standards.

The passage of California Senate Bill 375 (SB 375) in 2008 requires that an MPO prepare and adopt a Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas emissions from automobiles and light duty trucks (Govt. Code §65080(b)(2)(B)). The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning, and maximize transportation investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon.

Finally, the development of the RTP/SCS is subject to the California Environmental Quality Act (CEQA). Therefore, SCAG also prepares a Program Environmental Impact Report (PEIR) for the RTP/SCS that evaluates the potential environmental impacts associated with the Plan.

The acceptance of the 2016 RTP/SCS (or Plan) by the Federal Department of Transportation and the State is critical to our region. The mobility and economic consequences of failure to meet the state and federal requirements are outlined below.

#### Components of the 2016 RTP/SCS Plan

Following the 3 C's planning approach, the 2016 RTP/SCS continues with many of the policies included in SCAG's current 2012-2035 RTP/SCS (2012 RTP/SCS), and provides an update of these policies relative to the new planning horizon year of 2040. Among other things, the 2016 RTP/SCS update must include, as required under federal law, an identification of the transportation facilities (including major roadways, transit, multimodal and intermodal facilities, and intermodal connectors) that should function as an integrated metropolitan transportation network, giving emphasis to those facilities that serve important national and regional transportation functions (23 USCA §134(i)(2)) et seq.).

The 2016 RTP/SCS must also include a financial plan that demonstrates how the adopted transportation plan can be implemented, indicates resources from public and private sources that are reasonably expected to be available to carry out the plan, and recommends any additional financing strategies for the needed projects and programs. The Plan must also include operational



and maintenance strategies related to the existing transportation facilities and an economic impact analysis. Finally, under California law, the region's SCS must identify existing and future land use patterns; consider statutory housing goals and objectives; identify areas to accommodate housing needs; consider resource areas and farmland; identify transportation needs and the planned transportation network; and set forth a future land use pattern to meet state greenhouse gas emission reduction targets.

# **Failure to Meet Federal and State Requirements**

Federal or state disapproval of the submitted 2016 RTP/SCS Plan could mean that many of the transportation projects contained within the Final Plan and approved by voters in the six (6) counties could be delayed. Delays would impact: congestion on the regional system, the regional economy, greenhouse gas emissions reductions, and air quality pollution reductions. In addition, disapproval by the State of the SCS could mean development of an alternative planning strategy to meet SCAG's greenhouse gas emissions reduction targets. The more detailed economic costs of delays is being further detailed by the SCAG economic experts retained to objectively analyze the draft 2016 RTP/SCS and will be made available at the subsequent Regional Council meeting.

# **Public Outreach To Date**

Public outreach has been integral to the development of the entire 2016 RTP/SCS. To ensure that the 2016 RTP/SCS was developed openly and inclusively, SCAG implemented a comprehensive public outreach and involvement program. This was based on a Public Participation Plan adopted by SCAG's Regional Council in April 2014. Specific public engagement strategies used during the development of the Draft 2016 RTP/SCS included:

- Developing materials for public outreach in a variety of formats to reach broad audiences, including a short video, fact sheets, surveys, power points and presentation poster boards.
- Centralizing RTP/SCS information on a new easy-to-use microsite, developed to be mobile/tablet friendly and compliant with the 1990 Americans with Disabilities Act.
- Supporting multiple committees, task forces and working groups made up of SCAG partners, stakeholders and interested groups to develop the key components of the Plan.
- Holding multiple public open houses before the release of the Draft 2016 RTP/SCS, to allow direct participation by interested parties.
- Announcing the schedule for the open houses through a wide variety of means, including community calendars, distributing flyers at local events and libraries, email newsletters, social media, and ethnic media.
- Seeking the assistance of transit agencies, stakeholder organizations, and their communication channels to maximize outreach opportunities.
- Conducting expanded and enhanced outreach activities for traditionally underrepresented and/or underserved groups through five specialized workshops and eight focus group sessions on environmental justice.



- Meeting with Native American tribes in the SCAG region on priorities and concerns related to the Draft Plan and PEIR.
- Evaluating public participation activities to continually improve the outreach process.
- Engaging local jurisdictions early in the development of the base demographic and land use data that is used in the technical analysis of the Plan, including meeting one-on-one with 99 percent of the 197 cities and counties in the SCAG Region.

The overall Draft Plan was developed with input from local jurisdictions, County Transportation Commissions (CTCs), tribal governments, other government agencies, non-profit organizations, businesses, labor, builders and other stakeholders throughout the region.

From past plan development cycles, SCAG had heard from many participants about the need for early engagement during the development of the Draft 2016 RTP/SCS. For members of the public, SCAG conducted public engagement activities between May 2015 and July 2015, with 23 open house events held across six counties. These events helped educate residents on the goals of the Plan, explore topics included in the Plan, and gather input on priorities with an electronic survey. Participants reviewed poster boards showing projected changes in population and demographics within their county and the region, and then were asked for their input on how the region could accommodate growth in a variety of areas. These included providing transportation options, improving public health, preserving natural lands and supporting economic opportunities.

Recognizing that not all members of the public could attend the open houses, SCAG provided an opportunity to participate virtually by providing the workshop materials and the online survey. Hundreds of Southern Californians participated online, and gave input on transit accessibility, transportation investments and other topics. A summary report from the survey was presented at a special Joint Meeting of SCAG's Regional Council and Policy Committees held on August 6, 2015, and this report will also be included in the Public Participation & Consultation Appendix released with the Draft 2016 RTP/SCS next month.

In addition to these outreach efforts, all regular and special meetings of SCAG's Transportation Committee; Community, Economic and Human Development Committee; Energy and Environment Committee; Legislative/Communications and Membership Committee; Executive Administration Committee; and Regional Council were publicly noticed, and opportunities for public comment were provided at each meeting. SCAG held monthly meetings of its Technical Working Group, which consisted of staff representatives of CTCs and subregions, among others, to seek technical input. SCAG also maintained ongoing communications with other state and local agencies such as the California Air Resources Board (ARB), the Strategic Growth Council, Caltrans, the Department of Finance, the Housing and Community Development Department, various air quality management districts, and other MPOs. Federally and state required interagency consultation was done through the monthly meetings of the Transportation Conformity Working Group and of the chief executive officers (CEOs) of the CTCs.



# What Has Changed Since the 2012 RTP/SCS?

Since SCAG's Regional Council adoption of the 2012 RTP/SCS, a number of new circumstances have arisen that have had an impact on the development of the Plan. These changed circumstances are summarized below.

- The Great Recession, which lasted from December 2007 through June 2009, caused massive job losses and had a devastating impact on our region's economic well-being. Now that the recession is behind us and our region has experienced a decline in unemployment and housing foreclosures, challenges still remain. While employment levels in the region have surpassed where we were in 2007 and real per capita income has increased, the region continues to struggle with a larger population base and stagnant wages. These factors have contributed to more people slipping into poverty.
- The region's demographics and housing market remain fluid and dynamic. The housing market has rebounded since the 2012 RTP/SCS was adopted, and the number of Millennials and empty nesters has continued to increase with many seeking smaller housing and a more walkable lifestyle. For many households in the region, minimizing transportation and housing costs remains a priority.
- A new surface transportation funding and authorization bill entitled "Moving Ahead for Progress in the 21st Century Act" (MAP-21) was signed into law by President Obama on July 6, 2012. MAP-21 emphasized performance-based regional transportation planning. Continuing federal budget deficits cast a long shadow over the re-authorization of MAP-21 or a new transportation bill. Long-term uncertainty of federal funding will put even greater pressure on local sources to solve our transportation challenges.
- Since 2012, California's state government has been exploring viable alternatives to the state gas tax. In 2014, Governor Brown signed into law Senate Bill 1077 (SB 1077, DeSaulnier), the "Vehicles: Road Usage Charge Pilot Program." This program requires the State Transportation Agency (CalSTA) to evaluate a new funding system for transportation a road charge to replace the state gas tax. California has convened the Road Charge Technical Advisory Committee, comprised of representatives from government, private industry and academia to offer recommendations on a road charge pilot program, which must be initiated by January 1, 2017.
- California's legislature passed several bills to help local jurisdictions and MPOs implement SB 375, including:
  - SB 535: Identifies investment in disadvantaged communities from Cap & Trade revenues;
  - SB 743: Streamlines the environmental clearance process for infill projects and Transit Oriented Development (TOD);
  - o SB 628: Creates Enhanced Infrastructure Financing Districts (EIFD);
  - o AB 93: Relates to taxation and economic development; and



- o AB 2: Authorizes certain local agencies to form community revitalization authorities within community revitalization and investment areas to carry out provisions of the Community Redevelopment Law for purposes related to, among other things, infrastructure, affordable housing, and economic revitalization.
- The rapid advancement of new technologies such as real-time traveler information, ondemand shared mobility services enabled by smartphone applications or ridesourcing, car share and bike share – is influencing how households travel and their choices about single- and multiple-vehicle ownership. These mobility innovations are encouraging more efficient transportation choices and land development patterns, which help public agencies manage the multi-modal transportation system more efficiently.
- There is a continuing emphasis on reducing greenhouse gas emissions, even after the adoption of SB 375. On April 29, 2015, Governor Brown issued Executive Order B-30-15, which establishes a California greenhouse gas reduction target of 40 percent (below 1990 levels) by 2030. Executive Order B-30-15 also reiterates the greenhouse gas emissions emission reduction target of 80 percent below 1990 levels as established in Governor Schwarzenegger's 2005 Executive Order S-03-05. Because the transportation sector is the largest contributor to California's greenhouse gas emissions (more than 36 percent), SCAG anticipates updated and more stringent regional emissions reduction targets.

The 2016 RTP/SCS was developed considering these new realities and was shaped by our outreach. The Plan envisions vibrant, livable communities that are healthy and safe, and which offer many transportation options that provide timely access to schools, jobs, services, health care and other basic needs. These communities will be more conducive to walking and bicycling, and offer residents improved access to parks and natural lands. Collectively, these communities will support opportunities for business, investment and employment, fueling a more prosperous economy. This vision recognizes the region's tremendous diversity, and that one-size solutions are not practical or feasible.

#### **B.** OUR PROGRESS

Since the 2012 RTP/SCS was adopted, the region has made progress in many areas, including the following:

# **Transit**

- The total amount of transit service offered has reached pre-recessionary levels.
- The region exceeded 20 million annual service hours for the first time since the recession, according to preliminary projections using unaudited data.
- Gains are mainly due to growth in rail service hours (up 63 percent over ten years) and demand response growth (up 29 percent over ten years).
- These increases are making up for a decrease in total fixed route bus hours (down 3 percent over ten years).



- The region has made significant progress in completing capital projects for transit:
  - Metro Orange Line Extension
  - o Metro Expo Line
  - Omnitrans E street sbX
  - o Brawley Transit Center
- In addition, there are currently five major Metro Rail projects under construction in Los Angeles County:
  - o Purple Line Phase 1 to Wilshire/La Cienega
  - o Crenshaw/LAX Transit Corridor
  - Regional Connector
  - Gold Line Foothill Extension Phase 1 to Azusa
  - Exposition Transit Corridor Phase 2 to Santa Monica

# Passenger Rail

- The Amtrak Pacific Surfliner is now being managed locally by the Los Angeles-San Diego-San Luis Obispo (LOSSAN) Rail Agency.
- Metrolink is nearing completion on the Perris Valley Line between downtown Riverside and South Perris, the first major expansion of the Metrolink system since the mid-1990s.
- Metrolink also became the first commuter railroad in the nation to implement Positive Train Control and purchase fuel-efficient, low-emission Tier IV locomotives.
- The California High-Speed Rail broke ground in the San Joaquin Valley last year, and it's on track to begin service from Merced to Bob Hope Burbank Airport in 2022, and reach Los Angeles Union Station in 2028.
- The region has made significant progress in completing capital projects for passenger rail:
  - o Anaheim Regional Intermodal Transportation Center (ARTIC)
  - o Burbank Bob Hope Airport Regional Intermodal Transportation Center
  - o Burbank Bob Hope Airport Hollywood Way Rail Station
  - Downtown San Bernardino Transit Center
  - Vincent Grade/Acton Siding and Platform
  - o Southern California High-Speed Rail MOU Projects

# **Highways**

- The expansion of highways in the region has slowed down considerably over the last decade, due to land, financial and environmental constraints. Nevertheless, several projects have been completed since the 2012 RTP/SCS was adopted to improve access and close critical gaps and congestion chokepoints in the regional network, including:
  - o Interstate 5 South Corridor Project in Los Angeles County
  - Interstate 10 westbound widening in Redlands and Yucaipa, from Ford Street to Live Oak Canyon Road in San Bernardino County
  - Interstate 215 Bi-County Project in Riverside and San Bernardino Counties
  - State Route 57 land widening from State Route-91 to Lambert Road and between Katella Avenue and Lincoln Avenue in Orange County



- O State Route 91 has several projects that have been completed since 2012 or are currently in construction. These include:
  - o State Route 241 and State Route 71 in Orange and Riverside Counties
  - The recently initiated westbound lane addition between State Route 241 and the Riverside County Line
  - Widening projects in both directions have also begun between State Route-55 and State Route 241
- State Route 138 (Pearblossom Highway) Corridor Improvement Projects in North Los Angeles County

# Regional High-Occupancy Vehicle (HOV) and Express Lane Network

- The demands on our region's highways continue to exceed available capacity during peak periods, but over the past few years several critical projects to close HOV gaps have been completed. The result has been 27 more miles of regional HOV lanes, including:
  - o Interstate-405 Sepulveda Pass Improvements Project
  - o Interstate-10, between Interstate-605 and State Route-57
  - o Interstate-5 South Corridor Project
  - o Interstate-215 Bi-County Project between San Bernardino and Riverside Counties
  - West County Connector Project within Orange County
- To provide people with greater reliability on travel times and more route choices, the region is developing a Regional Express Lane Network. Express Lanes are appropriately priced to reflect demand and are capable of outperforming non-priced lanes in terms of throughput, especially during congested periods. Specific milestones in the effort to enhance the regional network of Express Lanes since 2012 include:
  - o Express Lanes in Los Angeles County along Interstate 10 and Interstate 110 were made permanent in 2014, following a one-year demonstration.
  - The Riverside County Transportation Commission (RCTC) in 2014 initiated construction of Express Lanes on State Route 91 extending eastward from the Orange County line to Interstate 15.
  - o The San Bernardino Associated Governments (SANBAG) in 2014 selected Express Lanes along Interstate 10, from San Antonio Avenue to Ford Street, as the locally preferred alternative.
  - The Orange County Transportation Authority (OCTA) Board in 2015 voted to take the lead on construction of Express Lanes along Interstate 405, from Interstate 605 to State Route 73.



# **Active Transportation**

- Our region is making steady progress in encouraging more people to embrace active transportation. Progress since 2012 has included:
  - As a percentage share of all trips, bicycling has increased more than 70 percent since 2007 to 1.12 percent, while walking has remained steady at 17 percent after several years of growth.
  - Nearly 37 percent of all trips less than one mile and 18 percent of all trips less than three miles are made via active transportation. Most pedestrian trips are less than half a mile and take about ten minutes. Most bicycling trips, meanwhile, cover less than two miles.
  - o More than 500 miles of new bikeways have been constructed in the region.
  - About \$350 million in Active Transportation investments are underway, leveraging close to \$200 million in grants awarded in the first cycle of the California Active Transportation Program (ATP).
  - Safety and encouragement programs, including the rollout of the SCAG-led "Go Human" campaign, are providing the education, training and encouragement to make walking and biking safe and attractive options for getting to the places we need to go.

# **Goods Movement**

- Reliable freight transportation infrastructure is essential to support our regional economy.
  The region continues to make substantial progress toward completing several major
  capital initiatives to support freight transportation, while also demonstrating significant
  improvement in reducing harmful emissions generated by goods movement sources.
  Progress since 2012 has included:
  - o San Pedro Bay Ports Clean Air Action Program (CAAP): With the first CAAP completed in 2006, a second CAAP completed in 2010, and a third underway, the Ports have initiated clean air improvements for all goods movement sources with levels of diesel particulate matter dropping by 82 percent, oxides of nitrogen by 54 percent, and oxides of sulfur by 90 percent.
  - San Pedro Bay Ports Clean Truck Program: A key component of the CAAP is the Clean Truck Program. As of January 1, 2012, all port trucks meet the 2007 Federal Clean Truck Emissions Standards and have resulted in 80 percent reduction in port truck emissions.
  - O Advanced Technology Demonstration Projects: The South Coast Air Quality Management District (SCAQMD), the California Energy Commission (CEC), the U.S. EPA, and several regional agency partners have contributed about \$13.5 million to construct and demonstrate a one-mile Overhead Catenary System (OCS) in the City of Carson, and to develop prototype trucks for assessing compatibility with the OCS.
  - The Transportation Investment Generating Economic Recovery (TIGER) Grant for State Route (SR) 57/60 Confluence Freight Corridor Project: In 2014, the City of Industry and the Los Angeles County Metropolitan Transportation Authority



- (LACMTA), were awarded a TIGER Grant to construct the SR 57/60 Confluence Freight Corridor Project.
- Construction of Gerald Desmond Bridge Initiated: The Gerald Desmond Bridge has been designated as a National Highway System Intermodal Connector Route and part of the Strategic Highway Network.
- South Wilmington Grade Separation: This project was completed in the spring of 2015.
- o Grade Separations: Seventy-one grade separation projects throughout the SCAG region were identified for inclusion in the financially constrained 2012 RTP/SCS. To date, 14 grade separation projects were completed and are now open to traffic. Twenty-four grade separation projects are now under construction and should be completed and open to traffic in late 2015 to 2016.
- Double Tracking of the Union Pacific (UP) Alhambra Subdivision Initiated: 5.8
  miles between South Fontana and Reservoir have been double-tracked, and three
  new run-through tracks at Montclair have been constructed.
- Colton Crossing Completed: Completed in August 2013, this project physically separated two Class I railroads with an elevated 1.4-mile-long overpass that lifts Union Pacific (UP) trains traveling east-west. It also removed the chokepoint that existed where Burlington Northern Santa Fe (BNSF) and UP mainlines crossed tracks in Colton.

# **Sustainability Implementation**

- Planning for sustainable growth has become increasingly important since 2012. In addition to sustainability efforts undertaken independently by local jurisdictions, to help the region grow more sustainably, SCAG administers a Sustainability Planning Grant Program (formerly the Compass Blueprint Program) that provides funding to member agencies to help them link local land use plans to the 2012 RTP/SCS goals. Since adoption of the 2012 RTP/SCS, 70 planning projects have been funded, totaling an investment of \$10 million.
  - o Specific progress by member jurisdictions since 2012 includes: updating outmoded general plans and zoning codes; completing specific plans for town centers and Transit Oriented Development; implementing sustainability policies; and adopting municipal climate action plans.
  - o Thirty of the 191 cities in the SCAG region reported updating their general plans since 2012, and another 42 cities have general plan updates pending.
  - Fifty-four percent of all the adopted and pending general plans include planning for TOD, 55 percent plan to concentrate key destinations, and 76 percent include policies encouraging infill development.
- Protecting water quality and conserving energy are also priorities for member jurisdictions. Progress in these areas include:

- Ninety-one percent of cities have adopted water-related policies, and 85 percent adopted measures to address water quality.
- o Eight-six percent of cities have implemented community energy efficiency policies, with 80 percent of those cities implementing municipal energy efficiency policies and 76 percent implementing renewable energy policies.
- Of the region's 191 cities, 189 have completed sustainability components, with 184 cities implementing at least 10 or more policies or programs and 10 cities implementing 20 or more policies or programs. This last group includes Santa Monica, Pasadena and Pomona.

# Affordable Housing

- Recent funding developments suggest that future progress in producing affordable housing is achievable in the SCAG region. Progress since 2012 has included:
  - o In spring 2015, California's Affordable Housing Sustainable Communities (AHSC) program awarded its first round of funding to applicants after a competitive grant process. The AHSC program, which is appropriated \$130 million by the Greenhouse Gas Reduction Fund ("Cap & Trade"), provides an opportunity for eligible projects to receive funding to build affordable housing.
  - Of \$122 million available statewide, \$27.5 million was awarded to 10 projects in the SCAG region, all of which were designated for communities defined as disadvantaged.
  - Eight-hundred forty-two (842) affordable units, including 294 units designated for households with an income of 30 percent or less of the area median income, will be produced with this funding.
  - o Recent State legislation, such as Senate Bill 628 (Beall) and AB 2 (Alejo), provide jurisdictions an opportunity to establish a funding source to develop affordable housing and supportive infrastructure and amenities.

#### **Public Health**

- Within each county of the SCAG region, there has also been a groundswell of support for policies and projects that support improved public health outcomes related to the built environment. These actions have been driven in part by increased interest in resources at the national and state-level to analyze health impacts. Progress within the SCAG region since 2012 has included:
  - The Los Angeles County Department of Public Health and the Department of City Planning are developing a *Health Atlas*, which highlights health disparities between neighborhoods.
  - o In Riverside County, the *Healthy Riverside County Initiative* is working to have healthy cities resolutions adopted by a minimum of 15 cities.
  - o The County of San Bernardino has recently completed the *Community Vital Signs Initiative*, which envisions a "county where a commitment to optimizing health and wellness is embedded in all decisions by residents, organizations, and government."



 Other projects include active transportation planning such as the Orange County Loop, the Imperial County Safe Routes to School Master Plan, and the Healthy Ventura County Initiative.

# C. OUR CHALLENGES AND OPPORTUNITIES

The RTP/SCS is updated every four years to reflect the most current information and conditions per federal and state requirements. Every RTP/SCS update describes a number of challenges and opportunities. The challenges and opportunities we face with respect to the Draft 2016 RTP/SCS are described briefly in this section.

#### 2016 RTP/SCS Growth Forecast

According to the 2015 population estimates from the California Department of Finance (DOF), the population of the Southern California region is 18.8 million, which represents 5.8 percent of the 325 million people of the U.S., and over 48 percent of California's population. With the region's land area of 38,000 square miles, the region's population density is now 490 persons per square mile. The Southern California region is the 5th highest in population among states in the nation, behind the state of Florida, and the second largest combined statistical area (CSA) in the nation behind the New York CSA.

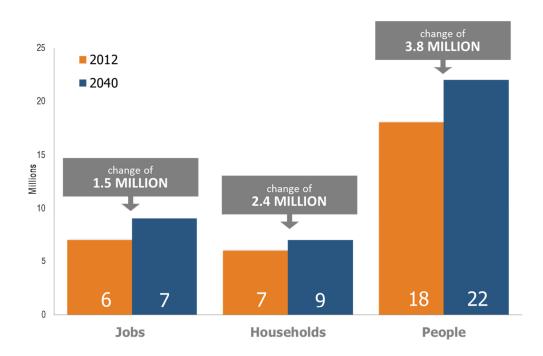
The recent population growth of the region from 2010-2015 is an extension of the existing slow growth pattern observed during the 2000-2010 period. Although the regional economy has recovered from the Great Recession by adding 800,000 jobs, the regional population continues to show slow growth. The annual average growth rate for the 2010-2015 period was only 0.7 percent, which was lower than the 0.9 percent growth rate of the 2000-2010 period. California and the U.S. also experienced slow growth over the last 15 years, which will continue over the next 25 years. The annual average growth rate of the SCAG region, California, and the U.S. through 2040 is consistent with or lower than the growth rate for the 2010-2015 period.

SCAG projects that the region will add 3.8 million residents, 1.5 million households, and 2.4 million jobs from 2012 through 2040. Population and households are projected to grow at the annual average growth rate of 0.7 percent during the same period, while employment grows faster at 2 percent until 2020, and then stabilizes at 0.7 percent. The region's population is projected to grow more slowly than that of previous years. The slow growth pattern is occurring not only in the SCAG region, but is also observed from U.S. and California population projections by the U.S. Census Bureau and California DOF, respectively.



Draft SCAG Region Growth Forecast for the 2016 RTP/SCS							
County	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040	
Imperial	180,000	282,000	49,000	92,000	59,000	125,000	
Los Angeles	9,923,000	11,514,000	3,257,000	3,946,000	4,246,000	5,226,000	
Orange	3,072,000	3,461,000	999,000	1,152,000	1,526,000	1,899,000	
Riverside	2,245,000	3,168,000	694,000	1,049,000	617,000	1,175,000	
San							
Bernardino	2,068,000	2,731,000	615,000	854,000	659,000	1,028,000	
Ventura	835,000	966,000	269,000	312,000	332,000	420,000	
SCAG	18,322,000	22,122,000	5,885,000	7,406,000	7,440,000	9,872,000	

Note: Rounded to the nearest 1,000. Reflecting local input as of July 31, 2015.

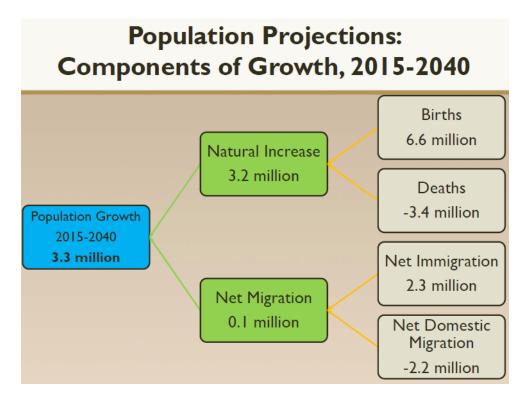


# Changing Demographics and an Aging Population

We expect the region to grow differently than in the past. Before 1990, population growth was driven largely by both natural increase and migration. Since 1990, however, any gains from immigration have been offset by domestic migration losses and Southern California's population

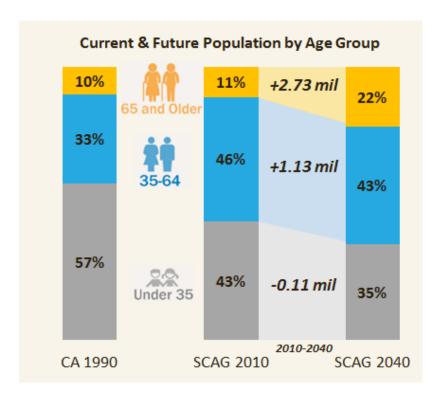


growth has been fueled mostly by a natural increase in births – despite declining fertility rates. This continuing trend is expected to account for most of the Southern California's future population growth by 2040. Our population growth will place additional strain on all of our systems and resources.



Notably, the median age of our region's overall population is expected to rise, with increasing shares of senior citizens. As the Baby Boomer generation continues to age and live longer, our region will experience a significant increase in its senior population – a trend expected nationwide. Today, people who are 65 and older represent 12 percent of the region's total population. But by 2040, the number of seniors will increase to 22 percent – about one in five people in our region. This demographic shift will have major impacts on the locations and types of housing we build and our plan for transportation. A key challenge for the region will be to help seniors maintain their independence and age in their homes and communities. And as the number and share of seniors are projected to increase, the percentage share of younger people of working age is expected to fall. The ratio of people over the age of 65 to people of working age (15 to 64) is expected to increase to 28 seniors per 100 working age residents by 2040, compared with a 16 to 100 ratio calculated for 2010. This means that our region could face a labor shortage, and a subsequent reduction in tax revenues.





# Transportation System Maintenance & Preservation

The region's aging transportation system (encompassing roads, bridges, bus and rail transit, and freight rail) is facing increasing preservations costs in the face of diminishing revenues. If we continue on our current path of serious underfunding of system preservation, the cost of bringing our system back to a reasonable state of good repair would grow exponentially. Based upon preliminary estimates, the cost to maintain our transportation system at current conditions, which is far from the ideal, will be in the tens of billions over and beyond currently committed funds. Policy leaders must collectively decide what investment level to use to maintain the region's existing transportation facilities and how to fund the significant revenue gap.

# Financing Transportation

Perhaps our most critical challenge is securing funds for a transportation system that promotes a more sustainable future. The cost of a multimodal transportation system that will serve the region's projected growth in population, employment, and demand for travel surpasses the projected revenues expected from the gas tax – our historic source of transportation funding. Gas tax revenues, in fact, are going down and will continue their downward trajectory as fuel efficiency improves and the number of alternative-fuel vehicles continues to grow. Furthermore, state and federal gas taxes have not kept up with inflation; the latest adjustments occurred more than two decades ago. To backfill limited state and federal gas tax revenues, our region has continued to rely on local revenues to meet transportation needs. In fact, 71 percent of SCAG's core revenues are local revenues. Seven sales tax measures have been adopted throughout the region since the 1980s, so the burden of raising tax dollars has shifted significantly to local agencies. In reality, we need a stronger state and federal commitment to raising tax dollars for



the Southern California transportation system – given its prominence and importance to the state and national economy, particularly when it comes to the movement of goods.

# Moving Goods Efficiently in a Huge and Complex Region

The smooth and efficient movement of goods is critical to our regional economy, particularly as our region continues to recover from the recession. A number of key trends and drivers are expected to impact our region's goods movement system, some of which include:

- Population and Employment Growth: Our region's population and employment growth is
  expected to fuel consumer demand for products and in turn, the goods movement services
  that provide them. This increased demand will drive stronger growth in freight traffic on
  already constrained highways and rail lines. Levels of harmful emissions also will rise.
- Continued Growth in International Trade: The San Pedro Bay Ports anticipate cargo volumes to grow to 36 million containers by 2040. This growth will place further demands on marine terminal facilities, highway connections, and on-dock and off-dock intermodal terminals. If port-related rail traffic and commuter demands are to be met, main line rail capacity improvements will be required as well.
- Logistics Epicenter: Southern California is the nation's epicenter for distribution and logistics activity, with close to 1.2 million square feet of facility space for warehousing, distribution, cold storage and truck terminals.1 By 2040, the region may experience a shortfall of more than 527 million square feet in warehouse space, relative to demand.<sup>2</sup>
- Air Quality Issues: Goods movement emissions contribute to regional air pollution problems (NOx and PM2.5), and they pose public health challenges. Emissions generated by the movement of goods are being reduced through efforts such as the San Pedro Bay Ports Clean Air Action Plan, as well as regulations such as the statewide Heavy Duty Truck and Bus Rule. But these reductions are unlikely to be sufficient to meet regional air quality goals.

# Affordability, Gentrification and Displacement

Affordable housing throughout Southern California remains a very challenging issue, particularly as economy continues to recover and grow. Housing prices are rising steadily, and affordability is declining. While residential construction has improved notably since the recession, the production of affordable housing has not kept pace with the demand for it. As our region builds communities that are more compact and more transit-oriented, regional greenhouse gas emissions are anticipated to decline, and residents from a variety of income levels will continue to make housing choices that allow them to use an increasing number of mobility options. Certainly, the overall quality of life will increase for many people. However, people

<sup>&</sup>lt;sup>2</sup> Industrial Warehousing in the SCAG Region Study, Task 4 Warehousing Demand Forecast



<sup>&</sup>lt;sup>1</sup> CoStar Reality Information, Inc. www.costar.com, based on November 2014 data downloads

from low-income communities near new transit infrastructure may face displacement as they are no longer able to afford to live in the area.

# Improving Public Health

Today, many people in our region suffer from poor health due to chronic diseases related to poor air quality and physical inactivity. Chronic diseases including heart disease, stroke, cancer, chronic lower respiratory disease and diabetes are responsible for 72 percent of all deaths in our region. Millions of more people live with chronic diseases every day. Within our region, more than 60 percent of residents are overweight or obese, more than 8 percent have diabetes, 27 percent suffer from hypertension, and more than 12 percent suffer from asthma. Health care costs resulting from being physical inactive, obese and overweight, and from asthma cost our Southern California region billions of dollars annually in medical expenses, lost life and lost productivity, research shows.

How a neighborhood is laid out and linked to transportation options can shape the lifestyles that people have – how physically active they are and how safe their everyday lives can be, a growing body of evidence shows. As a result, regional planning for land use and transportation across the U.S. has increasingly incorporated strategies to improve public health. One of the challenges that SCAG faces as it strives to improve public health is the sheer size and diversity of our region. Public health varies widely, by geographic location, by income and by race. There is no one size fits all approach to meeting this complex challenge. It requires flexibility and creativity to ensure that initiatives are effective in both rural and urban areas.

# Confronting a Changing Environment

The consequences of climate change already are impacting Southern California, and more intensified changes are expected. Drought, water shortages and an agriculture industry in crisis have become hard realities in recent years. Climate change is transforming the state's natural habitats and overall biodiversity. Continued changes are expected to impact coastlines as sea levels rise and storm surges grow more destructive. Forestry will continue to be impacted by drought and wildfire. Climate change also will impact how we use energy and the quality of public health. Our transportation system will experience new challenges as well as the global and regional climate continues to change.

Researchers predict that both coastal and inland Southern California will see many more days of extreme heat, with temperatures exceeding 95 degrees Fahrenheit. This is expected to increase heat-related mortality, lower labor productivity, and boost demands for energy. Meanwhile, changing patterns of rain and snowfall – including the amount, frequency and intensity of precipitation across the state – will have serious long-term impacts on the supply and quality of water in Southern California, as well as how the state manages it. It is clear that our region needs to prepare for these projected challenges, and a big part of that effort is to make individual communities more resilient to the consequences of climate change, as well as the region as a whole. Without advance planning and effective action, the consequences of climate change will negatively impact our transportation system, our economy and our everyday lives.



# **Mobility Innovations**

Since SCAG adopted the 2012 RTP/SCS, technology and innovation have emerged as major themes of the 2016 RTP/SCS. Technology as a concept is a very broad topic. The term has myriad connotations and encompasses products such as smart phones and electric cars; advancements in software development such as real-time travel information; and new service paradigms such as ride sourcing (e.g. Lyft and Uber) and peer-to-peer car sharing. Some of these so-called "new" concepts have actually been around for a long time, but only recently have they scaled up because of technological innovations. For example, car sharing and bike sharing concepts have been in development since the 1980s, but only in recent years has the ubiquity of cellular phones with Internet access, precise geographic mapping, and the ability to instantly approve payments between users and providers made these systems more useful to a wider audience.

The 2016 RTP/SCS uses the term "mobility innovations" to characterize the new technologies that help us move about the region. The Plan includes policies and models the market growth of three key new mobility innovations: Zero Emissions Vehicles, Neighborhood Electric Vehicles, and Car sharing/Ridesourcing.

#### D. SCENARIO PLANNING

To develop a preferred scenario for the region at 2040, SCAG first generated four preliminary "sketch scenarios" for our region's future – each one representing a different vision for land use and transportation in 2040. More specifically, each scenario was designed to explore and convey the impact of where the region would grow, to what extent the growth would be focused within existing cities and towns, and how it would grow—the shape and style of the neighborhoods and transportation systems that would shape growth over the period. The following are descriptions of the four scenarios that were presented to the Regional Council, stakeholders, and at workshops throughout the region.

# Scenario 1: Trend

Scenario 1 was a base case scenario that represented "business-as-usual" growth to 2040, based on the region's population, household and employment trends. By "base case" SCAG meant and included: all existing regionally significant highway and transit projects; all ongoing Transportation Demand Management (TDM) and Transportation System Management (TSM) activities; and all projects which are undergoing right-of-way acquisitions, are currently under construction, have completed the federal environmental process (NEPA), or will be in the first two years of the previously conforming Federal Transportation Improvement Plan (FTIP). This scenario served as a yardstick to compare the three other scenarios for development of the Draft Plan. Growth and land use under the baseline scenario followed previous trends. Significant transportation investments or new policies regarding land use, housing or transportation were not introduced.



# Scenario 2: 2012 RTP/SCS Updated with Local Inputs

Scenario 2 updated SCAG's established 2012 RTP/SCS with inputs from local jurisdictions, and included the adopted Plan's broad suite of land use and transportation strategies, investments and policies. Scenario 2 envisioned future regional growth well-coordinated with the transportation system improvements of the approved 2012 RTP/SCS, as well as anticipated new transportation projects planned by the region's CTCs and transit providers. This scenario reflected land use patterns as depicted by local general plan land use policies and refined by cities through SCAG's extensive bottom-up local review input process and outreach effort.

# Scenario 3 (Policy A): Making Further Progress

Scenario 3 (also known as "Policy A") builds upon the concepts in Scenario 2 and incorporated additional best practices to increase transportation mode choice, reduce personal automobile dependency and further improve air quality. For example, this scenario expanded regional investment in transit integration strategies to increase transit ridership by making it quicker and easier to complete a transit trip. This scenario assumed that First/Last Mile improvements will be made at all fixed-guideway transit stations (i.e., commuter rail, subway, light-rail and bus rapid transit (BRT) stations) across the region. Scenario 3 included arterial roadways where jurisdictions are planning for some combination of high-quality bus service, higher density residential and employment at key intersections, and increased opportunities for active transportation. Scenario 3 also included a set of policies and complete street investments aimed at encouraging the replacement of the automobile for trips less than four miles in length with walking, bicycling, and slow-speed electric vehicles. Scenario 3 incorporated new technology and innovations such as bikeshare and car sharing, and assumed a well substantiated growth of these shared mobility services in urban areas predominantly through private sector actions. This scenario built upon SCAG policies from the 2012 RTP/SCS, and allowed for more future growth in walkable, mixed-use communities and in High Quality Transit Areas (HQTAs).

# **Scenario 4 (Policy B): Exceeding Expectations**

Scenario 4 (or "Policy B") builds upon Scenario 3, and represented an ambitious and holistic slate of public policies and investments. This scenario was intended to determine which policies would be required to achieve maximum per-capita greenhouse gas emissions reductions, in order to inform a comprehensive discussion during outreach and deliberation. Scenario 4 assumed improved bus transit services throughout identified HQTAs, as well as land use policies that encourage density along those routes. There was added emphasis on higher density residential and mixed-use infill along arterials with high-quality bus service, and more robust active transportation infrastructure. This scenario directed new growth away from undeveloped high-quality habitat areas to promote resource conservation, and it assumed no new residential growth in areas vulnerable to future sea level rise. Scenario 4 included a mix of housing options, with even more focus on infill development in towns and urban centers. Multifamily development in HQTAs was emphasized throughout the region.

The scope of these four regional growth scenarios, which were developed in consultation with the CEHD Committee and the SCAG's Technical Working Group (TWG), evolved throughout the first five months of 2015. Using local population, household, and employment growth



projections, these scenarios explored a range of potential regional development patterns using myriad land use and transportation inputs. In an effort to facilitate understanding of the impacts for policymakers and for the general public, a variety of scenario impacts were considered including land, energy, and water consumption; air quality; and household costs. Based on policy direction as well as an extensive analysis of these scenarios using SCAG's Regional Travel Demand Model (RTDM) and Scenario Planning Model (SPM), and considering the substantial feedback received during the public input process, a Draft Policy Growth Forecast (PGF) was developed utilizing elements of all scenarios that demonstrates progress over the 2012 RTP/SCS. Therefore, the strategies, policies and investments represented by the Draft PGF alternative will be documented as the Draft 2016 RTP/SCS.

The Draft PGF envisions future regional growth that is well coordinated with the transportation system improvements of the approved in the previous 2012 RTP/SCS, as well as anticipated new transportation projects planned by the region's CTCs and transit providers. It also incorporates best practices for increasing transportation choices; reducing our dependence on personal automobiles; allowing future growth in walkable, mixed-use communities and in HQTAs; and further improving air quality. The technical details associated with the scenario analysis work will be fully disclosed in the associated technical appendices to the Draft 2016 RTP/SCS.

#### E. OUR STRATEGIES FOR TRANSPORTATION AND LAND USE

Serving as an MPO, Regional Transportation Planning Agency and Council of Governments, SCAG has an essential responsibility to develop a Draft 2016 RTP/SCS that is dedicated to detailing recommended regional transportation investments and strategies. However, SCAG also recognizes that the region's transportation network and land uses must be well integrated if we are to ensure that our region grows in ways that enhance our mobility, sustainability, and quality of life. The Draft 2016 RTP/SCS makes a concerted effort to integrate the two, so that we can develop into an even more sustainable region over the coming decades. Accordingly, this staff report reviews regional strategies for growth and land use that set the context for a comprehensive review of the agency's plans for the region's transportation system.

#### **Land Use Strategies**

The Draft 2016 RTP/SCS builds upon the 2008 Advisory Land Use Policies in the 2012 RTP/SCS. These foundational policies have guided the development of land use strategies for the SCS:

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered<sup>3</sup> system of centers development;
- Develop "Complete Communities";

<sup>&</sup>lt;sup>3</sup> "Identify strategic centers based on a three-tiered system of existing, planned, and potential, relative to transportation infrastructure. This strategy more effectively integrates land use planning and transportation investment." A more detailed description of these strategies and policies can be found on pages 90-92 of SCAG's 2008 Regional Transportation Plan, which was adopted in May 2008.



- Develop nodes on a corridor;
- Plan for additional housing and jobs near transit;
- Plan for changing demand in types of housing;
- Continue to protect stable, existing single-family areas;
- Ensure adequate access to open space and preservation of habitat;
- Incorporate local input and feedback on future growth;

In addition, the Draft 2016 RTP/SCS is based upon the guiding principles and framework of the Draft PGF that were reviewed and approved by the CEHD Committee in October 2015. Consistent with the scenario development process and workshop feedback, SCAG developed the Draft PGF to serve as the foundation for the 2016 RTP/SCS, and specifically, to serve as the preferred regional growth scenario to be incorporated as part of the region's SCS. The Draft PGF maintains local input-based jurisdictional growth totals, along with targeted growth in opportunity areas that are well served by transit and are conducive to successful mixed-use and higher density housing in the future (based on future transit investments and recent construction trends for similar developments).

SCAG staff conducted and completed the intensive local review and input process of the Draft PGF between June 24 to the end of July 2015. To ensure the greatest degree of accuracy and expediency, staff worked with our local partners to incorporate all of the feedback provided during the review period. Recommended revisions specifically addressed development agreements, entitlements, and projects that are currently under development or were recently completed. In addition, the Draft PGF with these technical corrections was sent out to all the local jurisdictions who provided input by July 31<sup>st</sup> to ensure that revisions were appropriately reflected in the revised data set. This entire technical revision process was completed on September 16, 2015. Any input received about the Draft PGF after the July 31 deadline will be incorporated before the adoption of Final 2016 RTP/SCS to be presented to the Regional Council in April 2016.

The following guiding principles were approved by the CEHD Committee and serve as the basis for developing the Draft PGF:

- Principle #1: The Draft PGF for the 2016 RTP/SCS shall be adopted by the Regional Council at the jurisdictional level, thus directly reflecting the population, household and employment growth projections derived from the local input and previously reviewed and approved by SCAG's local jurisdictions. The PGF maintains these projected jurisdictional growth totals, meaning future growth is not reallocated from one local jurisdiction to another.
- Principle #2: The Draft PGF at the Transportation Analysis Zone (TAZ) level is controlled to be within the density ranges<sup>4</sup> of local general plans or input received from local jurisdictions in this most recent round of review.

<sup>&</sup>lt;sup>4</sup> With the exception of 6% of TAZs which have an average density below the density range of local general plans.



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- Principle #3: For the purpose of determining consistency for CEQA streamlining, lead
  agencies such as local jurisdictions have the sole discretion in determining a local
  project's consistency with the 2016 RTP/SCS.
- Principle #4: TAZ level data or any data at a geography smaller than the jurisdictional level is included in the Draft PGF only to conduct the required modeling analysis and is therefore, only advisory and non-binding because SCAG's sub-jurisdictional forecasts are not to be adopted as part of the 2016 RTP/SCS. After SCAG's adoption of the PGF at the jurisdictional level, the TAZ level data may be used by jurisdictions in local planning as it deems appropriate and there is no obligation by a jurisdiction to change its land use policies, General Plan, or regulations to be consistent with the RTP/SCS. SCAG staff plans to monitor the use of this data after the adoption of the RTP/SCS to encourage appropriate use.
- Principle #5: SCAG staff continues to communicate with other agencies who use SCAG sub-jurisdictional level data to ensure that the "advisory & non-binding" nature of the dataset is appropriately maintained.

Anticipated outcomes and benefits of the Draft PGF include reduced land consumption; improved air quality and physical fitness; increased shared mobility; natural habitat preservation; enhanced energy and water conservation; more strategic transportation infrastructure expenditures; and enhanced access to Cap & Trade resources. Ultimately, the Draft PGF will integrate regional land use strategies with transportation investments to significantly reduce vehicle miles traveled (VMT) and result in cleaner air by increasing transit ridership, increasing walking and biking, and reducing the length of auto trips. The Draft Policy Growth Forecast of population, employment and household at jurisdictional level is included as an **Attachment** to this staff report.

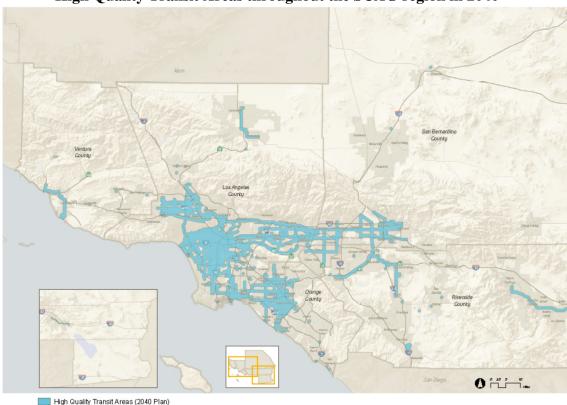
# High Quality Transit Areas (HQTAs)

The Draft 2016 RTP/SCS forecasted land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs. An HQTA is an area within one-half mile of (1) a fixed guideway transit stop, or (2) bus transit corridors where buses pick up passengers every 15 minutes or less during peak commute hours.

HQTAs are a cornerstone of land use planning best practice in the SCAG region because they concentrate roadway repair investments, leverage transit and active transportation investments, reduce regional lifecycle infrastructure costs, improve accessibility, create local jobs, and have the potential to improve public health and housing affordability. Here, households have expanded transportation choices with ready access to a multitude of safe and convenient transportation alternatives to driving alone – including walking and biking, taking the bus, light rail, commuter rail, the subway, and/or shared mobility options. Households have more direct and easier access to jobs, schools, shopping, healthcare, and entertainment, especially as Millennials form households and the senior population increases. Moreover, focusing future growth in HQTAs can provide expanded housing choices that nimbly respond to trends and market demands, encourage adaptive reuse of existing structures, revitalize main streets, and increase complete street investments.



A forecasted regional land use pattern has been developed exhibiting increased residential and employment growth in HQTAs, with corresponding reduced growth in areas lacking transit infrastructure. Regional investments in "First/Last Mile" strategies are expanded within HQTAs to increase transit ridership by making it quicker and easier to complete a transit trip. Investments include enhanced street crossings, connections, wayfinding, signage, station amenities, and bike parking. While HQTAs account for only 3 percent of total land area in SCAG region, they are planned and projected to accommodate 46 percent of the region's future household growth, and 50 percent of the future employment growth.



High Quality Transit Areas throughout the SCAG region in 2040

#### Livable Corridors

"Livable Corridors" are arterial roadways where jurisdictions may plan for a combination of the following elements: high-quality bus frequency; higher density residential and employment at key intersections; and increased active transportation through dedicated bikeways. Most Livable Corridors would be located within HQTAs. Livable Corridor land-use strategies include development of mixed use retail centers at key nodes along corridors, increasing neighborhood-oriented retail at more intersections, applying a "complete streets" approach to roadway improvements, and zoning that allows for the replacement of underperforming auto-oriented strip retail between nodes with higher density residential and employment. These strategies will allow



more context sensitive density, improve retail performance, combat blight, and improve fiscal outcomes for local communities.

#### Neighborhood Mobility Areas

Neighborhood Mobility Areas (NMA) represent the synthesis of various planning practices, and are applicable in a wide range of settings in the SCAG region. Strategies are intended to provide sustainable transportation options for residents of the region who lack convenient access to high-frequency transit options but have a high proportion of short-trips relating to the surrounding urban form. NMAs are conducive to active transportation and include a "complete streets" approach to roadway improvements to encourage replacing single- and multi-occupant automobile use with biking, walking, skateboarding, neighborhood electric vehicles and senior mobility devices. A complete streets approach ensures that transportation plans meet the needs of all users of the roadway system. These areas have high intersection density, low to moderate traffic speeds, and robust residential retail connections. NMAs are suburban in nature, but can support slightly higher density in targeted locations.

# Zero Emissions Vehicles & Electric Vehicle Charging Stations

Since SCAG adopted the 2012 RTP/SCS, the Governor's Office released Zero Emissions Vehicle (ZEV) Action Plans in 2013 and 2015. These plans identified state level funding to support the implementation of Plug-in Electric Vehicle (PEV) and Hydrogen Fuel Cell refueling networks, and contain ambitious targets for all ZEV vehicle classes. SCAG leveraged its transportation model and land use models to complete a Regional PEV Readiness Plan in 2012. As part of the Draft 2016 RTP/SCS, SCAG has focused location-based strategies specifically on increasing the efficiency to Plug-in Hybrid Electric Vehicles (PHEV) in the region. These are electric vehicles that are powered by a gasoline engine when their battery is depleted. The Draft 2016 RTP/SCS proposes a regional charging network that will increase the number of PHEV miles driven on electric power, in addition to supporting the growth of the PEV market generally. In many instances these chargers may double the electric range of PHEVs, reducing vehicle miles traveled that produce tail-pipe emissions.

# Preserving Natural Lands

Many natural land areas near the edge of existing urbanized areas do not have plans for conservation and are vulnerable to development pressure. Certain lands, such as riparian areas, have high per-acre habitat values and are host to some of the most diverse yet vulnerable species that play an important role in the overall ecosystem. Some cities and county transportation commissions have taken steps toward planning comprehensively for conserving natural lands and farmlands, while also meeting demands for growth. To support those and other comprehensive conservation planning efforts, SCAG studied regional scale habitat, developed a regional conservation framework, and assembled a natural resource database. The Draft 2016 RTP/SCS suggests redirecting growth from high value habitat areas to existing urbanized areas. This strategy avoids growth in sensitive habitat areas, builds upon the conservation framework, and complements an infill-based approach.



Balancing Growth Distribution Between 500-Foot Buffer Areas and HQTAs

The Draft 2016 RTP/SCS recognizes guidance from the 2005 ARB air quality manual, which recommends limiting the siting of sensitive uses within 500 feet of freeways and urban roads carrying more than 100,000 vehicles per day. 500 feet is approximately one-fifth of HQTA. While the density is increased in some areas of HQTAs, the growth remains stable in the 500-foot buffer areas to reflect local input, thereby balancing the growth distribution.

The foregoing land use strategies build upon growth policies that the Regional Council adopted as part of the 2012 RTP/SCS. Many local policy documents that SCAG reviewed in developing the land use strategies are based on best practices that encourage infill and mixed-use development in transit rich and/or transit ready areas. The strategies in the Draft 2016 RTP/SCS recognize demographic shifts and the increasing demand for multifamily housing near transit infrastructure. In 2015, 38 percent of all households in the SCAG region were multifamily homes. Through 2040, the Draft Plan projects 67 percent of the 1.5 million new homes expected to be built will be multifamily units. At the 2040 end state, this change represents an increase from 43 percent to 49 percent of all housing units in the region.

HOUSING MIX						
Baseline	Plan					
Growth Increment:	Growth Increment:					
• 64% single family	• 33% single family					
• 36% multifamily	• 67% multifamily					
End State:	End State:					
• 57% single family	• 51% single family					
• 43% multifamily	• 49% multifamily					

Ultimately, the Draft 2016 RTP/SCS integrates regional land use strategies with transportation investments to reduce VMT and result in cleaner air by increasing transit ridership, increasing walking and biking, and reducing the length of auto trips. The table below summarizes the land use characteristics for the entire region if these strategies are implemented.



LAND USE CHARACTERISTICS					
	Baseline	Plan			
Land Use and Transit Coordination	High Quality Transit Areas  • 36% Homes  • 44% Employees	<ul><li>High Quality Transit Areas</li><li>47% Homes</li><li>56% Employees</li></ul>			
Land Pattern Focus	<ul> <li>2012-2040 New growth:</li> <li>3% Urban Infill</li> <li>11% Compact Walkable</li> <li>86% Standard Suburban</li> </ul>	<ul> <li>2012-2040 New growth:</li> <li>13% Urban Infill</li> <li>49% Compact Walkable</li> <li>38% Standard Suburban</li> </ul>			

# Affordable Housing

As a council of governments (COG), SCAG is responsible for developing the Regional Housing Needs Assessment (RHNA) allocation, which represents future housing need for all income groups for each jurisdiction within the SCAG region. The integrated growth forecast is used as a basis to determine projected household growth as part of the RHNA methodology. The most recent RHNA allocation was adopted by the SCAG Regional Council in October 2012 and represents the 8 year planning period between October 2013 and October 2021. The next RHNA allocation is scheduled to be adopted in October 2020.

Once a jurisdiction receives its RHNA allocation, it is required to update its housing element as part of its General Plan. A jurisdiction's housing element must provide a sites and zoning analysis to accommodate its RHNA allocation and plan for all housing types, including affordable housing. Jurisdictions can consider a wide variety of zoning tools and housing types to accommodate future housing need in their housing element.

# **Transportation Strategies**

# Preserving our Existing System

Southern California's transportation system is becoming increasingly compromised by decades of underinvestment in maintaining and preserving our infrastructure. These investments have not kept pace with the demands placed on the system, and the quality of many of our roads, highways, bridges, transit, and bicycle and pedestrian facilities are continuing to deteriorate. Unfortunately, the longer they deteriorate the more expensive they will be to fix in the future. Even worse, deficient conditions compromise the safety of users throughout the network. For all of these reasons, system preservation and achieving a state of good repair are top priorities of the 2016 RTP/SCS.



#### Recommendation

Consistent with TC's prior action on September 3, 2015 to support the Draft 2016 RTP/SCS including the guiding principles of the 2012 RTP/SCS financial plan and reasonably available revenue strategies, staff recommends investing \$272.8 billion toward preserving our existing system. The allocation of these expenditures include the transit and passenger rail system, the state highway system, and regionally significant local streets and roads. Note that the allocation for the state highway system includes bridges; the allocation for transit includes funding to both preserve and operate the transit system; and the allocation for regionally significant local streets and roads includes bridges and active transportation safety improvements. Staff recommends the following strategies:

- Protecting and preserving what we have first, supporting a "fix-it-first" principle.
- Considering the cycle costs beyond construction.
- Continuing to work with stakeholders to identify and support new sustainable funding sources and/or increased funding levels for preservation and maintenance.

#### Potential Benefits

Investing in system preservation is one of the most cost-effective investments. At a minimum, the proposed investments will result in:

- Improved user experience (i.e. motorists, transit riders, bicyclists, pedestrians) of the system.
- Lower the costs for all tax payers over the long run.
- Lower the costs to the users in the form of reduced auto repair bills and lower fuel costs.
- Cleaner air and reduced greenhouse gas emissions from more efficiently operating transportation system.

#### Highway and Arterials

Our region's highways and arterials serve as a crucial backbone of our overall regional transportation network. As part of the 2016 RTP/SCS, SCAG continues to advocate for a comprehensive solution based on a system management approach to manage and maintain our highway and arterial network. Although we recognize that we can no longer rely on system expansion alone to address our mobility needs, critical gaps and congestion chokepoints in the network still hinder access to certain parts of the region. County transportation plans have identified projects to close these gaps, eliminate congestion chokepoints and complete the system in which such improvements are included in the 2016 RTP/SCS.

Consistent with our regional emphasis on the system management pyramid, recent planning efforts have focused on enhanced system management, including the integration of value pricing to better use existing capacity and offer users greater travel time reliability and choices. Express Lanes that are appropriately priced to reflect demand can outperform non-priced lanes in terms of throughput, especially during congested periods. Moreover, revenue generated from priced lanes can be used to deliver the needed capacity provided by the Express Lanes sooner, and to support complementary transit investments.



The regional Express Lane network included in the 2016 RTP/SCS builds on the success of the State Route 91 Express Lanes in Orange County, as well as the Interstate 10 and Interstate 110 Express Lanes in Los Angeles County. Additional efforts underway include the extension of the State Route 91 Express Lanes to the Interstate 15, as well planned Express Lanes on the Interstate 15 in Riverside County. Express Lanes are also planned for Interstate 15 and Interstate 10 in San Bernardino County. The following figure displays the segments in the proposed regional Express Lane network.

# Planned/Proposed HOT Direct Connector Scrotology Planned/Proposed HOT Direct Connector Scrotology Planned/Proposed HOT Direct Connector Scrotology Planned/Proposed HOT Direct Connector Connecto

# **Proposed Regional Express Lane Network**

Our region's arterial system is comprised of local streets and roads that serve many different functions. One is to link our region's residents with schools, jobs, healthcare, recreation, retail and other destinations. A number of arterials run parallel to major highways, and they can provide alternatives to them. Beyond automobiles, our arterials serve other modes of travel, including transit and active transportation. The 2016 RTP/SCS proposes a variety of arterial projects and improvements throughout the region. Operational and technological improvements



can maximize system productivity through various cost-effective and non-labor intensive means – beyond improvements to expand capacity. These include signal synchronization, spot widening, and adding grade separations at major intersections.

#### Recommendation

Consistent with TC's prior action on September 3, 2015 to support the Draft 2016 RTP/SCS including the guiding principles and framework of the Highways and Arterials component of the Plan, staff recommends investing \$55.5 billion toward Highway and Arterial strategies throughout the region. Staff recommends the following strategies:

- Focusing on achieving maximum productivity through strategic investments in system management and demand management.
- Focusing on adding capacity primarily (but not exclusively) to:
  - o Closing gaps in the system; and
  - o Improving access where needed
- Supporting policies and system improvements that will encourage the seamless operation of our roadway network from a user perspective.
- Increasing roadway capacity with consideration and incorporation of congestion management strategies, including demand management measures, operational improvements, transit, and ITS, where feasible.
- Focusing on addressing non-recurring congestion with new technology.
- Supporting "complete streets" opportunities developed from general plans as part of AB-1358 (2008) compliance and SB-743 (2013).

#### Potential Benefits

The following are some of the benefits that can be expected from investing in our roadway system.

- Improved mobility and accessibility to opportunities for the majority of our commuters and residents.
- Will provide additional capacity needed to run additional transit services, including express bus services and Bus Rapid Transit (BRT).
- More efficient system due to gap closures, eliminating the need to make detours onto local streets.

#### Transportation Demand Management (TDM) and System Management (TSM)

Efficient management of the demand placed on our transportation system and efficient operation of our transportation assets is critical, not only to ensure we are spending our scarce resources wisely, but also to ensure we are meeting our vision and our broader goals of improving the quality of life in Southern California. Expanding our investments in TDM and TSM strategies will allow us to achieve these objectives. Moe specifically, we must strive to:

- Manage our demand wisely before considering capital intensive options to meet our future demands, and
- Ensure an efficiently operating system through application of best practices and technology (Intelligent Transportation Systems (ITS)).



#### Recommendation

Staff recommends investing \$6.9 billion toward TDM strategies throughout the region. There are three main areas of focus:

- Reducing the number of drive-alone trips and overall VMT through ridesharing, which includes carpooling, vanpooling and supportive policies for shared ride services such as Uber and Lyft.
- Redistributing or eliminating vehicle trips from peak demand periods through incentives for telecommuting and alternative work schedules.
- Reducing the number of drive-alone trips through use of other modes of travel such as transit, rail, bicycling and walking.

In addition, the following strategies expand and encourage the implementation of TDM strategies to their fullest extent:

- Rideshare incentives and rideshare matching;
- Parking management and parking cash-out policies;
- Preferential parking or parking subsidies for carpoolers;
- Intelligent parking programs;
- Promotion and expansion of Guaranteed Ride Home programs;
- Incentives for telecommuting and flexible work schedules;
- Integrated mobility hubs and first/last mile strategies;
- Incentives for employees who bike and walk to work; and
- Investments in active transportation infrastructure.

Staff also recommends \$9.2 billion for TSM improvements that work in concert to optimize the performance of the transportation system. These include extensive advanced ramp metering, enhanced incident management, bottleneck removal to improve flow (e.g. auxiliary lanes), expansion and integration of the traffic signal synchronization network, data collection to monitor system performance, and other ITS improvements. Several key TSM strategies include:

- Corridor System Management Plans to identify lower cost, higher benefit options to maximize efficiency and productivity along major highway corridors, including coordination with parallel arterial systems, transit and incident response management.
- Integrated Corridor Management in which all elements within a corridor are considered to evaluate opportunities that move people and goods in the most efficient manner while ensuring the greatest operational efficiencies are achieved.
- Arterial Signal Synchronization Projects to optimize traffic flow.
- Dynamic Corridor Congestion Management to coordinate highway ramp metering with arterial signals, inform the traveling public of expected travel times to various destinations, and provide travel time comparisons with transit.



#### Potential Benefits

The following are some of the benefits expected to result from these investments.

- Increased use of carpooling, transit, and telecommuting, resulting in better performing system overall.
- A more efficient and fully functioning transportation system.
- Enhanced real-time traveler information resulting in improved user experience and efficient system utilization.
- Reduced congestion on our roadways.
- Reduced VMT, greenhouse gas emissions, and cleaner air.
- Reduced need for investing in expensive capital improvement projects.

#### **Transit**

Continuing to expand our transit system and improve services is critical to realizing our vision described earlier in this report and ultimately meeting our broad societal goals and objectives. Key points considered in developing recommendations to expand our transit system include:

- Significant investments in transit already committed locally (CTCs)
- Changing demographics and urban forms call for more travel choices, particularly transit
- Transit can help relieve pressure and provide alternatives on some of our most congested corridors
- Additional transit will be necessary to ensure our pricing strategies work efficiently and equitably

#### Recommendation

Significant investment in transit is already committed locally, primarily based on local sales tax measures as reflected in the current RTP/SCS. Some of the illustrative projects backed by current commitments are:

- 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

When these projects are completed, the region will have a greatly expanded urban rail network, including ten light-rail projects and three heavy rail extensions on the Metro Rail system. New BRT routes will provide additional higher speed bus service in Los Angeles and Orange Counties and the Inland Empire. Orange County will add new streetcar services to link major destinations in Anaheim, Santa Ana and Garden Grove to the Metrolink system. Riverside County will extend Metrolink to San Jacinto, and San Bernardino County will connect Metrolink to Ontario International Airport and to Redlands via Downtown San Bernardino.



In addition to current commitments, staff recommends extensive local bus, rapid bus, BRT and express service improvements. An expanded point-to-point express bus network will take advantage of the region's carpool and express lane network. New BRT service, limited-stop service, and increased local bus service along key corridors, in coordination with transit-oriented development and land use, will encourage greater use of transit for short local trips. Also included in the investment package are renewed commitments to asset management and maintaining a state of good repair.

Staff also recommends the following strategies:

- Implement and expand transit priority strategies, including transit signal priority, queue jumpers and bus lanes.
- Implement regional and inter-county fare agreements and media to make transit more attractive and accessible.
- Increase bicycle carrying capacity on transit and rail vehicles to facilitate first/last mile connections.
- Expand and improve real-time passenger information systems to allow travelers to make more informed decisions and improve the overall travel experience.
- Implement first/last mile strategies to extend the effective reach of transit.

The total recommended investment in transit is \$56.1 billion for capital and \$156.7 billion for operations & maintenance. This recommendation is consistent with TC's prior action on September 3, 2015 to support Draft 2016 RTP/SCS inclusion of the framework of the proposed transit strategies.

#### Potential Benefits

Some of the benefits of investing in transit are:

- New and enhanced transit services that provide new choices for commuters and residents
- Cleaner air and reduced congestion, VMTs and greenhouse gas emissions.
- Facilitation of current and future smart growth and sustainable communities
- The ability for our residents to choose a healthier, more active lifestyle
- The ability for our residents who do not own a vehicle to remain mobile and active

#### Passenger Rail and High Speed Rail

In November 2008, California voters passed a historic bond measure (Proposition 1A) that, among other things, authorizes the State to raise \$9 billion in bond funds to build our first statewide high speed rail system. Phase I of this system, which will connect Los Angeles Union Station and Anaheim to the Central Valley and San Francisco Bay Area, is to be implemented during the RTP/SCS timeframe (i.e., by 2040) and presents an enormous opportunity for the state and our region. With the adoption of the 2012 RTP/SCS, the region and the California High Speed Rail Authority (CHSRA) committed to spending a combined \$1 billion in Proposition 1A and matching funds on early investments in the existing passenger rail system. This commitment was formalized in a Memorandum of Understanding (MOU) which identifies a candidate project list to improve the Metrolink system and the Los Angeles-San Diego-San Luis Obispo



(LOSSAN) rail corridor, thereby providing immediate, near-term benefits to the region while laying the groundwork for future integration with High Speed Rail.

#### Recommendation

Staff recommends maintaining the commitments in the 2012 RTP/SCS and the High Speed Rail MOU that will improve rail speed, service and safety for Metrolink and the LOSSAN rail corridor, provide interconnectivity to the future High Speed Rail system, and provide an attractive alternative to driving alone. This includes the MOU capital projects to bring segments of the regional rail network up to the federally defined speed of 110 miles per hour or greater, and to implement a blended system of rail services.

A key MOU project and top priority is the Southern California Regional Interconnector Project (SCRIP, formerly called the Los Angeles Union Station Run-Through Tracks). This project will deliver regional benefits for all counties served by Metrolink and LOSSAN/Amtrak Pacific Surfliner by extending at least four tracks south of Union Station and across the U.S. Route 101 freeway to connect with the main tracks along the Los Angeles River. This will increase Union Station's capacity by 40 to 50 percent, result in improved operations, and reduce air pollution and greenhouse gas emissions from idling locomotives.

In addition to the MOU projects, investments are identified in the LOSSAN Strategic Implementation Plan for 2030 and in the Metrolink 2015 Strategic Assessment. Staff also recommends the following passenger rail strategies:

- Secure increased funding and dedicated funding sources
- Support increased transit-oriented development and first/last mile strategies
- Implement cooperative fare agreements and media

The total recommended investment in passenger rail is \$38.6 billion for capital and \$15.7 billion for operations & maintenance. This recommendation is consistent with TC's prior action on September 3, 2015 to support Draft 2016 RTP/SCS inclusion of the framework of the proposed passenger rail strategies.

#### Potential Benefits

Proposed investments in our Passenger and High Speed Rail system is expected to yield the following benefits.

- New and enhanced sustainable transportation options for travel between regions.
- Reduced congestion and greenhouse gas emissions from travel market shift from air and car travel.
- A system that complements and feeds current inter-city (Amtrak) and commuter rail (Metrolink) and the region's public transit network, and vice-versa.
- Economic benefits and new jobs from constructing the projects.
- Reduced demand for short haul flights in our most congested airports, particularly LAX.



#### Goods Movement

Consistent with TC's prior action on October 8, 2015 to support Draft 2016 RTP/SCS inclusion of the framework for goods movement strategies, these strategies total \$75 billion and include the following key components:

- A Regional Clean Freight Corridor System—a system of truck-only lanes extending from the San Pedro Bay Ports to downtown Los Angeles along Interstate 710, connecting to the State Route 60 east-west segment, and finally reaching Interstate 15 in San Bernardino County. Such a system would address growing truck traffic and safety issues on core highways through the region and serve key goods movement industries. Ongoing evaluation of a regional freight corridor system is underway, including recent work on an environmental impact report (expected to be recirculated in 2016) for the Interstate 710 segment. Additionally, as a part of the 2016 RTP/SCS, SCAG continues to refine the east-west corridor component of the system along the State Route 60 corridor.
- Truck Bottleneck Relief Strategy—the top 50 truck bottlenecks were identified through a process that included a quantitative analysis of congestion in the region and stakeholder outreach. This analysis has been updated for the 2016 RTP/SCS. The 2016 RTP/SCS allocates an estimated \$5 billion toward goods movement bottleneck relief strategies. In past RTPs, SCAG directly addressed truck bottlenecks by developing a coordinated strategy to identify and mitigate the top-priority truck bottlenecks. This RTP/SCS has updated previous analysis to confirm previously identified bottlenecks and to identify potential new bottlenecks.
- Rail Strategy—the region's extensive rail network offers shippers the ability to move large volumes of goods over long distances at lower costs, compared with other transportation options. The 2016 RTP/SCS continues to incorporate the following rail strategies for goods movement:
  - o Additional mainline tracks for the BNSF San Bernardino and Cajon Subdivisions and the UPRR Alhambra and Mojave Subdivisions
  - Expansion/modernization of intermodal facilities
  - o Highway-rail grade separations
  - o Port-area rail improvements, including on-dock rail enhancements
- Goods Movement Environmental Strategy—focuses on a two-pronged approach for achieving an efficient, safe and economically sound freight system that also reduces environmental impacts. For the near term, the regional strategy supports the deployment of commercially available low-emission trucks and locomotives while centering on continued investments into improved system efficiencies. In the longer term, the strategy focuses on advancing technologies taking critical steps now toward phased implementation of a zero-emission and near-zero-emission freight system. The plan to develop and deploy advanced technologies includes 4 phases of technology development and implementation, during which technology needs are defined, prototypes are tested and developed, and efforts are scaled up. This cycle of technology development is continuous, and it will renew itself as new innovations emerge and technologies continue to evolve.



#### Potential Benefits

The following are some of the benefits from the proposed recommendation:

- Supports mobility for key industries.
- Serves goods movement markets in an efficient manner.
- Helps alleviate the region's congestion.
- Promotes job creation and retention.
- Improves safety (reduced truck/automobile collisions and eliminates significant number of at-grade railroad crossings).
- Reduces emissions (CO2, NOx and PM2.5).

#### Active Transportation

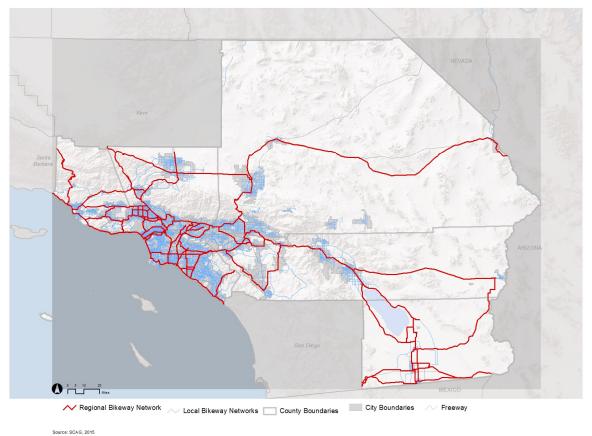
The 2016 Active Transportation Plan updates and expands upon the 2012 Plan. As such, it proposes strategies to continue progress made in developing regional bikeway network, assumes all local active transportation plans will be implemented and dedicates resources to maintain and repair thousands of miles of dilapidated sidewalks. The Plan also considers new strategies and approaches beyond those proposed in 2012.

#### Recommendation

Consistent with TC's prior action on October 8, 2015 for Draft 2016 RTP/SCS inclusion of the proposed Active Transportation Plan Investment framework, the 2016 Active Transportation Plan would double funding available for active transportation to \$12.9 billion and includes 11 specific strategies for maximizing active transportation in the SCAG region in four broad categories (regional trips, transit integration, short trips and education/encouragement). These strategies include:

- 1. Regional-Trip Strategies (see map):
  - a. <u>Regional Greenway Network</u>: a 2,298 mile network, based on local plans designed to increase walking and biking by creating separated bikeways designed to appeal to most potential bicyclists.
  - b. <u>Regional Bikeway Network</u> (RBN): a 2,697 mile system of interconnected bicycle routes of regional significance, based on local plans. The RBN connects cities and counties and serves as a spine for local bikeway networks and the regional greenway network.
  - c. <u>California Coastal Trail Access</u>: The active transportation plan provides established paths as part of the Regional Greenway Network and Regional Bikeway Network to access the California Coastal Trail.





Map Title: Enter Map Title Here

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#### 2. Transit Integration Strategies:

- a. <u>First Mile/Last Mile:</u> The Plan proposes bicyclist and pedestrian improvements at and around 224 rail or fixed-guideway bus stations.
- b. <u>Livable Corridors:</u> The Plan proposes 16 corridors totaling 670 miles for improvements separate from those areas in the First Mile/Last Mile strategy.
- c. <u>Bike Share Services</u>: The Plan calls for 880 stations and 8,800 bicycles starting in Downtown Los Angeles and Pasadena, and then moving into other locations.

#### 3. Short-Trip Strategies:

- a. <u>Sidewalk quality</u>: The Plan calls for 10,500 miles of new and improved sidewalks through development projects or larger road construction and maintenance projects
- b. <u>Local Bikeway Networks</u>: The planned 7,200 miles of new local bikeways are the foundation for the regional bikeway network and the regional greenway network. Combined, the local, regional and greenway networks comprise 12,700 miles of bikeways in the region.
- c. <u>Neighborhood Mobility Areas</u>: The strategy includes polices to encourage replacing single and multi-occupant automobile use with biking, walking, skateboarding and neighborhood electric vehicles. Complete Streets strategies, such as traffic calming, bicycle priority streets (bicycle boulevards), and pedestrian connectivity increase physical activity, improve connectivity to the regional bikeway/greenway networks, local businesses and parks.

#### 4. Education and Encouragement

- a. Safe Routes to School: Approximately \$280 million over the life of the plan is devoted to Safe Routes to School programs and projects.
- b. Safety Campaigns: The existing Safety and Encouragement Campaign is anticipated to be updated and conducted every five years.



#### Potential Benefits

Proposed investments in Active Transportation are expected to yield the following benefits:

- Increased biking and walking, particularly for short trips. Walking in the 2040 Plan is expected to increase 28 percent from 2012.
- Biking in the 2040 Plan is expected to increase 71 percent.
- Improved overall transit usage by 9 percent compared to the 2040 Plan with no Active Transportation investments.
- Improved transit usage in high quality transit areas by 10 percent compared to the 2040 Plan with no Active Transportation investments.



#### Aviation

The SCAG region is one of the busiest and most diverse commercial aviation regions in the world. In 2014, over 60 airlines offered scheduled service to one or more of our region's airports, providing over 1,200 daily commercial departures—one every 70 seconds. These departing flights travel all over the United States and to every corner of the globe—in all, a total of 169 destinations in 37 countries had non-stop service from our region in 2014. Our airports also play a critical role in the region's goods movement network, and they impact the operations of our ground transportation network as well. The passengers arriving at or departing from our airports generate over 200,000 daily trips on our region's ground transportation system.

The development of the air passenger demand forecasts for the 2016 RTP/SCS is based on two premises:

- First, aviation demand is regional. Because aviation is used to travel much longer distances than cars, trains and other modes of transportation, nearly all commercial air travel generated by our region occurs between the region and some other region of the state, country, or globe. Air passengers first make the choice to travel by air, and then they choose which airports to utilize for their trip. Thus, the demand for air travel is for travel to and from the region as a whole, not to and from a specific airport.
- Second, aviation demand is driven by macroeconomic trends at the regional, national, and global levels. Our region draws travelers from around the world because we are fortunate to have a diverse and growing population, many prominent cultural and educational institutions, a wealth of natural attractions from the mountains to the coast, a warm and sunny climate, and tourist attractions that are known worldwide. Thus, the demand for air travel between the SCAG region and other parts of the world depends on the level of economic activity not just here but in many other locations around the country and the world.

Based on the historical relationship between economic activity and the demand for air travel, as well as expected future economic conditions in our and other regions, total air passenger demand in our region is expected to increase from 91.2 million annual passengers (MAP) in 2014 to 136.2 MAP in 2040. This represents a 1.6 percent annual growth rate over the forecast period. This regional forecast is strong and reflects the potential for the region to have long-term economic recovery and growth. This regional passenger demand distribution of 136.2 MAP along with the hybrid approach of ranges and fixed numbers for each of the twelve regional commercial airports was previously approved by TC on August 6, 2015.



Airport	2040 Demand (MAP)
TOTAL	136.2
Burbank Bob Hope Airport (BUR)	7.3
Imperial County Airport (IPL)	0.2
Los Angeles International Airport (LAX)	82.9 - 96.6
Long Beach Airport (LGB)	5.0
LA/Ontario International Airport (ONT)	11.0 - 19.0
Oxnard Airport (OXR)	0.2
Palmdale Regional Airport (PMD)	0.5 - 2.5
Palm Springs International Airport (PSP)	3.7
March Inland Port (RIV)	0.2
San Bernardino International Airport (SBD)	0.2 - 1.5
John Wayne Airport (SNA)	12.5
Southern California Logistics Airport (VCV)	0.2

Note: These forecasts were approved by Transportation Committee on August 6, 2015.

Accommodating the future demand for air passenger and air cargo is critical to the economic health of the region. The economic impact of air travel to the region is expected to increase from \$27.4 billion in 2012 to \$43.8 billion in 2040 (in 2012 dollars), an increase of almost 60 percent. The number of jobs supported by visitors arriving by air is expected to increase from 275,000 to 452,000. If the region's aviation system and supporting ground access network cannot accommodate the expected demand, some of this potential economic activity could be lost to other regions.

#### **Air Cargo Forecasts**

The development of the air cargo demand forecasts is similar to that of the air passenger forecasts. The demand for air cargo is driven largely by the economic interrelationship of our region and other regions around the world. Because of its high cost, shipment by air is used primarily for time-sensitive and high-value goods. Total air cargo transported through our region's airports has experienced an uneven recovery since the recession of 2007, but remained below year 2000 levels even in 2014. Based on the historical relationship between economic activity and the demand for air cargo, as well as expected future economic conditions in our and other regions, total air cargo demand in our region is expected to increase from 2.43 million metric tons in 2014 to 3.78 million metric tons in 2040. This represents a 1.8 percent annual growth rate over the forecast period. On October 8, 2015, the TC approved this proposed air cargo forecast for inclusion in the Draft 2016 RTP/SCS.

#### **Airport Ground Access**

The ground access network serving the region's airports is critical to both the aviation system and the ground transportation system. Passengers' choice of airports is based in part on the travel time to the airport and the convenience of access, so facilitating airport access is essential to the



efficient functioning of the aviation system. In addition, airport related ground trips can contribute to local congestion in the vicinity of the airports.

#### Recommendation

To reduce the impact of air passenger trips on ground transportation congestion, the 2016 RTP/SCS airport ground access strategies include the following:

- Support the regionalization of air travel demand
- Continue to support regional and inter-regional projects that facilitate airport ground access (e.g., High Speed Rail, High Desert Corridor)
- Support on-going local planning efforts by
  - Airport operators
  - County Transportation Commissions
  - Local jurisdictions
- Encourage development and use of transit access to the region's airports
- Encourage use of modes with high average vehicle occupancy (AVO)
- Discourage use of modes that require "deadhead" trips to/from airports

This recommendation is consistent with TC's prior action on October 8, 2015 for Draft 2016 RTP/SCS inclusion of the proposed regional aviation ground access strategies.

#### Potential Benefits

The following are some of the potential benefits from the proposed recommendation:

- Accommodate future aviation demand in the region in an efficient and equitable manner.
- Allows decentralization of aviation demand and the economic opportunities associated with it.
- Minimizes additional ground access improvement needs beyond those that are already committed.

#### F. TRANSPORTATION FUNDING

In accordance with federal fiscal constraint requirements, the financial plan for the 2016 RTP/SCS identifies how much money is reasonably expected to be available to build, operate, and maintain the region's surface transportation system through the forecast horizon year of 2040.

The latest forecast of core revenues totals about \$356 billion. Local sources, totaling \$255 billion, comprise the largest share of core revenues at 71 percent, followed by state sources totaling \$64 billion (18 percent) and federal sources totaling \$38 billion (11 percent). Core revenues are existing transportation funding sources projected through 2040. The core revenue forecast does not include future increases in tax rates or adoptions of new tax measures.

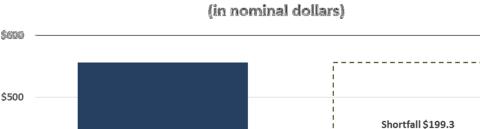
Forecast of expenditure needs totals \$555 billion. Operating and maintenance (O&M) expenditures needed to achieve a state of good repair total \$273 billion (49 percent). O&M includes \$65 billion in state highway O&M, \$157 billion in transit O&M, \$16 billion in

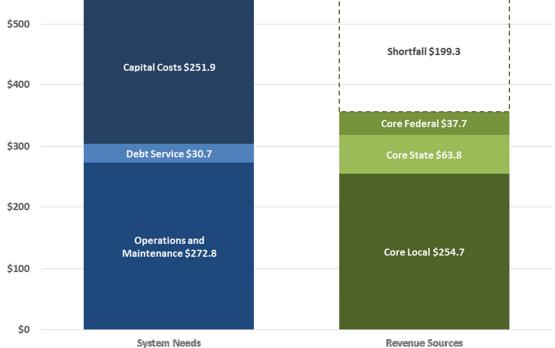


passenger rail O&M, and \$35 billion in regionally significant local streets and roads O&M. Capital project expenditures total \$252 billion (45 percent) and debt service totals \$31 billion (6 percent).

The difference between the expenditure forecast total (\$555 billion) and the core revenue forecast total (\$356 billion) is \$199 billion as shown in the figure below. This funding gap is similar to the amount identified in the 2012 RTP/SCS. As part of the 2012 RTP/SCS, reasonably available new revenue sources including short-term adjustments to state and federal gas excise tax rates and long-term replacement of gas taxes with mileage-based user fees were included to fill the gap.

Total SCAG Regional System Needs: \$555.4 Billion





Note: Numbers may not sum to total due to rounding

As part of the 2012 RTP/SCS, the Regional Council adopted a set of key guiding principles to lay the foundation for identifying reasonably available new revenues. The Transportation Committee re-confirmed use of these guiding principles at its September 2015 meeting. The guiding principles are as follows:



- Establish a user-based system that better reflects the true cost of transportation with firewall protection for transportation funds while ensuring an equitable distribution of costs and benefits
- Promote national and state programs that include return to source guarantees while maintaining flexibility to reward regions that continue to commit substantial local resources
- Leverage locally available funding with innovative financing tools (e.g., tax credits and expansion of Transportation Infrastructure Finance and Innovation Act (TIFIA)) to attract private capital and accelerate project delivery
- Promote funding strategies that strengthen federal commitment to the nation's goods movement system, recognizing the pivotal role that our region plays in domestic and international trade

Based on these guiding principles, both near-term transitional strategies and long-term initiatives consistent with state and national discussions were supported by the Transportation Committee on September 3, 2015 for inclusion in the 2016 RTP/SCS, which are as follows:

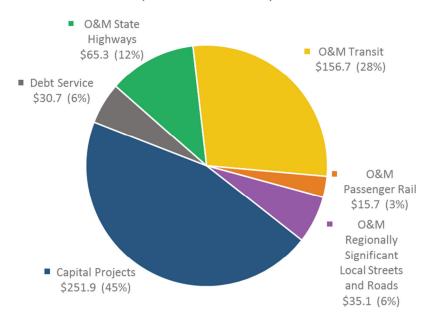
Reasonably Available Revenue Sources and Innovative Financing Strategies \$199.3 Billion (in nominal dollars)

	A
Revenue Source	Amount
State and Federal Gas Excise Tax Adjustment to Maintain Historical Purchasing Power	\$6.0
Mileage-Based User Fee (or equivalent fuel tax adjustment)	\$124.8 (est. increment only)
Highway Tolls (includes toll revenue bond proceeds)	\$23.5
Private Equity Participation	\$3.4
Freight Fee/National Freight Program	\$5.4
State Bond Proceeds, Cap-and-Trade Auction Proceeds & Other for California High-Speed Rail Program	\$34.0
Value Capture Strategies	\$1.2
Local Option Sales Tax (Ventura County)	\$1.1

As shown in the figure below, capital projects total \$251.9 billion in nominal dollars. Operating and maintenance (O&M) costs total \$272.8 billion, while debt service obligations total \$30.7 billion. Transit-related costs comprise the largest share of O&M costs for the region, totaling \$156.7 billion. Note: Numbers below may not sum to total due to rounding.



## Total Expenditures: \$555.4 Billion (in nominal dollars)



#### G. PLAN PERFORMANCE

First and foremost, the Draft 2016 RTP/SCS meets all of the federal and state requirements. Based upon SCAG's modeling analysis, the Draft Plan meets all the provisions of transportation conformity rules under the Clean Air Act. Cleaner fuels and new vehicle technologies will help to significantly reduce many of the pollutants that contribute to smog and other airborne contaminants that may impact public health in the region. The Plan also performs well when it comes to meeting state-mandated targets for reducing greenhouse gas emissions from cars and light trucks. The state's targets for the SCAG region are an 8 percent per capita reduction in greenhouse gas emissions from automobiles and light trucks by 2020, and a 13 percent reduction by 2035 (compared with 2005 levels). The Draft Plan is anticipated to result in an 8 percent reduction in emissions by 2020, an 18 percent reduction by 2035, and a 22 percent reduction by 2040 as compared to 2005 levels.

The 2016 RTP/SCS also uses a number of performance measures to help gauge progress toward meeting SCAG's goals and objectives. With the preferred scenario, SCAG developed the strategies, programs, and project proposals discussed above. To determine how effective these strategies, programs, and projects would be, SCAG conducted a "Plan" vs. "No Build" (i.e., Baseline) analysis – essentially comparing what the region would look like with and without implementation of the Plan. The analysis clearly shows that implementing the 2016 RTP/SCS would result in a regional transportation network that improves travel conditions and air quality, while also promoting an equitable distribution of benefits – that is, social equity. The analysis also found that the Plan will:



- Increase the combined percentage of work trips made by carpooling, active transportation and public transit by 4 percent, and reduce the share of commuters traveling by single occupant vehicle by 4 percent.
- Reduce vehicle miles traveled per capita by 10 percent and vehicle hours traveled per capita by 18 percent.
- Increase daily travel by transit by nearly 3 percent, as a result of improved transit service and more transit-oriented development patterns.
- Reduce delay per capita by 46 percent.
- Reduce heavy duty truck delay on highways by about 40 percent.
- Reduce the amount of previously undeveloped (greenfield) lands converted to more urbanized use by 23 percent. By conserving open space and other rural lands, the Plan provides a solid foundation for more sustainable development in the SCAG region.

#### Land Use Co-Benefits

The land use strategies of the Draft 2016 RTP/SCS promote location efficiency by orienting new housing and job growth in areas served by high quality transit, and in other opportunity areas including existing main streets, downtowns, and corridors where infrastructure already exists. This more compact land use pattern, combined with the transportation network improvements, would result in improved pedestrian and bicycle access to community amenities, shorter average trip lengths, and reduced vehicle miles traveled. Strategies also support the development of more livable communities that provide more housing choices, consume less land, conserve natural resources, offer more and better transportation options, reduce average household transportation and utility costs, and promote an overall better quality of life.

Co-Benefits	Draft Plan
	(Expressed as reductions relative to the
	Baseline scenario)
Land Consumption	-23 %
Respiratory Health Cost	-13 %
Local Infrastructure and	-8 %
Services Costs for New	
Residential Growth	
(O&M+ Capital)	
Building Energy Use,	-4 %
cumulative (2012-2040)	
Building Water Use, cumulative	-0.6 %
(2012-2040)	
Per Household Transportation	-13 %
Costs (fuel + auto)	
Per Household Utilities Costs	-9 %
(energy + water)	



#### Economic & Job Creation

The 2016 RTP/SCS outlines a transportation infrastructure investment strategy that will beneficially impact Southern California, the State, and the nation in terms of economic development, job creation and economic growth, and overall business and economic competitive advantage in the global economy in terms of job creation and economic growth throughout the Southern California region. Over the 2016–2040 period, the RTP/SCS calls for the spending of over \$500 billion on transportation improvement projects. An independent economic analysis indicates that over the twenty-five year period and six-county SCAG region, the Plan will generate significant employment. The 2016 RTP/SCS boosts employment in two ways—providing jobs for persons in highway and rail construction, operation, and maintenance, and boosting the economic competitiveness of the SCAG region by making it a more attractive place to do business.

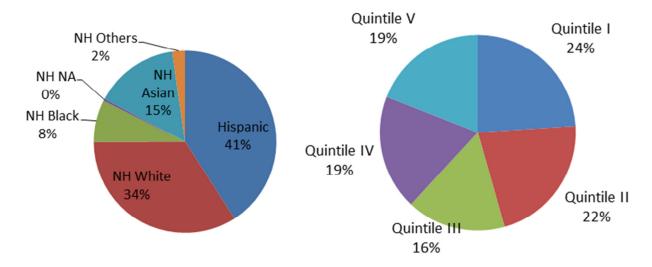
The economic analysis shows that, across SCAG's six county region, an annual average of over 188,000 jobs-year will be generated by the construction, maintenance, and operations expenditures that are specified in the RTP/SCS program, and the indirect and induced jobs that flow from those expenditures.

When investments are made in the transportation system, the economic benefits go far beyond the jobs created building it, operating it, and maintaining it. Unlike spending to satisfy current needs, infrastructure delivers benefits for decades. The infrastructure, once built, can enhance the economic competitiveness of a region. Projects that reduce congestion may help firms produce at lower cost, or allow those firms to reach larger markets or hire more capable employees. An economy with a well-functioning transportation system can be a more attractive place for firms to do business, enhancing the economic competitiveness of the SCAG region. An additional 375,000 annual jobs will be created by the SCAG region's increased competitiveness and improved economic performance that will result from congestion reduction and improvements in regional amenities due to implementation of the 2016 RTP/SCS.

#### Social Equity

SCAG staff conducted environmental justice (EJ) analysis for the Draft 2016 RTP/SCS based on the investment plan by mode (vehicle, passenger rail and transit, active transportation, etc.) and transportation usage by income/ethnicity. In regards to social equity, the 2016 RTP/SCS provides an extensive analysis on the impacts of the Plan on low-income and minority communities. A number of performance indicators were evaluated, including jobs-housing balance, accessibility to parks and other amenities, air quality, gentrification and displacement, noise impacts, and public health. The EJ results indicate that the 2016 RTP/SCS is an equitable investment plan by addressing the needs of both minority and low-income populations in the SCAG region.





The top left chart indicates that the distribution of investment from the Draft 2016 RTP/SCS is equitable among all ethnic groups compared with their respective usage and population share, while the chart on the right indicates that the Draft Plan expenditures and investment are reasonably allocated across all income quintile groups. Additionally, the Plan's EJ report includes a toolbox of suggestions for local jurisdictions and agencies to consider in addressing EJ issues, if any, at the local level.

#### Public Health

The 2016 RTP/SCS also focuses on improving public health outcomes in the SCAG region. A separate Appendix has been developed to highlight the Plan's performance through a public health "lens." The EEC reviewed and provided direction on the guiding principles and framework for the development and presentation of public health analysis in the Draft Plan. Plan performance is summarized in seven key focus areas, including: Access to Essential Destinations, Affordable Housing, Air Quality, Climate Adaptation, Economic Opportunity, Physical Activity and Transportation Safety. Some key performance results include a reduction in the total annual health costs for respiratory disease by more than 13 percent compared to the Baseline, as well as, a reduction in our regional obesity rate by 2.5 percent and a reduction in the share of our population that suffers with high blood pressure by 3 percent.

#### H. NEXT STEPS

Pending input from the Policy Committees at today's Joint Meeting, the Regional Council will be asked to formally release the Draft 2016 RTP/SCS for public review and comment on December 3, 2015. The Draft Plan will be available for public review and comment through January 27, 2016, fulfilling the 55-day review period required under SB 375. The PEIR for the Draft 2016 RTP/SCS will have a concurrent 55-day public review and comment period. In addition, during this period, staff will also initiate public hearings and another round of outreach to the elected representatives as well as stakeholders and the general public. After the close of the comment period, staff will document all of the comments received and prepare responses as



appropriate. Based on the input received through this process, staff will make necessary adjustments to the Draft 2016 RTP/SCS Plan and return to the Regional Council to present the proposed Final 2016 RTP/SCS for adoption at the Regional Council's April 7, 2016 meeting.

#### **FISCAL IMPACT:**

Work associated with this item is included in the Fiscal Year 2015-2016 Overall Work Program (WBS Number 15-010.SCG00170.01: RTP Support, Development, and Implementation).

#### **ATTACHMENTS:**

- 1. PowerPoint Presentation: "Draft 2016 RTP/SCS: A Plan for Our Future"
- 2. Draft 2016 RTP/SCS Policy Growth Forecast at the Jurisdictional Level









November 20, 2015 AB 1246 Briefing

# 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



2

#### Why Update the RTP/SCS? What's New Since 2012? **New Federal and State Guidance**

#### Moving Ahead for Progress in the 21st Century (MAP-21) signed into law by President Obama in June 2012

- Funding surface transportation programs at over \$106 billion for FY 2013 and 2014
- MAP-21 is the first long-term highway authorization enacted since 2005
- Creates performance-based surface transportation program
- · Builds on highway, transit, bike, and pedestrian programs and policies established in 1991

#### **Governor Brown's Executive Order** B-30-15. Call to Action for Greater **Reduction in GHG Emissions**

- New Green House Gas (GHG) Target of 40% Below 1990 Levels by 2030
- Most Aggressive Benchmark enacted by any government in North America
- · Will help ultimate goal of reducing emissions 80 percent under 1990 levels by 2050

#### SB 1077: Road Usage Charge **Pilot Program**

- Pilot Program to replace gas tax with User/Vehicle Miles Traveled (VMT) Fee
- Moves the Innovative Funding initiatives of 2012 RTP/SCS a step forward

### **Public Outreach & Committee Highlights** Meetings with **Local Jurisdictions**

Regional Council and Joint

to update and develop land use and SED

forecasts (Since December 2013)

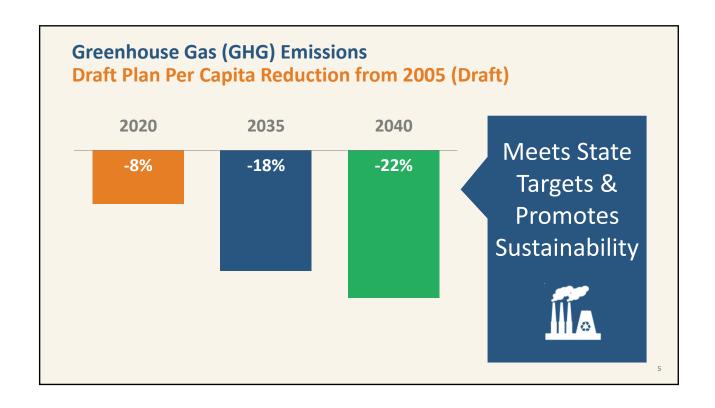
Public Workshops and Open Houses (Since May 2015)

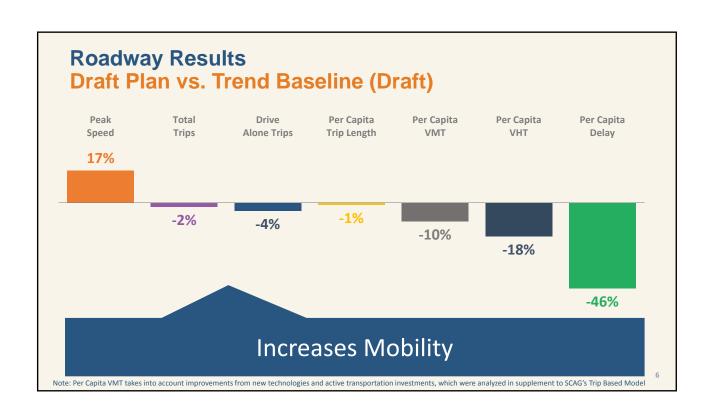
Policy Committee Meetings (Since March 2015)

**Environmental** Justice Workshops (Since November 2014)

Policy Committee and Subcommittee Meetings (Since January 2013)

Technical Committee Meetings (Since January 2013)





#### **Economic Benefits Background: 2012 SCAG RTP/SCS**

#### 2012 SCAG RTP/SCS Economic Analysis found:

- Transportation critical for regions key industries
  - Goods Movement/Logistics/International Trade
  - Tourism & Hospitality
  - Entertainment, etc.
- Job Creation from Infrastructure Investment
  - Construction
  - Operations
  - Maintenance
- Network Benefits in the form of Efficiency/Competitiveness Gains
  - Reduced transportation cost to regions business
  - Improves region's competitiveness
  - Continued analysis of specific economic benefits

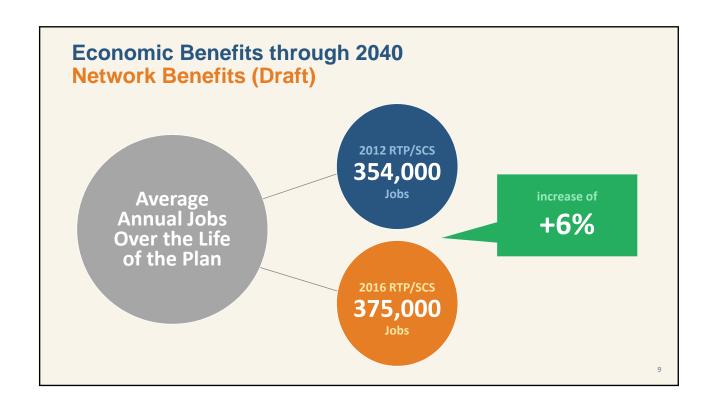
Economic Benefits through 2040
Construction, Operations and Maintenance (Draft)

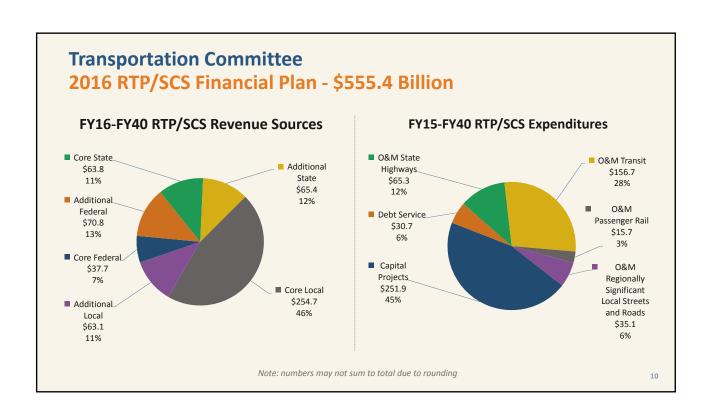
Average
Annual Jobs
Over the Life of the Plan

2012 RTP/SCS
174,500
Jobs

increase of +8%

2016 RTP/SCS
188,000
Jobs





## **Upcoming Schedule**

Draft 2016 RTP/SCS & PEIR Release	December 3, 2015
2016 RTP/SCS Public Comment Period	Minimum 55 Days
2016 RTP/SCS PEIR Public Comment Period	Minimum 45 Days
Elected Officials Briefings	January 2016
Public Hearings	January 2016
Final Adoption of 2016 RTP/SCS & PEIR	April 7, 2016

