

## PROJECT DESCRIPTION

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Consistent with the provisions of Section 15124 of the State California Environmental Quality Act (CEQA) Guidelines, this section provides information regarding the proposed, Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy (“2016 RTP/SCS,” “Plan,” or “Project”) needed for the evaluation and review of the environmental impacts. This section is organized in accordance with four areas of information recommended by the State CEQA Guidelines:

- The precise location and boundaries of the planning area for the 2016 RTP/SCS
- A statement of objectives sought by the 2016 RTP/SCS, including a clear written statement of objectives which should include the underlying purpose of the proposed 2016 RTP/SCS
- A general description of the 2016 RTP/SCS’ technical, economic, and environmental characteristics considering the principal engineers proposals if any and supporting public service facilities
- A statement briefly describing the intended uses of the Program Environmental Impact Report (PEIR)

In acknowledgement that a transportation project for which federal approval is required must be listed in the RTP/SCS and Federal Transportation Improvement Program (FTIP), a purpose and need statement has also been provided in this section.

This section also describes the relationship of this Program Environmental Impact Report (PEIR) for the 2016 RTP/SCS to the certified Final PEIR for the 2012-2035 RTP/SCS (2012 RTP/SCS).<sup>1</sup>

### 2.1 PROJECT BACKGROUND

SCAG is a federally designated Metropolitan Planning Organization (MPO) under Title 23, United States Code (USC) 134(d)(1), for a six-county region that includes the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura, and 191 cities (**Figure 2.1-1, SCAG Region**). The total area of the SCAG region is approximately 38,000 square miles. To the north of the SCAG region are the counties of Kern and Inyo; to the east is State of Nevada and State of Arizona; to the south is the U.S.-Mexico border; to the west is the county of San Diego; and to the northwest is the Pacific Ocean. The region includes the county with the largest land area in the nation, San Bernardino County; as well as the county with the highest population in the nation, Los Angeles County. The SCAG region is home to approximately 19 million people, or 48.4 percent of California’s population, representing the largest and most diverse region in the country. SCAG is one of 18 MPOs in the State of California. The SCAG region consists of 15 subregional entities that have been recognized by the Regional Council, SCAG’s governing body, as partners in the regional policy planning process (**Figure 2.1-2, SCAG Subregions**).

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<sup>1</sup> Southern California Association of Governments. March 2012. *Final Program Environmental Impact Report for the 2012-2035 RTP/SCS*. Available at: <http://rtpscs.scag.ca.gov/Documents/peir/2012/final/Final2012PEIR.pdf>

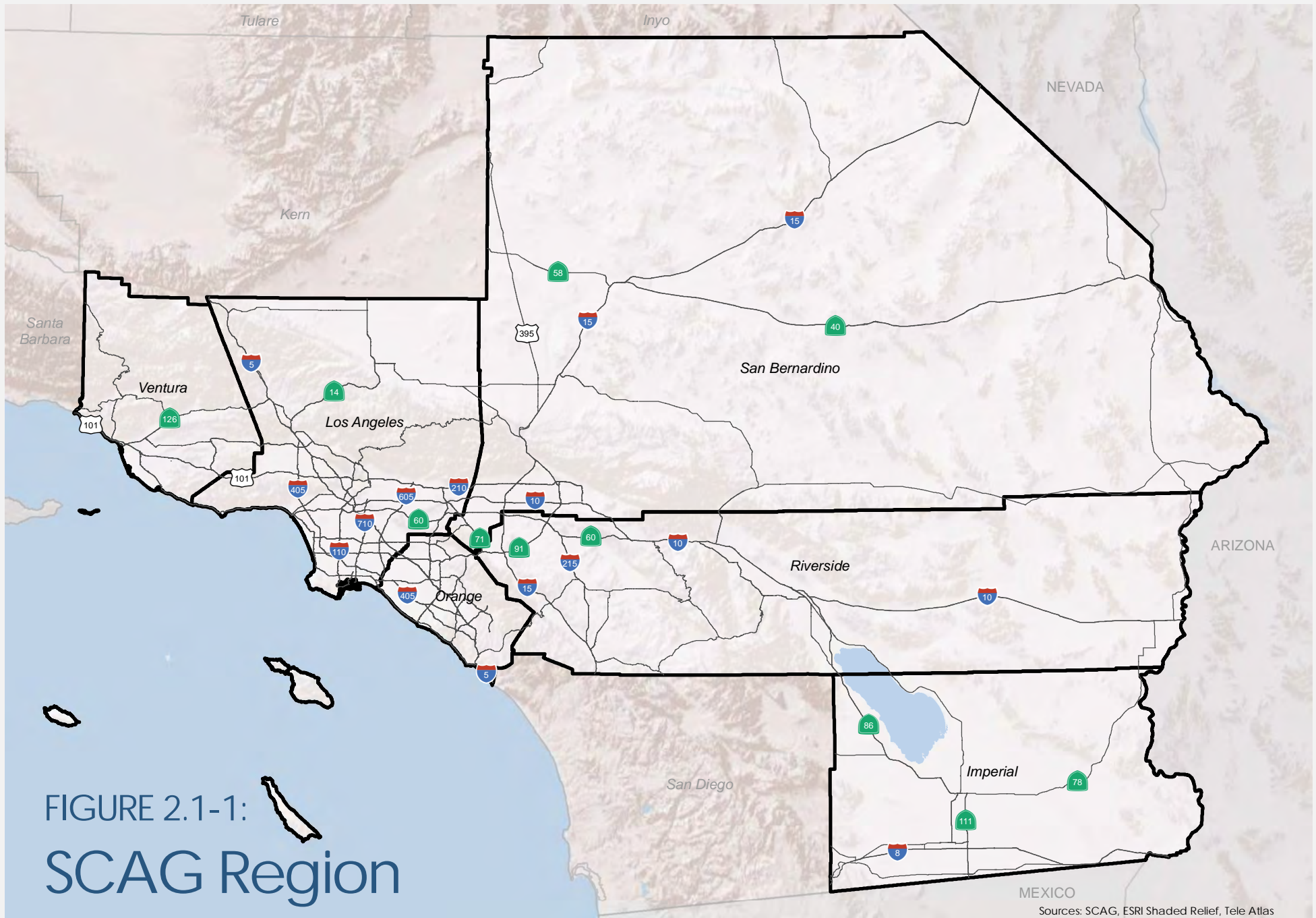
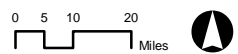


FIGURE 2.1-1:  
SCAG Region

Sources: SCAG, ESRI Shaded Relief, Tele Atlas



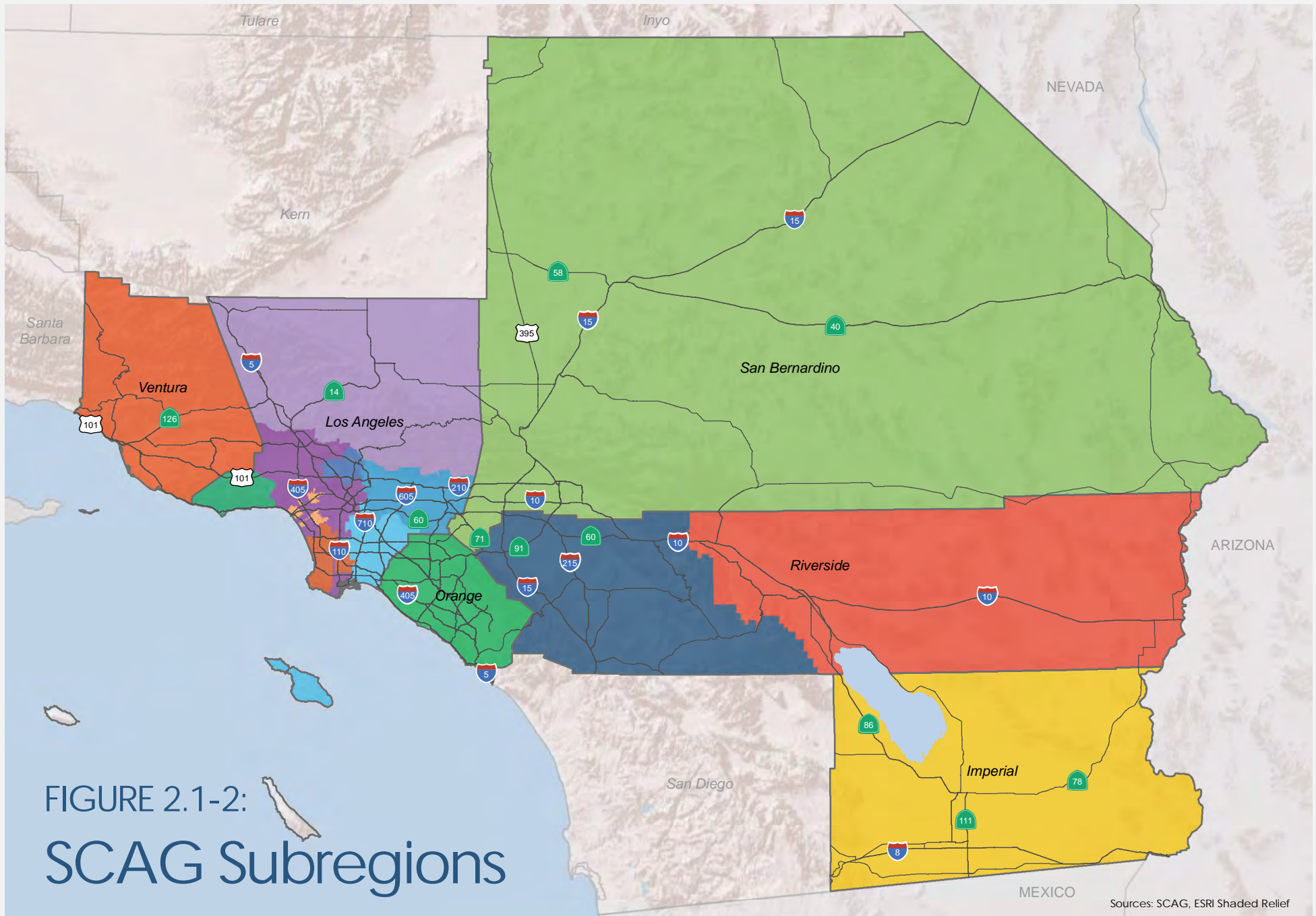
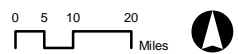


FIGURE 2.1-2:  
SCAG Subregions

Sources: SCAG, ESRI Shaded Relief



## 2.2 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

This section is intended to provide background information on the RTP/SCS that is updated by SCAG every four years in accordance with applicable federal and state laws.

The RTP is used to guide the development of the FTIP as well as other transportation programming documents and plans. The RTP outlines the region's goals and policies for meeting current and future mobility needs, providing a foundation for transportation decisions by local, regional, and state officials that are ultimately aimed at achieving a coordinated and balanced transportation system. The RTP identifies the region's transportation needs and issues, sets forth actions, programs, and a plan of projects to address the needs consistent with adopted regional policies and goals, and documents the financial resources needed to implement the RTP.

The RTP also provides for the development and integrated management and operation of transportation systems and facilities that 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 accompanied by a "continuing, cooperative and comprehensive" (the 3 C's) planning approach which is also performance driven and outcome-based, consistent with provisions of Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21).<sup>2</sup>

Transportation investments in the SCAG region that receive funding for which federal approval is required must be consistent with the RTP/SCS and must be included in SCAG's FTIP when funded. The FTIP covers six years and is updated biennially on an even-year cycle. It represents the immediate, near-term commitments of the RTP/SCS. SCAG does not implement individual projects included in the RTP/SCS, as these projects are implemented by local jurisdictions and other agencies. In order to continue receiving funding for which federal approval is required, the SCAG region must have a conforming RTP/SCS in place by June 2016.

The SCAG region encompasses 17 federally designated non-attainment and maintenance areas for air quality standards, pursuant to the federal Clean Air Act. The U.S. Department of Transportation (U.S. DOT), Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) under Section 176(c) of the Federal Clean Air Act [42 USC 7506(c)] require that for a non-attainment area, air quality conformity determinations on updated transportation plans and programs must be made every four years.

All RTP/SCS documents must conform to air quality requirements, as well as meet a number of other requirements, including specific requirements on the "horizon" year of RTPs that provide a vision for regional transportation investments for more than a 20-year period. In order to comply with those requirements, the 2016 RTP/SCS includes a horizon year of 2040.

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<sup>2</sup> MAP-21, enacted into law on July 6, 2012 (after the adoption of the 2012 RTP/SCS by SCAG's Regional Council in April 2012), sets forth a performance-based approach requiring the State and MPOs to set performance targets and track their progress in achieving those targets relative to past system performance. While the federal rules governing performance targets are not yet enacted, SCAG utilizes a performance-based approach in preparing and developing the Draft 2016 RTP/SCS.



SCAG is also required to prepare an RTP pursuant to Section 65080 of the California Government Code. The state requirements largely mirror the federal requirements and require each transportation planning agency in urban areas to adopt and submit an updated RTP to the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans) every four years. To ensure a degree of statewide consistency in the development of RTPs, the CTC, pursuant to Government Code Section 14522, adopted RTP Guidelines. The RTP Guidelines include a requirement for program-level performance measures, which include objective criteria that reflect the goals and objectives of the RTP. In addition, the initial years of the plan must be consistent with the FTIP.

State planning law further requires, pursuant to the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill 375 or "SB 375"), that an MPO prepare and adopt an SCS that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas (GHG) emissions from automobiles and light duty trucks. SB 375 is part of California's overall strategy to reach GHG emissions reduction goals as set forth by Assembly Bill (AB) 32 and Executive Orders S-03-05 and B-30-15, by promoting integrated transportation and land use planning with the goal of creating more sustainable communities.

The SCS outlines certain land use growth strategies that provide for more integrated land use and transportation planning, and maximize transportation investments. According to Section 65080(b)(2)(B) of the California Government Code, the SCS must:

- Identify existing land use;
- Identify areas to accommodate long-term population growth;
- Identify areas to accommodate an eight-year projection of regional housing needs;
- Identify transportation needs and the planned transportation network,
- Consider resource areas and farmland;
- Consider state housing goals and objectives;
- Set forth a forecasted growth and development pattern; and
- Comply with federal law for developing an RTP.

In accordance with provisions of SB 375, the SCS developed as part of the RTP cannot dictate local General Plan policies. Rather, SB 375 is intended to provide a regional policy foundation that local government may build upon, if they so choose, and generally includes the quantitative, jurisdiction-level growth projections from each city and county in the region going forward. Additionally, SB 375 provides streamlined environmental review opportunities for eligible projects.<sup>3</sup>

Pursuant to federal and state planning laws, updates to the RTP/SCS must include a few requisite components. The RTP/SCS updates must include 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. The RTP/SCS updates 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

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<sup>3</sup> CEQA streamlining provisions are also available for eligible projects meeting the criteria established by Senate Bill 226 (Simitian, 2011), CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects) and for eligible projects meeting the criteria established by Senate Bill 743 (Steinberg, 2013), Public Resources Code Section 21155.4 (Exemptions).

available to carry out the plan, and recommends any additional financing strategies for the needed projects and programs. Moreover, the RTP/SCS updates must include operational and maintenance strategies related to the existing transportation facilities. The RTP/SCS updates must include an economic impact analysis. Finally, under SB 375, the region's SCS as part of the RTP/SCS updates 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.

## **2.3 PURPOSE AND NEED FOR ACTION**

Federal regulations (40 Code of Federal Regulations [CFR] §1502.13) require the preparation of a statement of purpose and need in conjunction with environmental documents prepared to meet the requirements of the National Environmental Policy Act (NEPA). Consistent with the protocols established in NEPA, this statement of Purpose and Need has been included to facilitate the use of an EIR as a functional equivalent to environmental review required pursuant to NEPA, to the extent that the proposed action adequately characterized and analyzed anticipated adverse effects, and sufficient mitigation measures have been considered to avoid or reduce the anticipated adverse direct, indirect and cumulative effects of the proposed action. Although adoption of the 2016 RTP/SCS is not subject to NEPA, SCAG has chosen to include this statement of purpose and need to enable proponents of projects included in the 2016 RTP/SCS to discuss the purpose and need for their individual projects relative to the Plan.

The SCAG Regional Council has the responsibility for consideration of the 2016 RTP/SCS, with substantial input from its member jurisdictions, agencies, and stakeholders. This statement of Purpose and Need has been prepared to identify the underlying purpose for adopting the 2016 RTP/SCS. It was not prepared to be a comprehensive statement of need for each individual project included in the 2016 RTP/SCS. However, the 2016 RTP/SCS includes transportation improvements that may involve a federal action, such as the use of federal funds, right-of-way, permits and or leases at the time that project-level design is initiated; thus triggering the requirement for environmental review under NEPA, as set forth in 40 CFR Section 1502.13. Therefore, where determined appropriate by a Lead Agency asked to undertake a site or project-specific federal action, evaluated in this PEIR at the programmatic-level of detail, this statement of purpose and need may be incorporated by reference in site- or project-specific NEPA documents as provided in 40 CFR § 1502.21.

The purpose of the 2016 RTP/SCS is to provide a clear, long-term vision of the regional transportation goals, policies, objectives, strategies, and investments integrated with land use strategies for the SCAG region while at the same time providing strategies to meet greenhouse gas emissions reduction and air quality conformity requirements. The necessity for the 2016 RTP/SCS is driven by the need to plan for region's changing socioeconomic, transportation, financial, technological, and environmental conditions. Additionally, the 2016 RTP/SCS is necessary to plan for improvements to the aging regional transportation system, among others, to preserve its long-term viability in light of the projected population growth.

## 2.4 PROJECT DESCRIPTION

Similar to the 2012 RTP/SCS, last adopted by SCAG's Regional Council in April 2012 and subsequently amended in September 2014 (Amendment No. 2 to the 2012 RTP/SCS),<sup>4</sup> the 2016 RTP/SCS is a long-range transportation plan that provides a vision for regional transportation investments, integrated with land use strategies, over a minimum 20-year period. The 2016 RTP/SCS contains regional transportation investments and integrated land use strategies. It includes investments and strategies to improve the regional transportation system (e.g. highways, transit, active transportation, etc.) and land use integration strategies. It also includes transportation financial strategies based on committed, available or reasonably available funding sources, thereby constituting the 2016 RTP/SCS as a "financially constrained Plan." As part of the constrained Plan, the 2016 RTP/SCS is intended to identify reasonably available sources of funding over the Plan period, and allocate these funds to transportation projects and programs that benefit the SCAG communities and residents. The 2016 RTP/SCS is designed to assure that, to the greatest extent possible, the money invested would have the best chance of achieving the objectives communities and residents care about.

The last chapter of the 2016 RTP/SCS also contains entitled "Looking Ahead," serves as a Strategic Plan and discusses which projects, programs, or initiatives the region should pursue in the coming decades. Unlike the constrained Plan, the Strategic Plan of the 2016 RTP/SCS presents a vision for regional improvements beyond committed, available, or reasonably available funding sources. It identifies additional projects that may require study and consensus building before the decision can be made as to whether to commit the funding to include these projects in a future RTP/SCS constrained plan. These are projects for which funding sources have not been identified, but the implementation of which would provide transportation, air quality, and health benefits to the region. The 2012 RTP/SCS also included a Strategic Plan, and it played a large role in informing the investments and strategies detailed in the financially constrained component of the 2016 RTP/SCS. Hence, the Strategic Plan included in the 2016 RTP/SCS is intended to play a similar role in informing future RTP/SCS updates.

This PEIR for the 2016 RTP/SCS does not analyze strategic projects because their lack of funding indicates that implementation is speculative at this point. If these projects become reasonably foreseeable, they will be included in the future RTP/SCS updates, and their impacts will be addressed in the PEIRs for future Plans.

### 2.4.1 Vision, Goals, Guiding Policies and Performance Measures

The 2016 RTP/SCS includes a vision, goals, guiding policies and performance measures developed through extensive outreach to the general public and stakeholders across the region. The 2016 RTP/SCS is intended to build upon the progress made since the 2012 RTP/SCS while recognizing the current conditions of land use and transportation throughout the region as well as developments and technologies since the adoption of the 2012 RTP/SCS. It is intended to respond to a changing region by meeting the challenges and creating conditions and infrastructure that motivate increased mobility and accessibility, expanded transportation options, broader economic growth, equitably distributed benefits, and sustainability.

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<sup>4</sup> Southern California Association of Governments. September 2014. Amendment No. 2 to 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy. Available at: <http://scagrtpscsc.net/Pages/2012RTPSCS.aspx>

Based upon extensive local collaboration, the 2016 RTP/SCS has a vision for achieving a range of quality of life outcomes. It envisions vibrant, livable communities that are healthy and safe, and which offer transportation options that provide timely access to schools, jobs, services, health care and other basic needs. It offers opportunities to communities for walking and bicycling, and offers residents improved access to parks, open space, natural lands, and recreational opportunities. Collectively, the 2016 RTP/SCS is intended to support and enhance 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.

The Plan’s goals are intended to help carry out vision for improved mobility, a strong economy and sustainability. The 2016 RTP/SCS goals remain unchanged from those adopted in the 2012 RTP/SCS as listed in **Table 2.4.1-1, 2016 RTP/SCS Goals**.

**TABLE 2.4.1-1  
2016 RTP/SCS GOALS**

Goal 1:	Align the plan investments and policies with improving regional economic development and competitiveness.
Goal 2:	Maximize mobility and accessibility for all people and goods in the region.
Goal 3:	Ensure travel safety and reliability for all people and goods in the region.
Goal 4:	Preserve and ensure a sustainable regional transportation system.
Goal 5:	Maximize the productivity of our transportation system.
Goal 6:	Protect the environment and health of our residents by improving air quality and encouraging active transportation (e.g. bicycling and walking).
Goal 7:	Actively encourage and create incentives for energy efficiency, where possible.
Goal 8:	Encourage land use and growth patterns that facilitate transit and active transportation.
Goal 9:	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 4.

The guiding policies for the 2016 RTP/SCS are intended to help focus future investments on the best-performing projects and strategies to preserve, maintain and optimize the performance of the existing transportation system. The 2016 RTP/SCS includes two additional guiding policies since the 2012 RTP/SCS (**Table 2.4.1-2, 2016 RTP/SCS Guiding Policies**). The first addition (Guiding Policy 6) addresses emerging technologies and the potential for such technologies to lower the number of collisions, improve traveler information, reduce the demand for driving alone, and lessen congestion related to road incidents and other non-recurring circumstances (a car collision, for example). The second addition (Guiding Policy 7) recognizes the potential for transportation investments to improve both the efficiency of the transportation network and the environment.



**TABLE 2.4.1-2  
DRAFT 2016 RTP/SCS GUIDING POLICIES**

Policy 1:	Transportation investments shall be based on SCAG’s adopted regional Performance Indicators
Policy 2:	Ensuring safety, adequate maintenance, and efficiency of operations on the existing multimodal transportation system should be the highest RTP/SCS priorities for any incremental funding in the region.
Policy 3:	RTP/SCS land use and growth strategies in the RTP/SCS will respect local input and advance smart growth initiatives.
Policy 4:	Transportation demand management (TDM) and active transportation will be focus areas, subject to Policy 1.
Policy 5:	High-Occupancy vehicle (HOV) gap closures that significantly increase transit and rideshare usage will be supported and encouraged, subject to Policy 1.
Policy 6 :	The RTP/SCS will support investments and strategies to reduce non-recurrent congestion and demand for single occupancy vehicle use, by leveraging advanced technologies.
Policy 7:	The RTP/SCS will encourage transportation investments that result in cleaner air, a better environment, a more efficient transportation system, and sustainable outcomes in the long run.
Policy 8:	Monitoring progress on all aspects of the Plan, including the timely implementation of projects, programs, and strategies, will be an important and integral component of the Plan.

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 4.

Performance measures are closely tied to the broader vision, goals and guiding policies to ensure that the implementation of the 2016 RTP/SCS moves the region closer to achieving these vision, goals and policies. The 2016 RTP/SCS uses a number of performance measures to help gauge progress, how well the region meets the federal air quality conformity requirements, the new federal requirements of MAP-21, and state requirements for reducing greenhouse gas emissions and planning for a more sustainable future. Like the 2012 RTP/SCS, performance measures continue to play a critical role in the development of the 2016 RTP/SCS. Performance measures included in the 2016 RTP/SCS are built upon and updated from those developed for the 2012 RTP/SCS to ensure that there is consistency when tracking and assessing the region’s performance and whether the region is progressing towards meeting and exceeding federal and state requirements. It is also intended to help quantify regional goals, estimate potential impacts of proposed investments, and evaluate progress over time. An extended discussion on Plan performance is covered in Chapter 8 entitled “Measuring Our Progress for the Future” of the 2016 RTP/SCS.

## 2.4.2 Changes since the 2012 RTP/SCS

The 2016 RTP/SCS integrates the transportation network and related strategies with a forecasted land use and regional growth pattern, and addresses changes the region has been facing since the adoption of the 2012 RTP/SCS. The 2016 RTP/SCS highlights a number of changing circumstances that have arisen in the region that have had an effect on the development of the Plan.<sup>5</sup> They include the region’s

<sup>5</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 1.

constant fluid and dynamic demographic and housing market; the passage of MAP-21; state legislation on transportation funding; the rapid advancement of new technologies such as real-time traveler information, on-demand shared mobility services enabled by smartphone applications or ridesourcing, car share and bike share; and the state's continuing emphasis on reducing greenhouse gas emissions, even after the passage of SB 375.<sup>6</sup>

The 2016 RTP/SCS was also developed recognizing the progress the region has made since the last Plan. Progress has been made in many planning areas, ranging from transit, passenger rail, highways, regional HOV and Express Lane network, active transportation, goods movement, sustainability planning implementation, affordable housing, and public health.<sup>7</sup> The 2016 RTP/SCS includes integrated strategies for land use and transportation that build upon the region's progress to ensure the region grows in ways that enhance mobility, sustainability, economy, and quality of life over the coming decades.

The RTP/SCS is updated every four years to reflect the most currently available information and conditions in the region. Updates to the RTP/SCS describe a number of challenges and opportunities. The challenges and opportunities with respect to the 2016 RTP/SCS are described in Chapter 3 of the 2016 RTP/SCS document.<sup>8</sup> The challenges and opportunities facing the SCAG region include:

- Economic challenges as a result of the Great Recession, which lasted from December 2007 through June 2009;
- An estimated increase in population growth (approximately 3.8 million residents), households (approximately 1.5 millions), and jobs (approximately 2.4 million) over the 2016 RTP/SCS planning horizon (2016-2040);<sup>9</sup>
- Changing demographics as a result of a slow population growth pattern, aging population, and Millennials that are expected to transform the character of the region over the next 25 years as people choose different places to live and more efficient way to get around;
- Maintenance and preservation for the region's aging transportation system (encompassing roads, bridges, bus and rail transit, and freight rail);
- Securing funding for financing a transportation system;
- How to move goods efficiently and environmentally in a huge and complex region;
- Affordable housing, gentrification and displacement while the region continues to build communities that are more compact and more transit-oriented;

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<sup>6</sup> On April 29, 2015, Governor Brown issued Executive Order B-30-15, which establishes a California GHG emissions reduction target of 40 percent (below 1990 levels) by 2030. This is also intended to ensure the achievement of 80 percent GHG emissions reduction (below 1990 level) by 2050 pursuant to Governor Schwarzenegger's Executive Order S-3-05 issued in 2005.

<sup>7</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 2.

<sup>8</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 3.

<sup>9</sup> Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

- How to develop integrated land use and transportation strategies that contribute to public health benefits for the large and diverse region;
- Climate change that will continue to transform the region's habitats and overall biodiversity and affect coastlines as sea levels rise and storm surges grow more destructive; and
- Rapid advancement and growth in technology and innovation 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.

Facing with these challenges, the 2016 RTP/SCS was developed with a particular emphasis on extensive regional collaboration, public outreach, and continued bottom-up planning process in order to reflect the region's needs, priorities, and desires, as well as meeting applicable federal and state requirements.

Major transportation projects considered in the 2016 RTP/SCS since the 2012 RTP/SCS was adopted include additional highway projects, high-occupancy vehicle (HOV) projects, mixed flow projects, rail projects, and toll projects (**Figure 2.4.2-1, Major Highway Projects, Figure 2.4.2-2, Major HOV Projects, Figure 2.4.2-3, Major Mixed Flow Projects, Figure 2.4.2-4, Major Rail Projects, and Figure 2.4.2-5, Major Toll Projects**).

### 2.4.3 Scenario Planning

The scenario planning process played a critical role in developing the 2016 RTP/SCS. To facilitate development of the Plan, SCAG generated four preliminary "sketch scenarios" for the region's future land use and transportation investments during the next 25 years.<sup>10</sup> Using several relevant land use and transportation inputs, sketch scenarios explored a range of potential regional development patterns, and evaluated how the scenarios performed in terms of sustainability, mobility and other performance metrics. The purpose for developing sketch scenarios was to engage in a bottom-up planning process, and solicit input and feedback on the scenarios as part of the 2016 RTP/SCS development process.<sup>11</sup>

Based on feedback received on the sketch scenarios, a preliminary draft policy growth forecast (PGF) was developed. The PGF serves as the foundation for the regional policy growth scenario, which proposed for inclusion in the 2016 RTP/SCS. As part of the scenario planning development process and consistent with the bottom-up planning process, the preliminary draft PGF, including population, households and employment, was distributed for local technical review in summer 2015. All technical corrections made to the preliminary draft PGF during the technical review process were completed in fall 2015, and these technical corrections were incorporated and used to modify the preliminary draft PGF.<sup>12</sup>

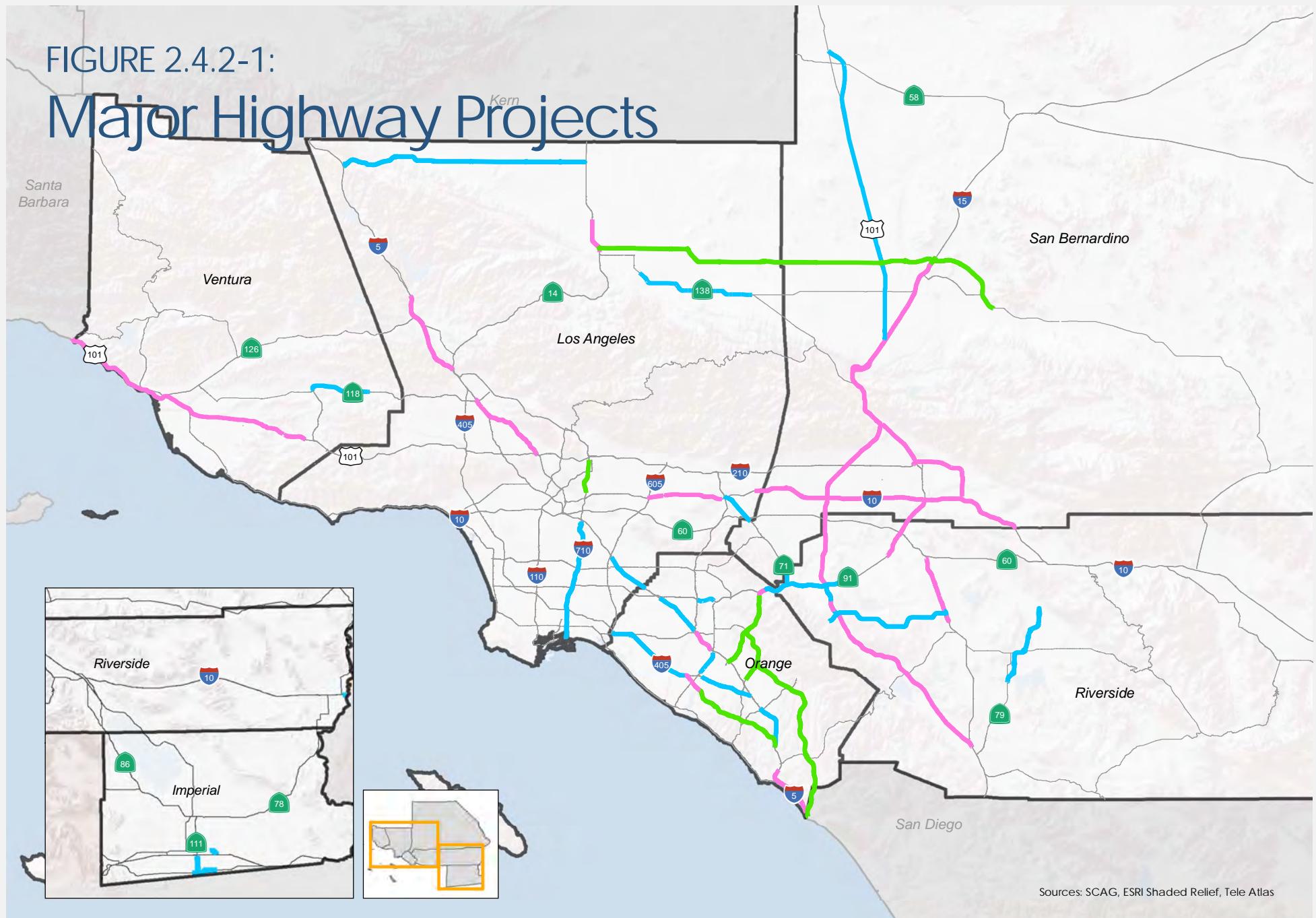
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<sup>10</sup> Southern California Association of Governments. 13 March 2015. *Preliminary Scenario Planning Matrix*. Available at: [http://www.scag.ca.gov/committees/CommitteeDocLibrary/oscwg031915\\_draftscenario.pdf](http://www.scag.ca.gov/committees/CommitteeDocLibrary/oscwg031915_draftscenario.pdf)

<sup>11</sup> Southern California Association of Governments. Accessed October 2015. *Workshop Materials. Station 6: The 4 Scenarios Posters*. Available at: <http://scagtrpccs.net/Pages/WorkshopMaterials.aspx>

<sup>12</sup> Southern California Association of Governments. 8 October 2015. *Staff Report: 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (Draft 2016 RTP/SCS) – Policy Growth Forecast (PGF) Guiding Principles and Framework*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/cehd100815fullagn.pdf>

FIGURE 2.4.2-1:  
Major Highway Projects



Sources: SCAG, ESRI Shaded Relief, Tele Atlas

- Toll Lanes (Plan 2040)
- Mixed-Flow Lanes (Plan 2040)
- HOV Lanes (Plan 2040)

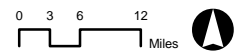
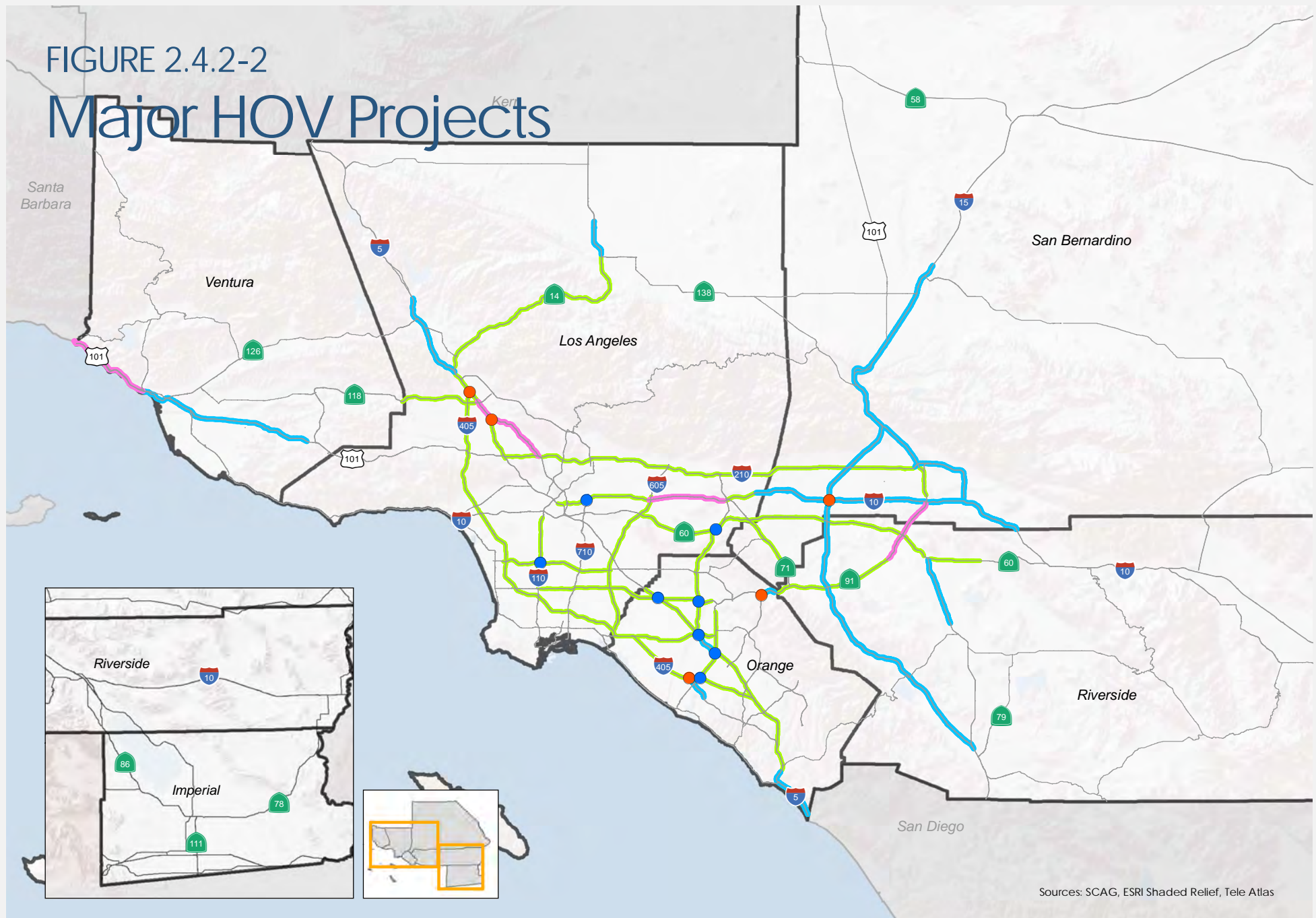




FIGURE 2.4.2-2  
Major HOV Projects



Sources: SCAG, ESRI Shaded Relief, Tele Atlas

- Base Year Connectors (2012)
- Plan Connectors (2040)
- Base Year Segments (2012)
- Baseline Segments (2040)
- Plan Segments (2040)

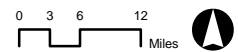
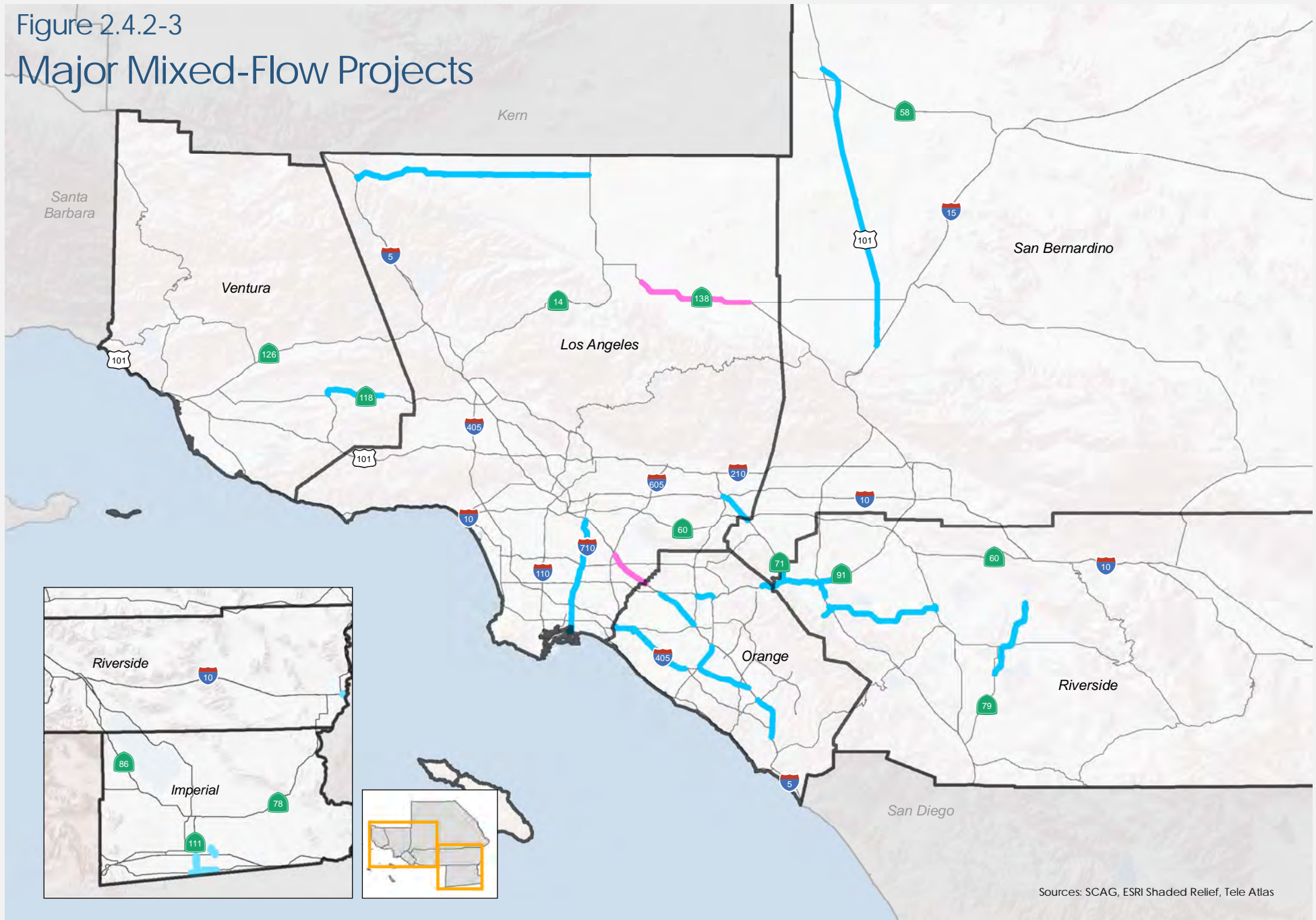


Figure 2.4.2-3  
Major Mixed-Flow Projects



Sources: SCAG, ESRI Shaded Relief, Tele Atlas

- Baseline (2040)
- Plan (2040)

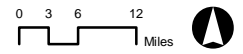
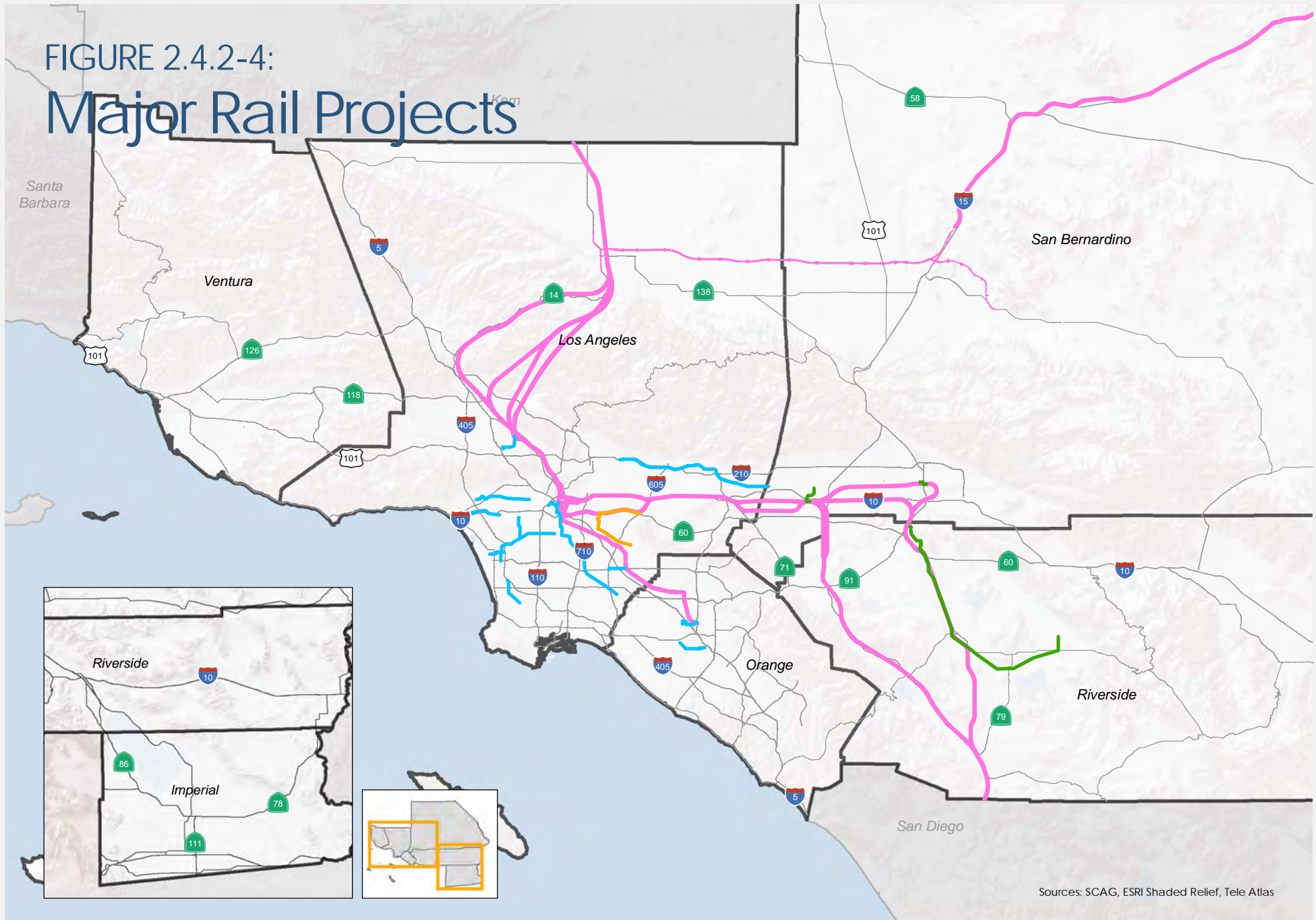




FIGURE 2.4.2-4:  
Major Rail Projects



Sources: SCAG, ESRI Shaded Relief, Tele Atlas

- High Speed Rail (Plan 2040)
- Urban Rail (Plan 2040)
- Metrolink (Plan 2040)
- Urban Rail Alternative (Plan 2040)

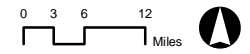
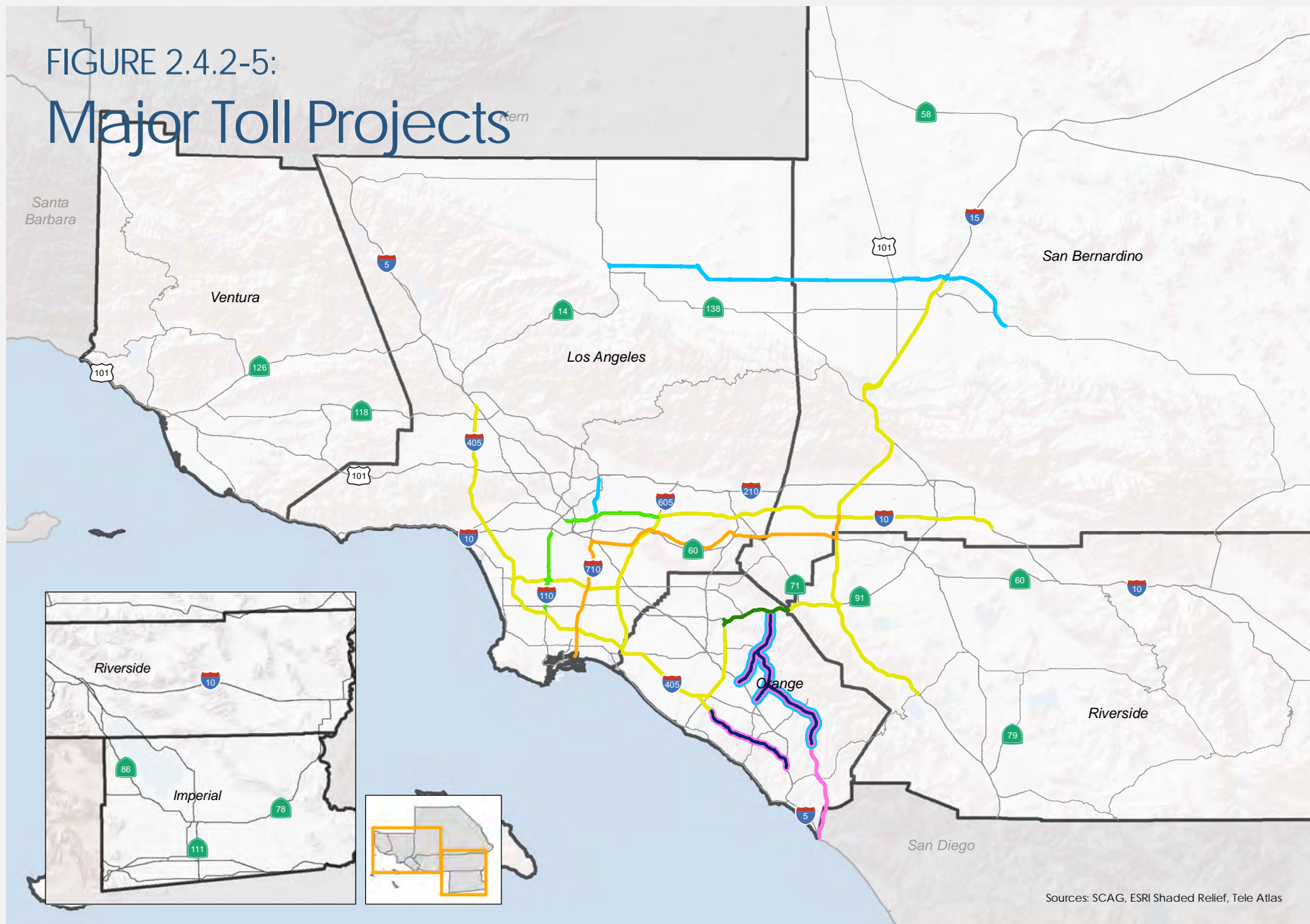
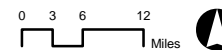


FIGURE 2.4.2-5:  
Major Toll Projects



Sources: SCAG, ESRI Shaded Relief, Tele Atlas

- Toll Lanes (Base Year 2012)
 — Toll Lanes (Plan 2040)
 — HOT Lanes (Baseline 2040)
 — Freight Corridors (Plan 2040)
- Toll Lanes (Baseline 2040)
 — HOT Lanes (Base Year 2012)
 — HOT Lanes (Plan 2040)



The modified draft PGF at jurisdictional level is illustrated in **Table 2.4.3-1, Draft PGF at Jurisdictional Level for the 2016 RTP/SCS**.<sup>13</sup> This modified version of the draft PGF serves as the basis for the technical modeling for the 2016 RTP/SCS, maintains local input-based jurisdictional growth totals 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).<sup>14</sup>

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
<b>Imperial County</b>						
Brawley city	25,800	42,900	7,600	15,000	8,000	16,800
Calexico city	40,200	62,200	10,200	19,300	8,300	17,500
Calipatria city	7,600	9,600	1,000	1,600	1,300	2,200
El Centro city	44,100	61,000	13,100	19,900	20,300	43,800
Holtville city	6,100	8,000	1,800	2,500	1,000	2,000
Imperial city	15,800	25,400	4,600	8,800	3,400	9,500
Westmorland city	2,300	2,700	600	700	300	500
Unincorporated	37,700	70,300	10,400	24,700	16,400	32,300
<b>Los Angeles County</b>						
Agoura Hills city	20,500	22,700	7,300	8,200	12,500	15,300
Alhambra city	84,000	88,800	29,300	31,900	28,000	33,500
Arcadia city	56,700	65,900	19,600	22,900	28,900	34,400
Artesia city	16,600	18,000	4,500	5,000	5,000	5,800
Avalon city	3,800	5,100	1,500	2,100	2,500	3,000
Azusa city	47,100	55,000	12,800	15,600	16,600	20,600
Baldwin Park city	76,100	83,600	17,200	19,300	16,500	19,500
Bell city	35,700	36,900	8,900	9,200	12,400	13,700
Bellflower city	77,100	79,600	23,700	24,400	13,600	14,700
Bell Gardens city	42,300	44,000	9,700	10,100	9,400	10,500
Beverly Hills city	34,400	37,200	14,900	16,200	57,700	68,900
Bradbury city	1,100	1,200	400	400	100	200
Burbank city	103,300	118,700	42,500	48,400	106,800	145,000
Calabasas city	23,800	24,500	8,700	9,100	16,700	17,300
Carson city	92,000	107,900	25,300	30,800	58,500	69,700

<sup>13</sup> Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

<sup>14</sup> Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Cerritos city	49,300	50,900	15,500	16,000	30,400	33,700
Claremont city	35,500	39,400	11,700	13,200	17,400	19,700
Commerce city	12,900	13,500	3,400	3,600	44,600	49,100
Compton city	97,300	100,900	23,100	24,000	25,400	28,200
Covina city	48,200	51,600	15,900	17,200	25,300	29,500
Cudahy city	23,800	23,800	5,600	5,600	2,900	2,900
Culver City	39,100	40,700	16,800	17,500	44,100	53,000
Diamond Bar city	56,000	63,900	17,900	21,200	15,400	19,300
Downey city	112,500	121,700	33,900	37,300	47,500	53,000
Duarte city	21,500	24,300	7,000	8,200	10,100	11,900
El Monte city	114,200	137,200	27,800	34,700	28,000	35,700
El Segundo city	16,700	17,300	7,100	7,400	38,400	45,400
Gardena city	59,400	68,700	20,600	24,200	28,900	33,500
Glendale city	193,200	214,000	72,400	81,100	111,300	127,000
Glendora city	50,500	54,300	17,200	18,900	20,000	23,000
Hawaiian Gardens city	14,300	15,900	3,600	4,000	4,800	5,600
Hawthorne city	85,300	87,000	28,600	30,000	27,200	32,100
Hermosa Beach city	19,600	20,400	9,500	9,800	7,400	10,000
Hidden Hills city	1,900	2,000	600	600	300	300
Huntington Park city	58,500	67,400	14,600	17,400	15,600	18,600
Industry city	500	500	100	100	67,700	74,700
Inglewood city	110,900	129,000	36,600	43,300	31,100	37,400
Irwindale city	1,400	2,000	400	500	18,800	21,500
La Cañada Flintridge city	20,400	21,600	6,900	7,300	6,500	8,300
La Habra Heights city	5,400	6,200	1,800	1,900	200	400
Lakewood city	80,600	84,700	26,600	28,200	18,900	21,400
La Mirada city	48,800	52,100	14,700	15,800	17,400	20,200
Lancaster city	158,300	209,900	47,400	65,300	45,800	59,600
La Puente city	40,100	50,200	9,500	12,400	6,300	8,700
La Verne city	31,800	32,900	11,400	12,100	12,200	14,300
Lawndale city	33,000	33,900	9,700	10,100	6,700	8,200
Lomita city	20,500	21,200	8,100	8,400	4,600	5,400
Long Beach city	466,300	484,500	163,800	175,500	153,200	181,700
Los Angeles city	3,845,500	4,609,400	1,325,500	1,690,300	1,696,400	2,169,100
Lynwood city	70,300	76,100	14,700	16,200	9,200	10,900

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Malibu city	12,700	14,100	5,300	5,600	8,500	10,300
Manhattan Beach city	35,300	37,100	14,000	14,800	18,000	20,700
Maywood city	27,500	28,900	6,600	6,900	3,600	4,000
Monrovia city	36,800	40,300	13,800	15,300	19,700	23,300
Montebello city	63,000	67,300	19,100	21,000	27,500	30,800
Monterey Park city	61,300	65,000	20,200	21,500	32,500	36,500
Norwalk city	105,900	106,300	27,100	27,200	24,100	27,300
Palmdale city	154,200	201,500	43,100	59,300	29,300	40,300
Palos Verdes Estates city	13,600	13,900	5,100	5,200	2,300	2,900
Paramount city	54,500	58,000	13,900	14,800	19,600	22,300
Pasadena city	140,300	150,700	58,900	62,400	111,000	144,800
Pico Rivera city	63,400	69,100	16,600	18,400	18,900	22,400
Pomona city	150,500	190,400	38,600	51,100	55,100	67,200
Rancho Palos Verdes city	42,000	42,300	15,600	15,700	5,800	6,200
Redondo Beach city	67,200	74,400	29,000	33,000	24,000	29,800
Rolling Hills city	1,900	2,000	700	700	100	100
Rolling Hills Estates city	8,100	8,600	3,000	3,100	5,900	6,800
Rosemead city	54,300	60,800	14,300	16,400	13,700	16,200
San Dimas city	33,600	34,500	12,000	12,400	11,200	12,700
San Fernando city	23,900	26,900	6,000	7,000	10,900	12,700
San Gabriel city	40,100	46,900	12,600	15,300	14,100	16,800
San Marino city	13,200	13,300	4,300	4,400	3,600	4,200
Santa Clarita city	202,000	262,200	67,300	90,300	73,500	95,900
Santa Fe Springs city	16,600	21,700	4,800	6,500	54,600	62,000
Santa Monica city	90,700	103,400	47,100	53,900	89,600	103,700
Sierra Madre city	11,000	11,200	4,800	5,000	1,900	2,100
Signal Hill city	11,200	12,000	4,200	4,600	13,800	16,500
South El Monte city	20,300	22,500	4,600	5,200	15,700	17,800
South Gate city	94,700	111,800	23,200	28,300	20,400	24,000
South Pasadena city	25,800	27,100	10,500	11,100	9,300	10,500
Temple City city	35,900	40,600	11,600	13,500	6,900	8,400
Torrance city	146,500	159,800	56,100	62,000	102,300	117,600
Vernon city	100	300	0	100	43,200	46,100

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Walnut city	29,800	33,800	8,700	10,400	8,400	9,900
West Covina city	107,000	116,700	31,700	35,000	29,500	34,300
West Hollywood city	34,800	41,800	22,600	27,800	29,800	37,300
Westlake Village city	8,300	8,800	3,300	3,500	13,300	15,900
Whittier city	85,900	96,900	28,300	32,600	26,900	31,700
Unincorporated	1,040,700	1,273,700	292,700	392,400	222,900	288,400
<b>Orange County</b>						
Aliso Viejo city	49,300	51,000	18,500	19,400	18,900	20,900
Anaheim city	345,300	403,400	99,200	122,600	177,900	245,600
Brea city	41,100	50,600	14,500	18,100	46,700	53,700
Buena Park city	81,800	92,500	24,000	27,900	34,300	39,800
Costa Mesa city	111,200	116,400	40,000	42,500	84,400	93,200
Cypress city	48,500	49,700	15,700	16,300	22,100	27,700
Dana Point city	33,800	35,800	14,200	15,300	11,900	14,100
Fountain Valley city	56,000	59,300	18,700	19,900	30,400	34,900
Fullerton city	138,000	160,500	45,500	55,200	60,800	94,100
Garden Grove city	172,900	178,200	46,200	48,200	51,700	58,500
Huntington Beach city	193,200	207,100	74,900	81,200	75,800	87,000
Irvine city	227,100	327,300	81,800	123,400	224,400	320,000
Laguna Beach city	23,100	23,100	10,800	11,000	12,100	14,100
Laguna Hills city	30,600	31,500	10,400	10,900	18,500	19,400
Laguna Niguel city	63,900	72,000	24,300	27,700	18,300	22,100
Laguna Woods city	16,500	17,100	11,400	11,700	4,400	6,500
La Habra city	61,100	68,500	19,000	21,700	17,300	19,900
Lake Forest city	78,500	90,700	26,300	30,500	39,200	49,000
La Palma city	15,800	15,800	5,100	5,100	7,700	8,500
Los Alamitos city	11,600	12,100	4,100	4,200	14,200	15,600
Mission Viejo city	94,500	96,600	33,200	34,100	37,100	39,100
Newport Beach city	86,300	92,700	38,800	41,700	76,000	79,100
Orange city	138,500	153,000	43,600	49,300	94,100	105,500
Placentia city	51,500	58,400	16,600	18,900	19,000	23,500
Rancho Santa Margarita city	48,500	48,700	16,700	16,800	17,200	19,500
San Clemente city	64,400	68,000	24,000	25,300	24,800	29,500
San Juan Capistrano city	35,200	39,500	11,500	13,300	14,700	17,900



**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Santa Ana city	329,200	343,100	73,300	78,000	154,800	166,000
Seal Beach city	24,400	24,800	13,000	13,300	11,000	12,300
Stanton city	38,700	41,600	10,700	11,800	7,200	8,500
Tustin city	77,300	83,000	25,600	27,900	37,600	66,400
Villa Park city	5,900	6,100	2,000	2,000	1,500	1,700
Westminster city	91,000	92,800	26,200	26,800	24,200	26,400
Yorba Linda city	66,200	70,500	21,900	23,400	15,600	17,700
Unincorporated	120,700	180,100	37,800	56,900	20,700	41,200
<b>Riverside County</b>						
Banning city	30,100	37,600	10,800	14,000	7,300	14,200
Beaumont city	39,400	80,600	12,400	27,200	5,900	18,000
Blythe city	20,000	24,600	4,500	6,200	3,700	6,600
Calimesa city	8,100	24,800	3,300	10,900	1,300	5,900
Canyon Lake city	10,700	11,300	3,900	4,100	1,200	2,700
Cathedral City city	52,200	68,100	17,100	26,000	10,800	21,200
Coachella city	42,400	146,300	9,200	40,100	8,500	34,400
Corona city	156,000	172,300	45,300	52,000	66,400	88,400
Desert Hot Springs city	27,800	58,900	9,100	21,900	3,700	12,900
Eastvale City	56,500	65,400	14,100	16,500	4,300	9,800
Hemet city	80,800	126,500	30,300	52,200	21,000	45,500
Indian Wells city	5,100	7,200	2,800	4,400	4,000	7,000
Indio city	78,800	123,300	23,800	39,300	16,000	36,800
Lake Elsinore city	54,100	111,400	15,200	35,000	11,800	31,700
La Quinta city	38,300	47,700	14,900	19,100	12,400	21,500
Menifee city	81,600	121,100	28,400	48,100	10,300	23,500
Moreno Valley city	197,600	256,600	51,800	73,000	31,400	83,200
Murrieta city	105,600	129,800	32,800	43,500	23,200	45,100
Norco city	26,900	32,100	7,000	9,200	13,200	25,700
Palm Desert city	49,800	61,700	23,400	31,400	36,900	53,600
Palm Springs city	45,600	56,900	22,900	31,300	26,300	45,800
Perris city	70,700	116,700	16,600	32,700	15,100	32,200
Rancho Mirage city	17,600	25,000	8,900	13,600	12,300	20,500
Riverside city	310,700	386,600	92,400	118,600	120,000	200,500
San Jacinto city	45,100	79,900	13,200	27,600	5,900	17,800
Temecula city	104,100	137,400	32,500	42,900	43,000	63,500
Wildomar city	33,000	56,200	10,100	18,100	5,000	13,500

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Jurupa Valley City	97,000	114,500	25,000	30,400	24,500	32,600
Unincorporated	359,500	487,500	112,700	159,200	71,300	160,200
<b>San Bernardino County</b>						
Adelanto city	31,100	70,000	7,900	18,100	3,900	7,800
Apple Valley town	70,200	100,600	23,700	34,800	15,400	27,600
Barstow city	23,100	35,100	8,100	12,900	8,100	16,800
Big Bear Lake city	5,100	6,900	2,200	3,000	3,800	5,400
Chino city	79,400	120,400	21,000	34,000	42,600	50,600
Chino Hills city	75,800	94,900	23,000	28,300	11,500	18,600
Colton city	52,800	69,100	15,000	20,800	16,800	29,200
Fontana city	200,200	280,900	49,600	74,000	47,000	70,800
Grand Terrace city	12,200	14,200	4,400	5,700	2,200	5,300
Hesperia city	91,100	129,100	26,400	39,100	14,900	28,300
Highland city	53,700	66,900	15,500	20,600	5,500	10,200
Loma Linda city	23,400	29,300	8,800	11,800	16,700	21,100
Montclair city	37,200	42,700	9,600	11,600	16,500	19,000
Needles city	4,900	7,000	1,900	2,800	2,200	3,800
Ontario city	166,300	258,600	45,100	75,300	103,300	175,400
Rancho Cucamonga city	170,100	204,300	55,400	73,100	69,900	104,600
Redlands city	69,600	85,500	24,800	32,400	31,700	53,400
Rialto city	100,800	112,000	25,400	31,500	21,100	30,500
San Bernardino city	211,900	257,400	59,300	77,100	88,900	128,900
Twentynine Palms city	25,900	37,300	8,300	11,400	4,300	8,500
Upland city	74,700	81,700	25,900	28,900	31,700	43,500
Victorville city	119,600	184,500	33,100	55,400	29,800	52,700
Yucaipa city	52,300	72,500	18,400	28,200	8,200	15,000
Yucca Valley town	21,000	26,300	8,300	12,200	6,100	10,000
Unincorporated	295,600	344,100	94,200	111,300	57,400	91,100
<b>Ventura County</b>						
Camarillo city	66,300	79,900	24,800	30,200	35,800	47,300
Fillmore city	18,800	21,800	5,200	6,300	3,000	5,300
Moorpark city	34,800	43,000	10,600	13,100	11,300	16,600
Ojai city	7,500	8,400	3,100	3,300	5,100	5,300
Oxnard city	200,100	237,300	50,100	60,100	58,100	79,200
Port Hueneme city	21,800	22,400	7,100	7,300	6,400	6,700
San Buenaventura (Ventura) city	106,700	125,300	40,700	48,400	60,700	66,000

**TABLE 2.4.3-1  
DRAFT PGF AT JURISDICTIONAL LEVEL FOR THE 2016 RTP/SCS**

City Name	Population 2012	Population 2040	Households 2012	Households 2040	Employment 2012	Employment 2040
Santa Paula city	29,800	39,600	8,500	11,500	7,800	11,700
Simi Valley city	125,100	142,400	41,300	47,400	44,000	61,100
Thousand Oaks city	127,800	131,700	45,900	47,200	68,200	81,900
Unincorporated	96,700	113,600	32,100	37,500	31,800	38,700

**NOTE:**

Rounded to the nearest 100, may not add up to rounded county numbers due to separate rounding process.

**SOURCE:**

Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

To guide the development of PGF, a set of five guiding principles and framework were developed, reviewed and supported by SCAG’s CEHD Committee.<sup>15</sup> Based on this support and consistent with the guiding principles and framework approved by the CEHD Committee, the 2016 RTP/SCS includes proposed land use strategies as discussed below.<sup>16</sup>

## 2.4.4 Land Use and Transportation Strategies

The 2016 RTP/SCS envisions future regional growth that is well coordinated with the transportation system improvements, as well as anticipates new transportation projects planned by the region’s CTCs and transit providers. It also incorporates best practices for increasing transportation choices; reducing dependence on personal automobiles; allowing future growth in walkable, mixed-use communities and in high-quality transit areas (HQTAs); and further improving air quality. As such, the 2016 RTP/SCS is dedicated to detailing recommended land use strategies and transportation investments.

The region’s transportation network and land uses must be well integrated to ensure that the region grows in ways that enhance mobility, sustainability, and quality of life. The 2016 RTP/SCS makes a concerted effort to integrate the two, so that the region can be developed into an even more sustainable region over the coming decades. Accordingly, the following overview of regional strategies for growth and land use set the context for a comprehensive review of the region’s transportation system.

### *Land Use Strategies*

Built upon the success of the 2012 RTP/SCS, the 2016 RTP/SCS includes a set of regional land use strategies that are intended to increase transportation mode choice, guide future land development

<sup>15</sup> Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

<sup>16</sup> Southern California Association of Governments. 5 November 2015. *Item No. 1 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Major Components*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/jointRCPC110515fullagn.pdf>

patterns, and further improve air quality.<sup>17</sup> These proposed land use strategies recognize a higher portion of new households and employment in areas well-served by transit, and reduce growth in high value habitat areas along with neighborhoods that are adjacent to highways. Like the 2012 RTP/SCS, the proposed land use strategies included in the 2016 RTP/SCS continue to focus new growth in HQTAs, existing suburban town centers, and more walkable, mixed-use communities. The 2016 RTP/SCS land use strategies also seek to balance the region's land use choices and transportation investments. Hence, the 2016 RTP/SCS includes coordinated land use strategies with the committed and projected transportation investments in the region that emphasize system preservation and enhancement, active transportation, and land use integration.

A set of foundational policies guide the development of the proposed land use strategies:

- Identify regional strategic areas for infill and investment;
- Structure the plan on a three-tiered system of centers development;<sup>18</sup>
- Develop "Complete Communities";
- 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; and
- Incorporate local input and feedback on future growth.

In support of the foundation policies and guiding principles, the 2016 RTP/SCS includes the six proposed land use strategies as follows.

**High Quality Transit Areas (HQTA).** 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. The 2016 RTP/SCS forecasted land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs (**Figure 2.4.4-1: High Quality Transit Areas throughout the SCAG Region in 2040**). 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.

**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. The proposed Livable Corridor land-use

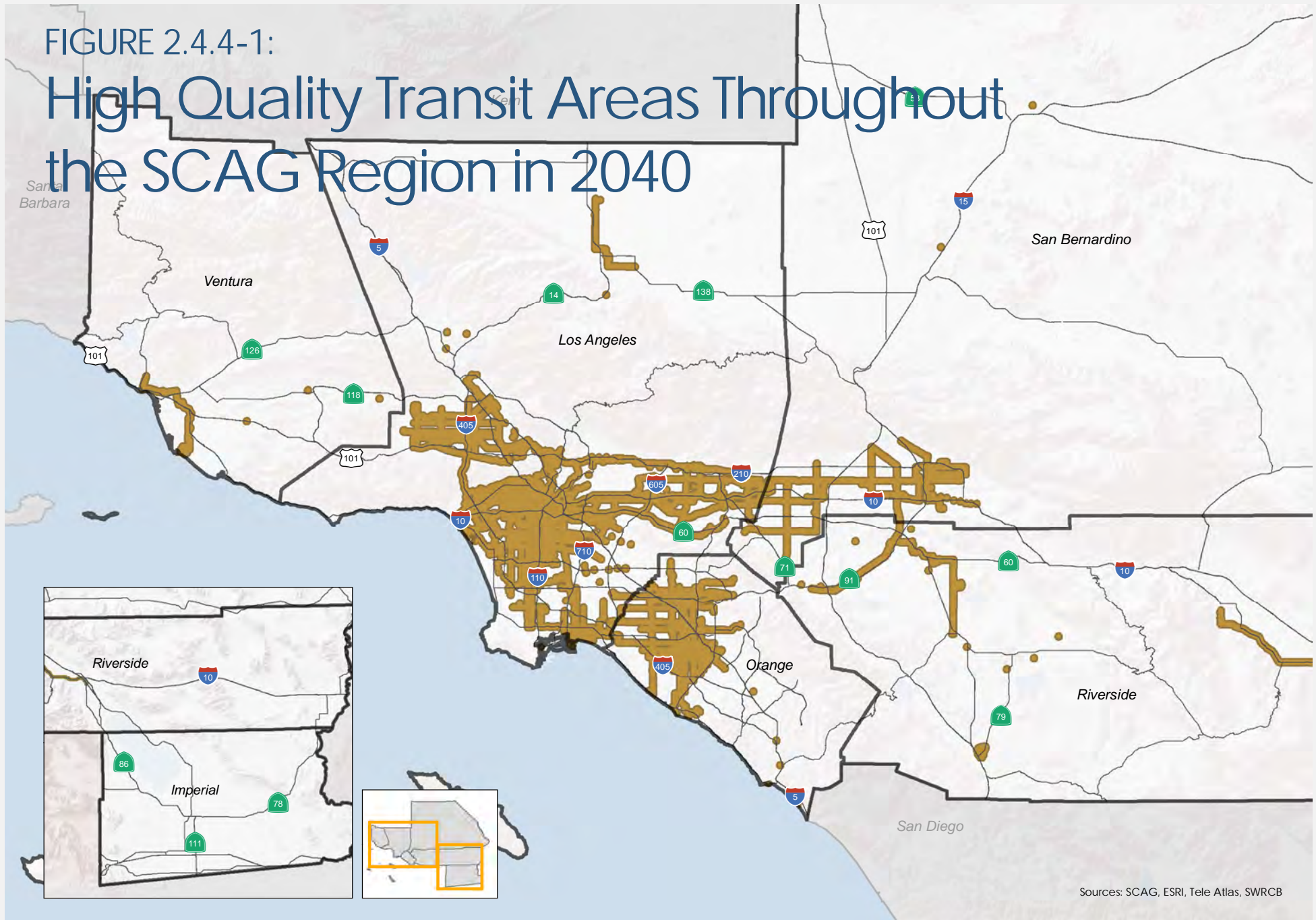
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<sup>17</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 5.

<sup>18</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.

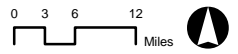
FIGURE 2.4.4-1:

# High Quality Transit Areas Throughout the SCAG Region in 2040



Sources: SCAG, ESRI, Tele Atlas, SWRCB

2040 HQTA



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 Area.** Neighborhood Mobility Areas (NMA) represent the synthesis of various planning practices, and are applicable in a wide range of settings in the SCAG region. Proposed NMA 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-Emission Vehicles and Electric Vehicle Charging Stations.** As technology has an important role in land use and transportation strategies, the 2016 RTP/SCS includes location-based land use 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 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.

**Natural Lands Preservation.** The 2016 RTP/SCS land use strategies propose to avoid growth in sensitive habitat areas, and redirect growth from high value habitat areas to existing urbanized areas. This proposed strategy recognizes that 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.<sup>19,20</sup> The 2016 RTP/SCS proposed natural lands preservation strategies are built upon the conservation framework and complements an infill-based approach.

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<sup>19</sup> Southern California Association of Governments. 2 October 2014. *Item No. 8 Staff Report: Comprehensive Planning for Open Space Strategic Plan*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/eec100214fullagn.pdf>

<sup>20</sup> Southern California Association of Governments. Accessed 26 October 2015. *Sustainability Program: Open Space Links and Resources*. Available at: <http://sustain.scag.ca.gov/Pages/LinksResources.aspx>



**Balancing Growth Distribution between 500 Feet of Freeways and HQTAs.** The 2016 RTP/SCS recognizes guidance from the 2005 California Air Resources Board (ARB) air quality manual,<sup>21</sup> which recommends limiting the siting of sensitive uses within five hundred (500) feet of freeways and urban roads carrying more than 100,000 vehicles per day. These areas within 500 feet of freeways and roads represent only approximately one-fifth of the HQTAs. While the Plan proposes to increase density in some areas of HQTAs, it proposes that growth remains stable within the 500-foot buffer areas of the freeways to reflect local input, thereby balancing the growth distribution.

### Transportation Strategies

Like the proposed land use strategies, the 2016 RTP/SCS includes transportation investments that are built off the framework and strategies in the 2012 RTP/SCS. Specifically, the proposed transportation investments in the 2016 Plan recognize that the region can no longer afford to rely solely on expanding the transportation system to address the region’s many changes and challenges. There is a need to use a comprehensive planning approach for a transportation system that focuses on preservation, sustainability, and productivity, as well as strategic expansion. The proposed land use patterns as part of the 2016 RTP/SCS provide a strategic opportunity to build a smart transportation system that is responsive to the region’s changes and challenges. As such, the 2016 RTP/SCS includes proposed strategies for transportation investments, totaling approximately \$556 billion, in nine (9) areas: 1) system preservation and maintenance; 2) highway and arterials; 3) transportation demand management (TDM) and system manage (TSM); 4) transit; 5) passenger rail including High Speed Rail; 6) goods movement; 7) active transportation; 8) aviation and 9) debt service (**Table 2.4.4-1, 2016 RTP/SCS: Proposed Allocation of Transportation Investments [in Billions]**)

**TABLE 2.4.4-1  
2016 RTP/SCS: PROPOSED ALLOCATION OF TRANSPORTATION INVESTMENTS  
(IN BILLIONS)**

System Preservation	\$275
Highway and Arterials	\$55
TDM and TSM	\$16 (\$6.9 for TDM; and \$9.2 for TSM)
Transit	\$56
Passenger Rail and High Speed Rail	\$39
Goods Movement	\$75
Active Transportation	\$8
Other (Environmental Mitigation, Landscaping and Project Development Costs)	\$3
Aviation	Included in modal investments
Debt Service	\$31

**NOTE:** due to rounding, the total will not exactly match.

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 6

<sup>21</sup> California Air Resources Board. April 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Available at: <http://www.arb.ca.gov/ch/handbook.pdf>

**System Preservation.** The 2016 RTP/SCS proposes investing toward preserving the region’s existing transportation system, including the transit and passenger rail system, the state highway system, and regionally significant local streets and roads. The proposed allocation of the system preservation investment 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. To support the proposed allocation of system preservation investment, the 2016 RTP/SCS includes the following strategies:

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

**Highway and Arterials.** The 2016 RTP/SCS proposes the following strategies to support the proposed allocation of investments to highway and arterials:

- Focusing on achieving maximum productivity through strategic investments in system management and demand management;
- Focusing on adding capacity primarily (but not exclusively) to:
  - Closing gaps in the system, and
  - 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; and
- Supporting “complete street” opportunities developed from general plans.

**Transportation Demand Management (TDM) and System Management (TSM).** The 2016 RTP/SCS includes the proposed TDM strategies in three main areas of focus as follows:

- 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; and
- 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 proposed strategies expand and encourage the implementation of proposed 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.

Additionally, the 2016 RTP/SCS allocates investments towards 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 included in the 2016 RTP/SCS are as follows.

- 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; and
- 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.

**Transit.** Continuing to expand the region's transit system and improve services is critical to realizing the Plan's vision and ultimately meeting the broad and diverse societal goals and objectives. Key points considered in developing the proposed transit strategies 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; and
- Additional transit will be necessary to ensure our pricing strategies work efficiently and equitably.

The 2016 RTP/SCS proposed transit strategies builds upon the significant investment in transit that has already committed locally, primarily based on local sales tax measures as reflected in the Plan. In addition to the current commitments, the Plan proposes 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 Plan's investment package are renewed commitments to asset management and maintaining a state of good repair.

Specifically, the 2016 RTP/SCS proposes the following transit 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; and
- Implement first/last mile strategies to extend the effective reach of transit.

**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)<sup>22</sup> that 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.

The Passenger Rail and High Speed Rail strategies proposed by the 2016 RTP/SCS maintain 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. Additionally, the Plan includes the following proposed passenger rail strategies:

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

**Goods Movement.** Proposed strategies for goods movement as part of the 2016 RTP/SCS include a Regional Clean Freight Corridor System, a truck bottleneck relief strategy, a rail strategy, and a goods movement environment strategy. The Regional Clean Freight Corridor System is 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 be expected to address growing truck traffic and safety issues on core highways through the region and serve key goods movement industries.

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<sup>22</sup> Southern California Association of Governments. December 2015. *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: Passenger Rail Appendix* (page 7).

The 2016 RTP/SCS includes a coordinated strategy to identify and mitigate the top-priority truck bottlenecks. The proposed truck bottleneck relief strategies begin with confirming bottlenecks that are previously identified in the past RTP/SCSs following by identifying new bottlenecks. An allocation of approximately \$5 billion is proposed toward goods movement bottleneck relief strategies. Examples of bottleneck relief strategies proposed by the Plan include ramp meterings; extending merging lanes; improving ramps and interchanges; improving capacity; and adding auxiliary lanes.

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. As such, the 2016 RTP/SCS continues to incorporate the following rail strategies for goods movement:

- Additional mainline tracks for the BNSF San Bernardino and Cajon Subdivisions and the UPRR Alhambra and Mojave Subdivisions;
- Expansion/modernization of intermodal facilities;
- Highway-rail grade separations; and
- Port-area rail improvements, including on-dock rail enhancements

The 2016 RTP/SCS also includes goods movement environmental strategy. It 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 four 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.

**Active Transportation.** The 2016 RTP/SCS includes an Active Transportation Plan, which updates and expands upon the 2012 RTP/SCS. As such, the 2016 RTP/SCS proposes strategies to continue progress made in developing a 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 2016 RTP/SCS also considers new strategies and approaches beyond those proposed in 2012 Plan.

To maximize active transportation opportunities in the SCAG region, the proposed Active Transportation Plan included in the 2016 RTP/SCS contains eleven (11) strategies in four broad categories: regional trips, transit integration, short trips and education/ encouragement.

- Regional-Trip Strategies:
  - *Regional Greenway Network*: to include an approximately 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.
  - *Regional Bikeway Network (RBN)*: to include an approximately 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.

- *California Coastal Trail Access*: to provide established paths as part of the Regional Greenway Network and Regional Bikeway Network to access the California Coastal Trail.
- Transit Integration Strategies:
  - *First Mile/Last Mile*: to proposed bicyclist and pedestrian improvements at and around 224 rail or fixed-guideway bus stations.
  - *Livable Corridors*: to propose 16 corridors totaling approximately 670 miles for improvements separate from those areas in the First Mile/Last Mile strategy.
  - *Bike Share Services*: to call for 880 stations and 8,800 bicycles starting in Downtown Los Angeles and Pasadena, and then moving into other locations.
- Short-Trip Strategies:
  - *Sidewalk quality*: to call for approximately 10,500 miles of new and improved sidewalks through development projects or larger road construction and maintenance projects
  - *Local Bikeway Networks*: to propose approximately 7,200 miles of new local bikeways, which will serve as the foundation for the regional bikeway network and the regional greenway network.
  - *Neighborhood Mobility Areas*: to include 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 are also proposed as the region's active transportation strategies to increase physical activity, and improve connectivity to the regional bikeway or greenway networks, local businesses and parks.
- Education and Encouragement:
  - *Safe Routes to School*: to propose an allocation of approximately \$280 million over the life of the 2016 RTP/SCS to be devoted to Safe Routes to School programs and projects.
  - *Safety and Encouragement Campaigns*: to propose the continued involvement in updating and conducting the Southern California Active Transportation Safety and Encouragement Campaign.<sup>23</sup>

**Aviation.** With the region being one of the busiest and most diverse commercial aviation regions in the world, the 2016 RTP/SCS proposes strategies for airport ground access, including:

- 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, CTCs, and local jurisdictions;
- Encourage development and use of transit access to the region's airports;
- Encourage use of modes with high average vehicle occupancy (AVO); and
- Discourage use of modes that require "deadhead" trips to/from airports

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<sup>23</sup> Southern California Association of Governments. 11 September 2014. *Item No. 16 Staff Report: Funding Awarded to SCAG for the Southern California Active Transportation Safety and Encouragement Campaign*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/rc091114fullagn.pdf>

## 2.4.5 Transportation Funding

In accordance with federal fiscal constraint requirements, the 2016 RTP/SCS is a financially constrained Plan. The financial plan for the 2016 RTP/SCS identifies the amount of funding that is reasonably expected to be available to build, operate, and maintain the region's surface transportation system through the forecast horizon year of 2040.<sup>24</sup>

The financial plan's forecast of core revenue totals approximately \$356 billion. Local sources, totaling approximately \$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.

The financial plan's forecast of expenditure needs totals approximately \$556 billion. Operating and maintenance (O&M) expenditures needed to achieve a state of good repair total \$275 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 \$37 billion in regionally significant local streets and roads O&M. Capital project expenditures total \$251 billion (45 percent) and debt service totals \$31 billion (6 percent).<sup>25</sup>

Similar to the amount of funding gap identified in the 2012 RTP/SCS, the 2016 RTP/SCS is expected to have an approximately \$200 billion difference between the expenditure forecast total (\$556 billion) and the core revenue forecast total (\$356 billion). As such, like the 2012 Plan, the 2016 Plan includes reasonable 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.

A set of key guiding principles were used to develop transportation funding strategies. They are as follows:<sup>26,27</sup>

- 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;

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<sup>24</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 6.

<sup>25</sup> Southern California Association of Governments. 3 September 2015. *Item No. 2 Staff Report: Draft 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) – Proposed Financial Strategies*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/tc090315fullagn.pdf>

<sup>26</sup> 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. SCAG's Transportation Committee at its September 3, 2015 meeting re-confirmed the use of these guiding principles and approved the proposed near-term transitional strategies and long-term initiatives for inclusion in the Draft 2016 RTP/SCS.

<sup>27</sup> Southern California Association of Governments. 11 September 2014. *Item No. 2 Staff Report: Draft 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy – Proposed Financial Strategies*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/tc090315fullagn.pdf>



- 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; and
- 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, the 2016 RTP/SCS includes both near-term transitional strategies and long-term initiatives to fill the approximately \$200-billion funding gap (**Table 2.4.5-1, Reasonably Available Revenue Sources and Innovative Funding Strategies: \$200 Billion [in Nominal Dollars]**).<sup>28</sup>

**TABLE 2.4.5-1  
REASONABLY AVAILABLE REVENUE SOURCES AND INNOVATIVE FUNDING STRATEGIES:  
\$200 BILLION (IN NOMINAL DOLLARS)**

Revenue Sources	Amount (Billion)
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)	\$2.1

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 4

<sup>28</sup> Southern California Association of Governments. 11 September 2014. *Item No. 2 Staff Report: Draft 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy – Proposed Financial Strategies*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/tc090315fullagn.pdf>

## 2.4.6 Plan Performance

The 2016 RTP/SCS uses a number of performance measures to gauge progress toward meeting the Plan's goals. Plan performance is shown by performance outcomes in seven (7) categories, and these performance outcomes are tied to the 2016 RTP/SCS goals (**Table 2.4.6-1, 2016 RTP/SCS Goals and Performance Outcomes**). Within each category of performance outcome, there are performance measures (**Table 2.4.6-2, 2016 RTP/SCS Performance Outcomes and Performance Measures**).<sup>29</sup> To determine how effective the Plan's land use and transportation strategies would be, Chapter of the 2016 RTP/SCS includes a "Plan" vs. "Baseline" analysis – essentially comparing what the region would look like with and without implementation of the Plan in 2040.<sup>30</sup>

The majority of the performance measures in the 2016 RTP/SCS remain the same as those in the 2012 RTP/SCS. Recognizing that integrated land use and transportation strategies are expected to have impacts beyond those exclusively transportation-related, the health outcome was first introduced in the 2012 RTP/SCS. Continuing with this emphasis on health outcome, the 2016 RTP/SCS includes a number of new measures, including three health-related measures. These health-related measures are tied with the proposed transportation investments in transit, active transportation, more walkable communities, and land use strategies which focus new housing and employment in the region's HQTAs, livable corridors and neighborhood mobility areas.

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<sup>29</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 8.

<sup>30</sup> Note that the Draft 2016 RTP/SCS baseline year is 2012 as required for RTP/SCSs. This PEIR properly uses 2015 at the time when the Notice of Preparation (NOP) is published as the existing conditions against which impacts are analyzed.

**TABLE 2.4.6-1  
2016 RTP/SCS GOALS AND PERFORMANCE OUTCOMES**

2016 RTP/SCS Goals	Mobility/ Accessibility	Reliability	Location Efficiency	Productivity	Safety and Health	Economic Well-Being	Cost Effectiveness	System Sustainability	Environmental Quality
Align the plan investments and policies with improving regional economic development and competitiveness						X			
Maximize mobility and accessibility for all people and goods in the region	X						X		
Ensure travel safety and reliability for all people and goods in the region		X			X				
Preserve and ensure a sustainable regional transportation system								X	X
Maximize the productivity of our transportation system	X			X					
Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking)					X				X
Actively encourage and create incentives for energy efficiency, where possible			X						
Encourage land use and growth patterns that facilitate transit and non-motorized transportation			X						
Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies*									

**NOTE:**

\*SCAG does not yet have an agreed-upon security performance measure. Therefore, it is not included in the table.

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 5; Chapter 8.

**TABLE 2.4.6-2: 2016 RTP/SCS PERFORMANCE OUTCOMES AND PERFORMANCE MEASURES  
(\*NEW PERFORMANCE MEASURES PROPOSED FOR THE 2016 RTP/SCS)**

Outcome	Performance Measures/Indicator(s)	Definition	Performance Target	Data Sources Used
<b>Location Efficiency</b>	Share of growth in High Quality Transit Areas (HQTAs)	Share of the region's growth in households and employment in HQTAs	Improvement over No Project Baseline	Census (including annual American Community Survey), InfoUSA
	Land consumption	Additional land needed for development that has not previously been developed or otherwise impacted, including agricultural land, forest land, desert land and other virgin sites	Improvement over No Project Baseline	Rapid Fire Model
	Vehicle Miles Traveled (VMT) per Capita*	VMT (for automobile and light-duty trucks) per capita	Improvement over No Project Baseline	Travel Demand Model
	Transit Mode Share*	Share of transit trips made throughout the region for work and non-work purposes	Improvement over No Project Baseline	Travel Demand Model
	Average distance for work and non-work trips	The average distance traveled for work or non-work trips separately	Improvement over No Project Baseline	Travel Demand Model
	Percent of work trips less than three miles	The share of total work trips which are fewer than three miles	Improvement over No Project Baseline	Travel Demand Model
	Work trip length distribution	The statistical distribution of work trip length in the region	Improvement over No Project Baseline	Travel Demand Model
<b>Mobility and Accessibility</b>	Person delay per capita	Delay per capita can be used as a supplemental measure to account for population growth impacts on delay	Improvement over No Project Baseline	Travel Demand Model
	Person delay by facility type (mixed flow, HOV, arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed	Improvement over No Project Baseline	Travel Demand Model
	Truck delay by facility type (Highway, Arterials)	Delay – excess travel time resulting from the difference between a reference speed and actual speed	Improvement over No Project Baseline	Travel Demand Model
	Highway Non-Recurrent Delay*	The share of congestion that is considered to be atypical	Improvement over No Project Baseline	Travel Demand Model
	Travel time distribution for transit, SOV, HOV for work and non-work trips	Travel time distribution for transit, SOV, HOV for work and non-work trips	Improvement over No Project Baseline	Travel Demand Model
<b>Safety and Health</b>	Collision/accident rates by severity by mode	Accident rates per million vehicle miles by mode (all, bicycle/ pedestrian and fatality/killed)	Improvement over Base Year	CHP Accident Data Base, Travel Demand Model Mode Split Outputs
	Criteria pollutant emissions	CO, NO <sub>x</sub> , PM2.5, PM10, and VOC.	Meet Transportation Conformity requirements	Travel Demand Model/ARB EMFAC Model
	Mode share for walking and biking*	Mode share of walking and biking for work and non-work trips	Improvement (increase) over No Project Baseline	Travel Demand Model
	Physical activity and weight-related disease*	Physical activity/weight related health issues and costs	Improvement (increase) over No Project Baseline	Scenario Planning Model
	Respiratory/pollution-release disease*	Pollution-related respiratory disease incidence and cost	Improvement (increase) over No Project Baseline	Scenario Planning Model
<b>Environmental Quality</b>	Criteria and greenhouse gas emissions	CO, NO <sub>x</sub> , PM2.5, PM10, and VOC Per capita greenhouse gas emissions (CO2)	Meet Transportation Conformity requirements and SB375 GHG per capita emission reduction targets	Travel Demand Model/ARB EMFAC Model
<b>Economic Well-Being</b>	Additional jobs supported by improving competitiveness	Number of jobs added to the economy as a result of improved transportation conditions which make the region more competitive.	Improvement over No Project Baseline	Regional Economic Model REMI
	Additional jobs supported by transportation investment	Total number of jobs supported in the economy as a result of transportation expenditures.	Improvement over No Project Baseline	Regional Economic Model REMI
	Net contribution to Gross Regional Product	Gross Regional Product due to transportation investments and increased competitiveness	Improvement over No Project Baseline	Regional Economic Model REMI
<b>Investment Effectiveness</b>	Benefit/Cost Ratio	Ratio of monetized user and societal benefits to the agency transportation costs.	Greater than 1.0	California Benefit Cost Model
<b>System Sustainability</b>	Cost per capita to preserve multi-modal system to current and state of good repair conditions	Annual costs per capita required to preserve the multi-modal system to current conditions.	Improvement over Base Year	Estimated using SHOPP Plan and recent California Transportation Commission 10-Year Needs Assessment

**SOURCE:**

Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 8.

## 2.4.7 Social Equity

The 2016 RTP/SCS places an important emphasis on social equity. Like the 2012 RTP/SCS, the 2016 RTP/SCS includes an analysis on environmental justice.<sup>31</sup> The concept of environmental justice is about equal and fair access to a healthy environment, with the goal of protecting underrepresented and poorer communities from incurring disproportionate environmental impacts. Consideration of environmental justice in the transportation planning process stems from Title VI of the Civil Rights Act of 1964. Title VI of the Civil Rights Act of 1964 establishes the need for transportation agencies to disclose to the public the benefits and burdens of proposed projects on minority populations. The understanding of civil rights has expanded to include low-income communities. In addition to Federal requirements, SCAG must comply with California Government Code Section 11135, which states that, “no person in the State of California shall, on the basis of race, national origin, ethnic group identification, religion, age, sex, sexual orientation, color, or disability, be unlawfully denied full and equal access to the benefits of, or be unlawfully subjected to discrimination under, any program or activity that is conducted, operated, or administered by the state or by any state agency, is funded directly by the state, or receives any financial assistance from the state.”

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have a commitment to assuring environmental justice in the programs they fund. Both of these federal agencies recently issued proposed revised planning regulations regarding environmental justice. This was done in part to comply with Title VI of the Civil Rights Act of 1964 and associated regulations and policies, including President Clinton’s 1994 Executive Order 12898 on Environmental Justice. Generally these laws prohibit discrimination on the basis of race, income, age, or disability. On August 4, 2011, seventeen federal agencies signed the “Memorandum of Understanding on Environmental Justice and Executive Order 12898.” The signatories, including the U.S. Department of Transportation, agreed to develop environmental justice strategies to protect the health of people living in communities overburdened by pollution and provide the public with annual progress reports on their efforts. In the regional transportation-planning context, SCAG’s role is to 1) ensure that when transportation decisions are made, low-income and minority communities have ample opportunity to participate in the decision-making process, and 2) identify whether such communities receive an equitable distribution of benefits and not a disproportionate share of burdens.

SCAG’s environmental justice program includes two main elements: public outreach and technical analysis. The public outreach efforts are intended to assure that all members of the public have an opportunity to participate meaningfully in the planning process. As of September 2015, SCAG has held five (5) public workshops on environmental justice for the 2016 RTP/SCS.<sup>32</sup> The environmental justice workshops convened the general public and focus groups on the environmental justice analysis to ensure that all members of the public have an opportunity to participate meaningfully in the planning process. As a result of these workshops, specific areas of concerns were raised including new issues such as 1) areas within 500-feet of highways and commercial/commuter rail roads; 2) areas within a ½ mile buffer of existing rail transit stops (gentrification/displacement); and 3) neighborhood that fall within potential future emissions hotspots (based the RTP/SCS’s modeled on-road emissions outcomes for PM and CO). These issues are addressed in the 2016 RTP/SCS and the corresponding Environmental Justice Appendix.

<sup>31</sup> Southern California Association of Governments. December 2015. *Draft 2016 Regional Transportation Plan/Sustainable Communities Strategy*. Chapter 8.

<sup>32</sup> Southern California Association of Governments. 3 September 2015. *Item No. 4 Staff Report: 2016 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) - Updates and Highlights of the Environmental Justice Analysis*. Available at: <http://www.scag.ca.gov/committees/CommitteeDocLibrary/eec090315fullagn.pdf>

## 2.4.8 Public Health

Built upon the public health emphasis of the 2012 RTP/SCS, the 2016 RTP/SCS places an even greater emphasis on public health. Public health is affected by the Plan in several ways, notably through its impact on the total level of air emissions, the exposure of the population to those emissions as a function of their location, and opportunities for physical activities including active transportation and recreation. Additionally, the health benefits of an active lifestyle have become apparent in recent years, and there is a growing support of increasing the walkability and bikeability of the communities in the region. Proposed land use strategies and transportation investments such as provision of additional investments in active transportation networks including first/last mile improvements, Safe Routes to School projects, and regional bikeways infrastructures are expected to increase the number of short trips and improve physical activity outcomes. Finally, including health-related measures in the Plan helps build an ongoing regional monitoring on the Plan's performance on public health.

A comprehensive approach for enhancing the public health analysis focuses on providing robust public health data to support evaluation of health outcome. In the 2016 RTP/SCS Public Health Analysis, a framework has been developed to promote health and prolong life among the population by enhancing the social determinants or the circumstances in which people are born, grow up, live, work, play, and age. Economic opportunity, government policies, and the built environment play a role influencing public health outcomes, so are social determinants of health, including social and community environment, health and health care, neighborhood and built environment, education, and economic stability. Related to the assessment of public health outcomes, seven focus areas are selected for additional analysis that would align with the goals of the 2016 RTP/SCS, including access to essential destinations, air quality, climate resiliency, economic wellbeing, physical activity, housing, and transportation safety. Impacts on public health are analyzed based on identified relevant performance metrics that could be used to measure impact of the 2016 RTP/SCS on the focus area.<sup>33</sup>

## 2.5 RELATIONSHIP TO OTHER EIRS

The 2016 RTP/SCS PEIR builds on the analysis and mitigation contained in the 2012 RTP/SCS PEIR. The 2016 RTP/SCS project list is similar to the project list for the 2012 RTP/SCS, although some of the transportation projects from the 2012 RTP/SCS are now considered committed and are included in the No Project Alternative. The 2016 RTP/SCS PEIR evaluates the most recent projects and policies and provides more direct comparisons between current conditions and expected future Plan conditions. The 2016 RTP/SCS PEIR includes additional analysis of cumulative, growth-inducing and other indirect impacts.

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<sup>33</sup> SCAG Energy and Environmental Committee. Special Meeting Agenda Package. 26 October 2015. Accessible via <https://www.scag.ca.gov/committees/Pages/CommitteeL2/SingleCommittee.aspx?CID=4>



## 2.6 INTENDED USES OF THE PEIR

SCAG will use this PEIR as part of its review and approval of the 2016 RTP/SCS. Lead agencies for individual projects may use this PEIR as the basis of their regional and cumulative impacts analysis. In addition, for projects that may be eligible for CEQA Streamlining applicable mitigation measures from this PEIR should be incorporated into those projects as appropriate. It is the intent of SCAG that lead agencies and others use the information contained within the PEIR in order to “tier” subsequent environmental documentation of projects in the region. Information from this document may also be incorporated in future County Congestion Management Programs and associated environmental documents, as applicable.

The 2016 RTP/SCS is intended to meet the changing socioeconomic, transportation infrastructure, financial, technological and environmental conditions of the region. Individual projects are included in the 2016 RTP/SCS; however, this PEIR is programmatic in nature and the analysis considers impacts that would be reasonably be expected in conjunction with the class and scope of transportation investments and land use development patterns envisioned in conjunction with the Plan, the potential for significant and unavoidable impacts after the consideration of feasible mitigation measures, and a range of feasible alternatives. Project-level analysis will be prepared by implementing agencies, serving as a lead agency under CEQA, with the authority and principal responsibility for approving or carrying out the individual projects. In some instances, there may also be a Federal lead agency pursuant to NEPA, for all or a portion of an action, where the project involves the need for approvals of right-of-way on federal lands, expenditure of federal funds, or issuance of federal permits or leases for which federal approval is required. Project-specific planning and implementation undertaken by each implementing agency will depend on a number of issues, including: policies, programs and projects adopted at the local level; restrictions on federal, state and local transportation funds; the results of feasibility studies for particular corridors; and further environmental review of proposed projects.