



FINAL ADDENDUM #1

TO THE

PROGRAM ENVIRONMENTAL IMPACT REPORT

FOR THE

2016–2040 REGIONAL TRANSPORTATION PLAN/
SUSTAINABLE COMMUNITIES STRATEGY

A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life

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INTRODUCTION

Southern California Association of Governments (SCAG) proposes to amend the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS or Plan). The RTP is a long-range vision for regional transportation investments. Using growth forecasts and economic trends, the RTP considers the role of transportation relative to economic factors, environmental issues and quality-of-life goals and provides an opportunity to identify transportation strategies today that address mobility needs for the future. The RTP is updated every four years to reflect changes in economic trends, state and federal requirements, progress made on projects and adjustments for population and jobs. The SCS, pursuant to Senate Bill (SB) 375, integrates land use, transportation strategies and transportation investments within the Plan.

The 2016 RTP/SCS Project List (hereafter referred to as “Project List”) contains thousands of individual transportation projects that aim to improve the region’s mobility and air quality and revitalize the economy and includes, but is not limited to, highway improvements such as mixed flow lanes, interchanges, ramps, high occupancy vehicle (HOV) lanes, toll lanes and arterials; transit improvements such as bus, bus rapid transit (BRT) and various rail projects and upgrades; and goods movement strategies. Although the 2016 RTP/SCS has a long-term time horizon under which projects are planned and proposed to be implemented, federal and state mandates ensure that the Plan is both flexible and responsive in the near term. Therefore, the 2016 RTP/SCS is regarded as both a long-term regional transportation blueprint and as a dynamic planning tool subject to ongoing refinement and modification.

As the Lead Agency under the California Environmental Quality Act (CEQA, Cal. Pub. Res. Code Section 21000 et seq.), SCAG prepared the Final 2016 RTP/SCS Program Environmental Impact Report (PEIR) for the 2016 RTP/SCS to evaluate the potential environmental impacts associated with implementation of the 2016 RTP/SCS and to identify practical and feasible mitigation measures.

As is appropriate for a PEIR, the 2016 RTP/SCS PEIR focuses on a region-wide assessment of existing conditions and potential impacts as well as broad policy alternatives and

program-wide mitigation measures (CEQA Guidelines Section 15168(b)(4)). Pursuant to Section 15152 of the CEQA Guidelines, subsequent environmental analyses for separate, but related, future projects may tier off the analysis contained in the 2016 RTP/SCS PEIR. The CEQA Guidelines do not require a Program EIR to specifically list all subsequent activities that may be within its scope. For large scale planning approvals (such as the RTP/SCS), where site-specific EIRs or negative declarations will subsequently be prepared for specific projects broadly identified within a Program EIR, the site-specific analysis can be deferred until the project level environmental document is prepared (Sections 15168 and 15152), provided deferral does not prevent adequate identification of significant effects of the planning approval at hand.

The 2016 RTP/SCS PEIR was certified on April 7, 2016 and the associated Plan was adopted on the same day (SCH No. 2015031035). Since the adoption of the 2016 RTP/SCS, SCAG has received requests from several county transportation commissions to amend the Plan to reflect changes to project scopes, costs and/or schedule for a number of transportation projects, as well as the addition of some new transportation projects contained therein (proposed Amendment #1 to the 2016-2040 RTP/SCS, referred to herein as “2016 RTP/SCS Amendment #1”).

This Addendum to the 2016 RTP/SCS PEIR has been prepared by SCAG to assess potential environmental impacts of the proposed updates and revisions to the 2016 RTP/SCS Project List included in the 2016 RTP/SCS Amendment #1. This document is prepared as an addendum to the previously certified 2016 RTP/SCS PEIR in April 2016 (SCH No. 2015031035).

In summary, the 2016 RTP/SCS PEIR and Addendum to the PEIR serves as an informational document to inform decision-makers and the public of the potential environmental consequences of approving the proposed Plan by analyzing the projects and programs on a broad regional scale, not at a site-specific level of analysis. Site specific analysis will occur as each project is defined and goes through individual project-level environmental review.

BASIS FOR THE ADDENDUM

When an EIR has been certified and the project is modified or otherwise changed after certification, additional CEQA review may be necessary. The key considerations in determining the need for the appropriate type of additional CEQA review are outlined in Section 21166 of the Public Resources Code (CEQA) and CEQA Guidelines Sections 15162, 15163 and 15164.

Specifically, CEQA Guidelines Section 15162(a) provides that a Subsequent EIR is not required unless the following occurs:

1. Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence, at the time the previous EIR was certified as complete, shows any of the following:
 - The project will have one or more significant effects not discussed in the previous EIR;
 - Significant effects previously examined will be substantially more severe than shown in the previous EIR;
 - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or
 - Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

An Addendum to an EIR may be prepared by the Lead Agency that prepared the original EIR if some changes or additions are necessary, but none of the conditions have occurred requiring preparation of a Subsequent EIR (Section 15164(a)). An Addendum must include a brief explanation of the agency's decision not to prepare a Subsequent EIR and be supported

by substantial evidence in the record as a whole (Section 15164(e)). The Addendum to the EIR need not be circulated for public review but it may be included in or attached to the Final EIR (Section 15164(c)). The decision-making body must consider the Addendum to the EIR prior to making a decision on the project (15164(d)).

An addendum to the 2016 RTP/SCS PEIR is appropriate to address the proposed changes in the 2016 RTP/SCS because the proposed updates and revisions do not meet the conditions of Section 15162(a) for preparation of a subsequent EIR. Neither the proposed new projects or changes to existing projects would result in 1) substantial changes to the 2016 RTP/SCS which will require major revisions of the 2016 RTP/SCS PEIR; 2) substantial changes to the circumstances under which the 2016 RTP/SCS is being undertaken which will require major revisions in the 2016 PEIR; or 3) new information of substantial importance showing significant effects not previously examined.

While the proposed changes to the 2016 RTP/SCS Project List documented in the 2016 RTP/SCS Amendment #1 may arguably represent "new information of substantial importance ..." at the local project-level, these changes are not substantial at the regional program-level as analyzed in the 2016-2040 RTP/SCS PEIR. More specifically, the proposed changes to the 2016-2040 RTP/SCS Project List documented in the 2016 RTP/SCS Amendment #1 would not result in one or more significant effects (at the regional level) not discussed in the 2016 RTP/SCS PEIR, nor result in a substantial increase in the severity of previously identified significant effects disclosed in the 2016 RTP/SCS PEIR. Moreover, no changes to the mitigation measures or alternatives contained in the 2016 RTP/SCS PEIR are necessary or being proposed that could trigger additional review regarding such measures. Furthermore, as discussed in the 2016 RTP/SCS PEIR, the level of detail for individual projects on the RTP/SCS Project List is generally insufficient to be able to analyze local effects. Such analysis is more appropriately undertaken in project-specific environmental documents prepared by the individual CEQA lead agencies proposing each project.

SCAG has assessed potential environmental effects of the proposed changes to the 2016 RTP/SCS Project List, contained in the 2016 RTP/SCS Amendment #1, at the regional program-level and finds that the additional and modified projects contained in Amendment #1 are consistent with the region-wide environmental impacts analysis, mitigation measures or alternatives and Findings of Fact discussed in the previously certified 2016 RTP/SCS PEIR and do not result in any of the conditions described in CEQA Guidelines Section 15162(a)(1)(2)(3). For these reasons, SCAG has elected to prepare an addendum to the 2016-2040 RTP/SCS PEIR rather than a Subsequent or Supplemental EIR and this Addendum #1 to the 2016-2040 RTP/SCS PEIR is prepared in accordance with CEQA Guidelines Section 15164.

PURPOSE AND SCOPE OF THE ADDENDUM TO THE PEIR

SCAG has prepared this Addendum #1 to the 2016 RTP/SCS PEIR to demonstrate that the proposed changes to the 2016 RTP/SCS Project List, contained in the 2016 RTP/SCS Amendment #1, satisfies the requirements contained in Section 15164 of the CEQA Guidelines for the use of an Addendum to an EIR. The proposed changes to the Project List do not require the preparation of a Subsequent or Supplemental EIR pursuant to Sections 15162 and 15163, respectively, of the CEQA Guidelines due to the absence of new or substantially more adverse significant impacts than those analyzed in the certified EIR.

This Addendum #1 to the 2016 RTP/SCS PEIR neither controls nor determines the ultimate decision for approval of the 2016 RTP/SCS Amendment #1 and the proposed changes to the 2016 RTP/SCS Project List contained therein. The information presented in this Addendum to the 2016 RTP/SCS PEIR will be considered by SCAG's decision making body, the Regional Council, prior to making a decision on the 2016 RTP/SCS Amendment #1.

PROJECT DESCRIPTION

A major component of the 2016 RTP/SCS is the Project List, which includes thousands of individual transportation projects and programs that aim to improve the region's mobility and air quality and to revitalize our economy. More specifically, the 2016 RTP/SCS includes approximately 4,000 projects with completion dates spread over a 24 year time period (through 2040). The proposed 2016 RTP/SCS Amendment #1 (revised plan) includes 76 projects, or approximately 2 percent of the total 2016 RTP/SCS projects. The revised plan proposes revisions to 54 projects already included in the 2016 RTP/SCS and it also proposes the inclusion of 22 new projects. The new projects include state and local highway projects as well as projects classified as other (e.g., Port of Los Angeles projects), none of which are different than the types of projects already included in the 2016 RTP/SCS and analyzed in the 2016 PEIR.

As part of the 2016 RTP/SCS amendment process, SCAG solicited input from the region's six County Transportation Commissions (CTCs) regarding updates to their individual project lists. The types of changes reflected in the updated Project List include:

- Project is new and not currently included in the 2016 RTP/SCS Project List;
- Project currently exists in the 2016 RTP/SCS Project List, but has a:
 - Revised description;
 - Revised schedule; and/or
 - Change in total cost;
- Project is a duplicate and needs to be removed or combined with another project in the 2016 RTP/SCS Project List;
- Project is no longer being pursued and the CTC has requested its removal from the 2016 RTP/SCS Project List;

Based on input received, a total of 54 projects were modified under Amendment #1 and a total of 22 new projects were proposed. A total of four projects were removed from the Project List. As part of Amendment #1 to the 2016 RTP/SCS, the Project List has been updated to reflect the latest CTC-approved project modifications. The updated Project List forms the foundation of the 2016 RTP/SCS. (See 2016 RTP/SCS Amendment #1 at: <http://scagrtpscs.net/Pages/FINAL2016RTPSCS.aspx>).

ENVIRONMENTAL ANALYSIS

The changes described above to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 would not result in a substantial change to the region-wide impacts programmatically analyzed in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR broadly identifies a number of region-wide significant impacts that would result from the numerous transportation policies and projects encompassed by the 2016-2040 RTP/SCS.

The 2016 RTP/SCS PEIR presents analysis at the programmatic level of various types of projects, including both modifications to the existing system as well as new systems such as new highway and transit facilities, goods movement roadway facilities, rail corridors, flyovers, interchanges and High-Speed Rail.

Although the new projects identified in the 2016 RTP/SCS Amendment #1 were not identified in the 2016 RTP/SCS PEIR, SCAG has assessed these additional projects at the programmatic level and finds that they are consistent with the scope, goals and policies contained in the 2016 RTP/SCS and with the analysis and conclusions presented in the previously certified 2016 RTP/SCS PEIR. Further, each project will be fully assessed at the project-level by the implementing agency in accordance with CEQA, National Environmental Policy Act (NEPA) and all applicable regulations.

No changes to the mitigation measures or alternatives contained in the 2016 RTP/SCS PEIR are necessary or proposed. SCAG has determined that the changes and additions identified above would result in impacts that would fall within the range of impacts already identified in the previously certified 2016 RTP/SCS PEIR. Therefore, no substantial physical impacts to the environment beyond those already anticipated and documented in the 2016 RTP/SCS PEIR are anticipated to result from the changes and additions identified in the 2016 RTP/SCS Amendment #1.

The environmental analysis provided in this Addendum describes the information that was considered in evaluating the questions contained in the Environmental Checklist of the State CEQA Guidelines, Appendix G, consistent with the 2016 RTP/SCS PEIR. Potential region-wide environmental impacts from the proposed project changes, documented in the 2016 RTP/SCS Amendment #1, as compared to those already identified in the 2016 RTP/SCS PEIR are summarized in Table 1, Summary of Impacts from Amendment #1 Changes identified in the 2016 RTP/SCS Amendment #1.

TABLE 1 Summary of Impacts From Amendment #1 Changes

Impact	Compared to the Certified 2016-2040 RTP/SCS PEIR
Aesthetics	Same; no new impacts
Agriculture and Forestry Resources	Same; no new impacts
Air Quality	Same; no new impacts
Biological Resources	Same; no new impacts
Cultural Resources	Same; no new impacts
Energy	Same; no new impacts
Geology and Soils	Same; no new impacts
Greenhouse Gas Emissions and Climate Change	Same; no new impacts
Hazards and Hazardous Materials	Same; no new impacts
Hydrology and Water Quality	Same; no new impacts
Land Use and Planning	Same; no new impacts
Mineral Resources	Same; no new impacts
Noise	Same; no new impacts
Population, Housing and Employment	Same; no new impacts
Public Services	Same; no new impacts
Recreation	Same; no new impacts
Transportation, Traffic and Safety	Same; no new impacts
Utilities and Service Systems	Same; no new impacts
Comparison of Alternatives	Same; no new impacts
Long-Term CEQA Considerations	Same; no new impacts

AESTHETICS

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to aesthetics beyond those already described in the previously certified 2016 RTP/SCS PEIR. Potential significant impacts anticipated in the 2016 RTP/SCS PEIR would be the substantial degradation of the existing visual character or quality of the site and its surroundings, adverse effects on a scenic vista, damage to scenic resources, creating a new source of substantial light affecting day or nighttime views and affecting shadow-sensitive uses that would be shaded by a project-related structure for more than three hours in the winter or for more than four hours during the summer (see 2016 RTP/SCS PEIR pp. 3.1-21 – 3.1-36).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List, contained in the Amendment #1, would not result in any new significant impacts to aesthetics, or a substantial increase in the severity of impacts to aesthetics beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

AGRICULTURE AND FORESTRY RESOURCES

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to agriculture and forestry resources beyond those already described in the previously certified 2016-2040 RTP/SCS PEIR. Implementation of transportation projects and anticipated development resulting from land use strategies included in the 2016 RTP/SCS would have the potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use, conflict with existing zoning for agricultural use or a Williamson Act contract, conflict with existing zoning for, or cause rezoning of, forest land or timberland zoned Timberland Production, lose forest land or convert forest land to non-forest use and change the existing environment which, due to their location or nature, would result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use (see 2016 RTP/SCS PEIR pp. 3.2-16 – 3.1-29).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List, contained in the Amendment #1, would not result in any new significant impacts to agriculture and forestry resources, or a substantial increase in the severity of impacts to agriculture and forestry resources beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

AIR QUALITY

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to air quality beyond those already identified in the previously certified 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR identified that implementation of the 2016 RTP/SCS would result in less than significant impact to air quality related to the potential to conflict with or obstruct implementation of the adopted SIPs/AQMPs/Attainment Plans in the SCAG region and increase of any criteria pollutant for which the region is non-attainment under applicable NAAQs or CAAQS but would result in significant impacts to air quality related to the potential to violate air quality standards or contribute substantially to an air quality violation and increase cancer risks due to exposure of substantial pollutant concentrations to sensitive receptors (see 2016 RTP/SCS PEIR pp. 3.3-38 – 3.3-54). Both the 2016 RTP/SCS and Amendment #1 meet the regional emissions and other tests set forth by the federal Transportation Conformity regulations, demonstrating the integrity of the State Implementation Plans prepared pursuant to the federal Clean Air Act for the non-attainment and maintenance areas in the SCAG region. The updated conformity analysis can be found below.

The Plan conditions (2040) and existing conditions (base year 2012) of the criteria pollutant emissions for the six counties in the SCAG region (Table 2, Criteria Pollutant Emissions by County – Existing Conditions (Base Year 2012); Table 3, Criteria Pollutant Emission By County – Amendment #1 (2040) vs. Existing Conditions (2015)) remained the same (See Table 3.3.2-6 Criteria Pollutant Emissions by County – Existing Conditions (Base Year 2012); Table 3.3.4-1, Criteria Pollutant Emission By County – Plan (2040 vs. Existing Conditions (2015), of the 2016 RTP/SCS PEIR) with the proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 therefore resulting in no changes to analyses already discussed in the certified 2016 RTP/SCS PEIR.

TABLE 2 Criteria Pollutant Emissions by County—Existing Conditions (Base Year 2012)*

County	(Tons/Day)								
	ROG		NO _x			CO	PM ₁₀	PM _{2.5}	SO _x
	Summer	Annual	Summer	Annual	Winter	Winter	Annual	Annual	Annual
Imperial	4	4	10	11	11	28	1	0	0
Los Angeles	103	101	179	194	190	851	17	9	1
Orange	28	28	42	46	45	225	5	2	0
Riverside	26	23	66	70	69	183	5	3	0
San Bernardino	32	28	81	86	84	225	6	3	0
Ventura	9	8	12	14	14	70	1	1	0

NOTE: *No Changes Between Original Plan and Amendment #1

SOURCE: SCAG Transportation Modeling, 2016.

TABLE 3 Criteria Pollutant Emission by County—Amendment #1 (2040) vs. Existing Conditions (2015)*

County		(Tons/Day)								
		ROG		NO _x			CO	PM ₁₀	PM _{2.5}	SO _x
		Summer	Annual	Summer	Annual	Winter	Winter	Annual	Annual	Annual
Imperial	Existing	4	4	10	11	11	28	1	0	0
	Plan	2	2	3	3	3	13	1	0	0
	Difference	-2	-2	-7	-7	-7	-14	0	0	0
Los Angeles	Existing	103	101	179	194	190	851	17	9	1
	Plan	22	21	36	38	37	144	14	6	1
	Difference	-81	-80	-144	-157	-154	-707	-3	-3	0
Orange	Existing	28	28	42	46	45	225	5	2	0
	Plan	7	7	8	8	8	45	5	2	0
	Difference	-21	-21	-34	-37	-37	-181	0	-1	0
Riverside	Existing	26	23	66	70	69	183	5	3	0
	Plan	8	7	14	14	14	42	5	2	0
	Difference	-18	-17	-52	-56	-55	-140	0	-1	0
San Bernardino	Existing	32	28	81	86	84	225	6	3	0
	Plan	8	7	21	22	22	46	6	2	0
	Difference	-24	-21	-60	-64	-63	-179	0	-1	0
Ventura	Existing	9	8	12	14	14	70	1	1	0
	Plan	2	2	2	2	2	11	1	0	0
	Difference	-7	-7	-10	-11	-11	-59	0	0	0

SOURCE: SCAG Transportation Modeling, 2016.

NOTE: Please note that 2012 base year network includes projects in the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and projects in the 2012 RTP/SCS as last amended in September 2014.

*No Changes between Original Plan and Amendment #1

TABLE 4 Daily VMT by County–Amendment #1

County	2012 Base Year	2040 Baseline	2040 Plan*
Imperial	5,000	10,000	9,000
Los Angeles	227,000	254,000	235,000
Orange	77,000	85,000	80,000
Riverside	59,000	88,000	81,000
San Bernardino	63,000	90,000	87,000
Ventura	20,000	23,000	21,000
Total (Amendment #1)	450,000	549,000	514,000
Total (Original Plan)	450,000	549,000	514,000

NOTE: * Calculation for Amendment #1
Source: SCAG GIS modeling and data, 2016.
Round to the nearest thousand

The 2016 RTP/SCS project daily VMT for the six counties in the SCAG region (Table 4, Daily VMT by County – Amendment #1) also remained the same with the proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 therefore resulting in no changes to analyses already discussed in the certified 2016 RTP/SCS PEIR.

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

As shown in the tables above, changes are minimal and insignificant when compared to the certified 2016 RTP/SCS PEIR. As such, the analysis in the previously certified 2016-2040 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016-2040 RTP/SCS Amendment # 1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant air quality impacts or a substantial increase in the severity of air quality impacts beyond those programmatically addressed in the 2016-2040 RTP/SCS PEIR.

BIOLOGICAL RESOURCES

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to biological resources beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR concluded that significant impacts expected with the implementation of the RTP/SCS includes the disturbance and removal of natural vegetation that may be utilized by sensitive species, habitat fragmentation and associated decrease in habitat quality, litter, trampling, light pollution and road noise, displacement of riparian and wetland habitat, siltation, loss of prime farmlands, grazing lands, open space and recreation lands (see 2016 RTP/SCS PEIR pp. 3.4-53 – 3.4-83).

Detailed project-level analysis, including project level mitigation measures, will be conducted by each implementing agency for each individual project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, the incorporation of the proposed changes to the Project List would not result in any new significant impacts to biological resources, or a substantial increase in the severity of impacts to biological resources beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

CULTURAL RESOURCES

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to cultural resources beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR determined that the development of new transportation and land use strategies may affect archaeological and paleontological resources, primarily through the disturbance of buried resources. Additionally, the development of transportation projects and land use strategies may affect historic architectural resources (structures 50 years or older), either through direct affects to buildings or through indirect affects to the area surrounding a resource if it creates a visually incompatible structure adjacent to a historic structure (see 2016 RTP/SCS PEIR pp. 3.5-34 – 3.5-46).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, the incorporation of the proposed changes to the Project List would not result in any new significant impacts to cultural resources, or a substantial increase in the severity of impacts to cultural resources beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

TABLE 5 SCAG Region Estimated Transportation Fuel Consumption—Amendment #1

Year	Fuel Consumed		Percentage under Existing
	Billion Gallons per Year	Thousand Gallons per Day	
2012	9.3	25,564	
2040 Baseline	7.3	19,965	-21.9%
Amendment #1*	6.8	18,738	-26.7%
Original Plan	6.8	18,730	-26.7%

SOURCE: SCAG transportation modeling, 2016.

NOTE: *Calculation for Amendment #1

ENERGY

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to energy beyond those already described in the previously certified 2016 RTP/SCS PEIR. The 2016 RTP/SCS would result in energy impacts as a result of increased energy demands for construction of transportation projects and development, increase energy demands for operation of the regional transportation system and the growing energy demand from anticipated growth and development associated with implementation of the 2016 RTP/SCS.

The estimated transportation fuel consumption for the SCAG region (Table 5, SCAG Region Estimated Transportation Fuel Consumption – Amendment #1) indicates that there is a slight increase of fuel consumption with the proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1. The slight increase is not expected to cause any new or substantial impacts previously discussed in the certified 2016 RTP/SCS PEIR.

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

As shown in the tables above, changes are minimal and insignificant when compared to the certified 2016 RTP/SCS PEIR. As such, the analysis in the 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List, contained in the Amendment #1, would not result in any new significant impacts to aesthetics and views, or a substantial increase in the severity of impacts to energy beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

GEOLOGY AND SOILS

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to geology and soils beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR identified that damage to transportation infrastructure can result from geologic and seismic activity, such as surface rupture, ground shaking, subsidence, liquefaction, soil expansion and land-sliding. In addition work associated with implementation of the 2016 RTP/SCS could cause impacts such as soil erosion, ground instability and loss of mineral resources. However, incorporation of mitigation measures identified in the 2016 RTP/SCS PEIR would alleviate significant impacts associated with geological safety and mineral loss (see 2016 RTP/SCS PEIR pp. 3.7-19 – 3.7-34).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, the incorporation of the proposed changes to the Project List would not result in any new significant impacts to geology and soils, or a substantial increase in the severity of impacts to geology and soils beyond those programmatically addressed in the 2016 RTP/SCS PEIR

GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to greenhouse gas emissions and climate change beyond those already identified in the 2016 RTP/SCS PEIR. Though lead agencies retain the discretion to determine thresholds of significance of GHG emissions, the 2016 RTP/SCS PEIR identifies three thresholds of significance: increase in GHG emissions compared to existing conditions, conflict with SB 375 GHG emission reduction targets and conflict with other applicable GHG reduction plans. The 2016-RTP/SCS Amendment #1 achieves and exceeds the SB375 per capita GHG reduction targets for the SCAG region.

The 2016 RTP/SCS Amendment #1, which includes light and medium duty vehicles and heavy duty trucks, would result in an approximately daily decrease of 23 percent (similar to the original plan) in GHG emissions by 2040 and annual decrease of 24 percent, with the largest losses occurring in Los Angeles, Orange and Ventura Counties (Table 6, Greenhouse Gas Emissions from Transportation by County –Amendment #1 and Table 7, Greenhouse Gas Emissions from Transportation by County –Amendment #1).

TABLE 6 Greenhouse Gas Emissions from Transportation by County–Amendment #1

County	CO ₂ Emissions (ton/day)				
	2005	2012 Base Year	2040 Plan	2040 Plan	2040 Plan** vs. 2012 Base Year
Imperial	3,768	3,459	3,757.90	4,625.80	34%
Los Angeles	130,123	117,828	103,758.50	77,781.00	-34%
Orange	39,423	38,052	33,553.10	23,662.40	-39%
Riverside	32,454	33,045	33,214.30	32,211.10	-3%
San Bernardino	35,841	36,117	35,037.70	38,534.50	7%
Ventura	10,239	9,796	8,694.10	6,312.40	-36%
Total (Amendment #1)	251,847	238,297	217,958.35	183,049.50	-23%
Total (Original Plan)	251,847	238,297	218,015.60	183,127.20	-23%

NOTE: *Light and medium duty vehicles and heavy duty truck

**Calculation for Amendment #1

SOURCE: SCAG modeling, 2016.

TABLE 7 Greenhouse Gas Emissions from Transportation by County–Amendment #1

County	CO _{2e} Emissions (million metric tons/year)				
	2005	2012 Base Year	2040 Plan	2040 Plan	2040 Plan** vs. 2012 Base Year
Imperial	1.40	1.25	1.33	1.62	30%
Los Angeles	46.81	41.71	36.38	27.16	-35%
Orange	14.08	13.41	11.74	8.25	-38%
Riverside	11.80	11.78	11.68	11.24	-5%
San Bernardino	13.05	12.92	12.34	13.47	4%
Ventura	3.68	3.46	3.05	2.20	-36%
Total (Amendment #1)	90.82	84.54	76.50	63.96	-24%
Total (Original Plan)	90.82	84.54	76.50	63.93	-24%

NOTE: *Light and medium duty vehicles and heavy duty truck

**Calculation for Amendment #1

SOURCE: SCAG modeling, 2016.

TABLE 8 Greenhouse Gas Emissions from On-Road Vehicles in the SCAG Region (Million Metric Tons Per Year)–Amendment #1

On-Road Vehicles	2012 Based Year			2040 (Plan)**		
	CO ₂	CH ₄	N ₂₀	CO ₂	CH ₄	N ₂₀
Light and Medium Duty Vehicles	68.4766	0.0042	0.0021	36.9571	0.0008	0.0003
Heavy Duty Trucks	14.2284	0.0007	0.0035	26.5881	0.0007	0.0010
Buses	1.3237	0.0016	0.0004	1.1002	0.0003	0.0000
On-Road Vehicles (Subtotal) in CO ₂	84.0287	0.0065	0.0060	64.6454	0.0018	0.0013
On-Road Vehicles (Subtotal) in CO _{2e} *	84.03	0.14	1.87	64.65	0.04	0.39
Total GHG Emissions from on-road vehicles in CO_{2e} (Amendment #1) *	86.03			65.07		
Total GHG Emissions from on-road vehicles in CO_{2e} (Original Plan) *	86.03			63.72		

SOURCE: SCAG Modeling, 2016.

NOTE: *CO₂ was converted to CO_{2e} based on the Global Warming Potential (GWP): <http://www.arb.ca.gov/cc/inventory/background/gwp.htm>

**Calculation for Amendment #1

Based on the analysis for the 2016 RTP/SCS Amendment #1, transportation emissions include on-road mobile sources (Table 8, Greenhouse Gas Emissions from On-Road Vehicles in the SCAG Region): light and medium duty vehicles, heavy duty trucks and buses. As shown on Table 8, the proposed changes from the 2016 RTP/SCS Amendment #1 project list would result in a slight increase of total GHG emissions from on road vehicles. Off-road emission sources include: rail, aviation and ocean going vessels (Table 9, Greenhouse Gas Emissions from Off-Road Vehicles in the SCAG Region – Amendment #1 and Table 10, Greenhouse Gas Emissions from On-Road and Off-Road Sources in the Transportation

Sector in the SCAG Region – Amendment #1). Table 9 indicates that the proposed changes from the 2016 RTP/SCS Amendment #1 project list would result in similar total GHG emissions from off-road vehicles. According to Table 10, the proposed changes from the 2016 RTP/SCS Amendment #1 project list would result in slight increase (1.5 percent) in emissions for on-road and off-road vehicles. However this increase is minimal (1.5 percent) and would result in a 20 percent decrease in greenhouse gas emissions by 2040 compared to existing conditions (2012 Base Year).

TABLE 9 Greenhouse Gas Emissions from Off-Road Vehicles in the SCAG Region (Million Metric Tons Per Year)–Amendment #1

On-Road Vehicles	2012 Based Year			2040 (Plan)**		
	CO ₂	CH ₄	N ₂₀	CO ₂	CH ₄	N ₂₀
Rail	2.2214	0.0001	0.0011	3.8101	0.0000	0.0005
Aviation	2.8791	0.0000	0.0000	2.2517	0.0000	0.0000
Ocean-going Vessel	0.8574	0.0000	0.0005	2.5976	0.0001	0.0003
Off-Road Vehicles (Subtotal) in CO ₂	5.9579	0.0001	0.0016	8.6593	0.0001	0.0008
Off-Road Vehicles (Subtotal) in CO _{2e} *	5.958	0.002	0.499	8.659	0.003	0.238
Total GHG Emissions from off-road vehicles in CO_{2e} (Amendment #1) *	6.459			8.901		
Total GHG Emissions from off-road vehicles in CO_{2e} (Original Plan) *	6.459			8.901		

SOURCE: SCAG Modeling, 2016.

NOTE: *CO₂ was converted to CO_{2e} based on the Global Warming Potential (GWP): <http://www.arb.ca.gov/cc/inventory/background/gwp.htm>

**Calculation for Amendment #1

TABLE 10 Greenhouse Gas Emissions from On-Road and Off-Road Sources in the Transportation Sector in the SCAG Region (Million Metric Tons Per Year)–Amendment #1

	2012 Based Year	2040 (Plan)**
Total GHG Emissions from on-road vehicles in CO _{2e} *	86.03	65.07
Total GHG Emissions from off-road vehicles in CO _{2e} *	6.459	8.901
All Transportation Sector (On-Road and Off-Road Vehicles) in CO _{2e} *	92.492	73.974
Amendment #1 vs. 2012 Base Year	-20.0%	65.07
Original Plan vs. 2012 Base Year	-21.5%	63.72

SOURCE: SCAG Modeling, 2016.

NOTE: *CO₂ was converted to CO_{2e} based on the Global Warming Potential (GWP): <http://www.arb.ca.gov/cc/inventory/background/gwp.htm>

**Calculation for Amendment #1

TABLE 11 Greenhouse Gas Emissions Summary for the SCAG Region–Amendment #1

Area	CO _{2e} Emissions (MMT CO _{2e} per year)			
	2012 Base Year	2020 Plan	2040 Plan	2040*** vs. 2012
Transportation*	92.49	81.62	73.97	22%
Building energy**	53.68	40.51	49.99	-7%
Water-related energy**	7.41	3.84	4.79	-35%
Total (Amendment #1)	153.58	125.97	128.75	-16%
Total (Original Plan)	153.58	125.97	127.40	-17%

NOTE: *On-road and off-road vehicles.

**Scenario Planning Model is a scenario planning tool used for developing scenarios for the Plan during the scenario planning process to compare relative differences among scenarios.

***Calculation for Amendment #1

SOURCE: SCAG Modeling, 2016.

As shown on Table 11, Greenhouse Gas Emissions Summary for the SCAG Region – Amendment #1, the 2016 RTP/SCS and Amendment #1 would result in a net decrease of 16 Percent for building energy emissions when compared to existing conditions (2012 Base Year). As stated in the previously certified 2016 RTP/SCS PEIR, these three sectors account for approximately 70 percent of the total GHG emissions in the SCAG region. According to Table 11, the proposed changes from the 2016 RTP/SCS Amendment #1 project list would

result in a slight increase (1 percent) in total GHG emissions from the transportation sector, including on-road and off-road vehicles. However this increase is considered minimal due to the fact that the overall per capita decrease (21 percent) in GHG emissions would remain the same (see Table 3-12, SB 375 Analysis – Amendment #1). It is important to note that the Plan is not responsible for addressing sectors beyond transportation, building, water-related energy consumption and construction.

TABLE 12 SB 375 Analysis–Amendment #1

	2005 (Baseline)	2020 (Plan)	2035 (Plan)	2040 (Plan)****
Resident population (per 1,000)	17,161	19,060	21,125	21,766
CO ₂ emissions (per 1,000 tons)	204.0*	203.7**	206.9**	206.6**
Per capita emissions (pounds/day)	23.8	21.4	19.6	19.0
% difference from Plan (2020) to Baseline (2005)				-8%*
% difference from Plan (2035) to Baseline (2005)				-18%***
% difference from Plan (2040) to Baseline (2005) (Amendment #1)				-21%***
% difference from Plan (2040) to Baseline (2005) (Original Plan)				-21%***

NOTE: *Based on EMFAC2007

**Based on EMFAC2014

***Included off-model adjustments for 2035 and 2040

****Calculation for Amendment #1.

SOURCE: SCAG modeling, 2016

As shown on Table 12, SB 375 Analysis – Amendment #1, similar to the original plan (see 2016 RTP/SCS PEIR, Table 3.8.4-7, SB 375 Analysis) per capita CO₂ emissions from cars and light duty trucks (only) from the 2016 RTP/SCS Amendment #1, would result in 19 pounds per day. The percent decrease would achieve the 8 percent emissions reduction target by 2020 for the region set by SB 375. By 2035, 19 pounds per day for per capita CO₂ emissions would result from cars and light duty trucks (only). This represents an approximately 18 percent decrease in per capita CO₂ emissions from 2005 to 2035. This 18 percent decrease would meet and exceed the 13 percent emissions reduction target set by CARB for 2035. Furthermore, although there is no per capita GHG emission reduction targets for passenger vehicles set by CARB for 2040, the Plan's GHG emission reduction trajectory shows that more aggressive GHG emission reductions are projected for 2040. The Plan would continue result in an estimated 21 percent decrease in per capita GHG emissions by 2040. By meeting and exceeding the SB 375 targets for 2020 and 2035, as well as achieving an approximately 21 percent decrease in per capita GHG emissions by 2040, the Plan is expected to fulfill and exceed its portion of SB 375 compliance with respect to meeting the State's GHG emission reduction goals. Amendment #1 would not conflict with SB 375 GHG emission reduction targets and would result in a less-than-significant impact and mitigation measures would not be required.

Senate Bill (SB) 32 was signed into law on September 08, 2016. SB 32 codifies the 2030 target stated in Executive Order B-30-15 (40% below 1990 levels by 2030). However, when the certified 2016 RTP/SCS PEIR was being prepared, SB 32 had not been passed. While the 2030 target is now mandated, CARB has not yet set a target for the transportation sector. As such, the approach taken in the 2016 RTP/SCS PEIR, i.e., analysis of the trajectory of GHG emissions reductions as a result of the 2016 RTP/SCS, is still appropriate.

As stated in the certified 2016 RTP/SCS PEIR, the 2016 RTP/SCS is required to meet the GHG reduction targets set by CARB, i.e., 8% reduction by 2020 and 13% by 2035, both on per capita basis relative to 2005 levels. The GHG reduction trajectory of the 2016 RTP/SCS is consistent with and is more aggressive than the ARB GHG Reduction Target Trajectory for the SCAG region, as the Plan's trajectory shows aggressive GHG reductions between 2020 and 2040 (see Figure 3.8.4-1, SB 375 (per capita) Reduction Trajectory, 2016 RTP/SCS PEIR). However, the new statewide 2030 target set forth under EO B-30-15 suggests that an accelerated timeline would be necessary. In order to address the 2030 target, the 2016 RTP/SCS accelerates the reduction of GHG emissions such that by 2030, the Plan is expected to achieve a 14.7% reduction. This reduction would exceed SCAG's current target of 13% by 2035. The GHG reduction trajectory of the 2016 RTP/SCS is more aggressive than CARB's targets between 2020 and 2035. Additionally, the GHG reduction trajectory of the 2016 RTP/SCS beyond 2030 is consistent, if not more aggressive, with the accelerated pace established by SB 32. Further, it should be noted that the goals set forth by AB 32, SB 32 and the Executive Orders are intended to be achieved by all the responsible sectors. Because the 2016 RTP/SCS is demonstrated to meet more than its share of GHG emissions reductions, even on an accelerated schedule, the Plan is not in conflict with the State's long-term GHG emission reduction goals. Amendment #1 would result in the same GHG reduction trajectory as the original Plan and would also not be in conflict with the State's long term GHG emission reduction goals.

The changes proposed in the 2016 RTP/SCS Amendment #1 would result in minimal changes to GHG emissions and would remain consistent with the findings stated in the certified 2016 RTP/SCS EIR.

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

As shown in the tables above, changes are minimal and insignificant when compared to the certified 2016 RTP/SCS PEIR. The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant greenhouse gas emissions and climate change impacts or a substantial increase in the severity of greenhouse gas emissions and climate change impacts beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

HAZARDS AND HAZARDOUS MATERIALS

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to hazards and hazardous materials beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR concluded that there would be potential hazards created due to the disturbance of contaminated property during implementation of the 2016 RTP/SCS and risk of accidental releases due to an increase in the transportation of hazardous materials and the potential for such releases to reach schools within one-quarter mile of transportation facilities affected by the 2016 RTP/SCS (see 2016 RTP/SCS PEIR pp. 3.9-23 – 3.9-42).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to hazards and hazardous materials, or a substantial increase in the severity of impacts to hazards and hazardous materials beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

HYDROLOGY AND WATER QUALITY

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to hydrology and water quality beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS would result in significant impacts to water

quality standards and waste discharge requirements, groundwater supplies or interfere substantially with groundwater recharge, existing drainage patterns of the area, existing drainage patterns of the area, runoff water that would exceed the capacity of existing or planned stormwater drainage systems or providing substantial additional sources of polluted runoff but will have no impact on placing housing within a 100-year flood hazard area (see 2016 RTP/SCS PEIR pp. 3.10-43 – 3.10-63).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to hydrology and water quality, or a substantial increase in the severity of impacts to hydrology and water quality beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

LAND USE AND PLANNING

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to land use and planning beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR analyzed potential impacts of the 2016-2040 RTP/SCS on land use and planning consistency and compatibility. The 2016 RTP/SCS PEIR concluded that implementation of major transportation projects and land use strategies included in the 2016 RTP/SCS has the potential to conflict with applicable land use plans, policies and regulations, physically divide established communities as result of creating real or perceived barriers to pedestrians, bicyclists and motorists and conflict with habitat conservation plans and natural community conservation plans (see 2016 RTP/SCS PEIR pp. 3.11-22 – 3.11-35).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to land use and planning, or a substantial increase in the severity of impacts to land use and planning beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

MINERAL RESOURCES

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to mineral resources beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR concluded that implementation of transportation projects included in the 2016 RTP/SCS could have the potential to result in loss of availability of a known mineral resource that would be of value to the region and the residents of the state and result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan (see 2016 RTP/SCS PEIR pp. 3.12-5 – 3.12-10).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to mineral resources, or a substantial increase in the severity of impacts to mineral resources beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

NOISE

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to noise beyond those already identified in the 2016 RTP/SCS PEIR. Implementation of transportation projects in the 2016 RTP/SCS could potentially cause temporary or permanent increases in ambient noise levels and expose noise-sensitive land uses to noise increases in excess of acceptable levels. However, the assessment in the 2016 RTP/SCS PEIR Noise Chapter adequately evaluates these impacts across the SCAG region at the programmatic level and includes mitigation measures to be implemented at the project level (see 2016 RTP/SCS PEIR pp. 3.13-26 – 3.13-40). Impacts from the proposed projects identified in this Amendment would be expected to fall within the range of impacts previously identified in the 2016 RTP/SCS PEIR.

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant noise impacts or a substantial increase in the severity of noise impacts beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

POPULATION, HOUSING AND EMPLOYMENT

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to population, housing and employment beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR analyzed potential impacts to population growth and current residential and business land uses that could occur upon implementation of the 2016-2040 RTP/SCS. The 2016 RTP/SCS PEIR concluded that the Plan would result in significant impacts and significant cumulative impacts, including substantial induced population growth in areas adjacent to transit, displacement of existing businesses and homes, separation of residences from community facilities and services and impacts on vacant natural lands. The 2016 RTP/SCS PEIR also concluded that the plan would result in indirect significant impacts, including increased population distribution that is expected to occur due to the transportation investments and land use policies identified in the 2016 RTP/SCS (see 2016 RTP/SCS PEIR pp. 3.14-17 – 3.14-27).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The proposed changes stated in Amendment #1, would not cause any population growth, nor would it affect housing and employment. As such, the analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Therefore, incorporation of the proposed changes to the Project List would not result in any new significant impacts to population, housing and employment, or a substantial increase in the severity of impacts to population, housing and employment beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

PUBLIC SERVICES

The proposed changes to the 2016-2040 RTP/SCS Project List identified in the 2016-2040 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to public services beyond those already identified in the 2016-2040 RTP/SCS PEIR. Amendment #1 would not place additional strain on public services and anticipated significant cumulative impacts include demand for more police, fire, emergency personnel and facilities and demand for more school facilities and teachers during implementation of the 2016-2040 RTP/SCS (2016-2040 RTP/SCS PEIR pp. 3.15-21 – 3.15-34).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to public services, or a substantial increase in the severity of impacts to public services beyond those programmatically addressed in the 2016-2040 RTP/SCS PEIR.

RECREATION

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to recreation beyond those already identified in the 2016 RTP/SCS PEIR. Implementation of the 2016 RTP/SCS PEIR would result in significant cumulative impacts, including increased demand of existing neighborhood and regional parks or other recreational facilities in the SCAG region that leads to substantial physical deterioration and increased potential of constructed or expanded recreational facilities that may have adverse physical effects on the environment (see 2016 RTP/SCS PEIR pp. 3.16-15 – 3.16-23).

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to recreation, or a substantial increase in the severity of impacts to recreation beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

TRANSPORTATION, TRAFFIC AND SECURITY

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to transportation, traffic and security beyond those already identified in the 2016 RTP/SCS PEIR. The 2016 RTP/SCS PEIR utilized data from the Regional Travel Demand Model to present a regional analysis for the impacts of the 2016 RTP/SCS on transportation. The 2016 RTP/SCS PEIR identifies the following significant impacts from implementation of the 2016 RTP/SCS: per capita Vehicle Miles Traveled (VMT); average daily Vehicle Hours of Delay (VHD) for light, medium and heavy-duty truck trips; percentage of work opportunities within a 45 minute travel time; and system-wide fatality accident rate and injury accident rate in the SCAG region (see 2016 RTP/SCS PEIR pp. 3.17-37 – 3.17-64). Despite the benefits shown by implementing the 2016 RTP/SCS, impacts from the transportation projects and land use strategies considered in the Plan still remain significant.

Amendment #1 would result in similar daily vehicle miles traveled throughout the SCAG region (Table 13 Daily Vehicle Miles Traveled in 2012 and 2040 – Amendment #1). Tables 14 through 17 indicate that there are slight differences (less than 1 percent) with the proposed changes to the 2016-2040 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1. When compared to the certified 2016 RTP/SCS, these slight differences are not expected to cause any new or substantial impacts previously discussed in the certified 2016 RTP/SCS PEIR.

TABLE 13 Daily Vehicle Miles Traveled in 2012 and 2040—Amendment #1*

County	In Thousands		
	2012 Base Year*	2040 No Project	2040 Plan**
Imperial	5,000	10,000	9,000
Los Angeles	227,000	254,000	234,000
Orange	77,000	85,000	80,000
Riverside	59,000	88,000	81,000
San Bernardino	63,000	90,000	87,000
Ventura	20,000	23,000	21,000
SCAG Total (Amendment #1)	450,000	549,000	514,000
SCAG Total (Original Plan)	450,000	549,000	514,000

NOTE: Numbers are rounded to nearest thousand.

*Please note that 2012 base year transportation network includes project information from the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and approved by Federal Highway Administration in December 2014, as well as projects listed in the 2012 RTP/SCS as last amended in September 2014.

**Calculation for Amendment #1

SOURCE: SCAG modeling, 2016.

TABLE 14 Total Daily Hours of Delay in 2012* and 2040–Amendment #1

County	In Thousands		
	2012 Base Year*	2040 No Project	2040 Plan**
Imperial	1	8	6
Los Angeles	1,636	2,135	1,432
Orange	443	553	314
Riverside	162	468	211
San Bernardino	190	575	242
Ventura	70	135	67
Regional Total (Amendment #1)	2,502	3,875	2,272
Regional Total (Original Plan)	2502	3,875	2,264

SOURCE: SCAG modeling, 2016.

NOTE: *Please note that 2012 base year transportation network includes the 2015 project information from the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and approved by Federal Highway Administration in December 2014, as well as projects listed in the 2012 RTP/SCS as last amended in September 2014

**Calculation for Amendment #1

TABLE 15 Total Daily Heavy-Duty Trucks Trips Hours of Delay in 2012* and 2040–Amendment #1

County	In Thousands of Hours		
	2012*	2040 No Project	2040 Plan**
Imperial	0	1	1
Los Angeles	71	149	96
Orange	18	39	24
Riverside	11	47	27
San Bernardino	17	81	41
Ventura	2	6	3
Regional Total (Amendment #1)	120	322	193***
Regional Total (Original Plan)	120	322	193

SOURCE: SCAG modeling, 2016.

NOTE: * Please note that 2012 base year transportation network includes the 2015 project information from the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and approved by Federal Highway Administration in December 2014, as well as projects listed in the 2012 RTP/SCS as last amended in September 2014

**Calculation for Amendment #1

***Numbers appear to be similar due to rounding (less than 1 percent difference)

TABLE 16 Percentage of PM Peak Period Work Trips Completed Within 45 Minutes–Amendment #1

County	2012 Base Year*	2040 No Project	2040 Plan**
AUTOS – SINGLE OCCUPANCY VEHICLES			
Imperial	95.8%	95.4%	97.0%
Los Angeles	80.4%	81.4%	88.6%
Orange	79.8%	80.3%	86.7%
Riverside	87.2%	83.3%	89.8%
San Bernardino	85.2%	83.3%	87.6%
Ventura	90.0%	89.6%	92.3%
Region	81.9%	82.2%	88.5%
AUTOS – HIGH OCCUPANCY VEHICLES			
Imperial	83.4%	80.7%	84.2%
Los Angeles	75.6%	75.5%	80.8%
Orange	69.5%	69.9%	76.3%
Riverside	76.5%	70.4%	76.2%
San Bernardino	71.2%	67.4%	72.0%
Ventura	72.9%	72.3%	76.7%
Region	73.8%	72.9%	78.3%
TRANSIT			
Imperial	16.7%	12.3%	32.4%
Los Angeles	30.5%	28.0%	32.7%
Orange	13.6%	13.9%	18.8%
Riverside	17.6%	14.6%	15.8%
San Bernardino	10.7%	10.8%	12.5%
Ventura	7.6%	7.0%	10.6%
Regional Total (Amendment #1)	28.4%	26.2%	30.5%
Regional Total (Original Plan)	28.4%	26.2%	30.1%

SOURCE: SCAG Modeling, 2016

*Please note that 2012 base year transportation network includes the 2015 project information from the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and approved by Federal Highway Administration in December 2014, as well as projects listed in the 2012 RTP/SCS as last amended in September 2014.

**Calculation for Amendment #1

TABLE 17 Percentage of Mode Share on Transit and Active Transportation—Amendment #1

Mode Share	2012*	2040 No Project	2040 Plan**
Walk	10.6	10.7	13.5
Bike	1.3	1.6	2.2
Active Transportation	11.9	12.3	15.7
Transit	2.1	2.1	3.1
Total (Amendment #1)***	14.0	14.4	18.9
Total (Original Plan)	14.0	14.4	18.9

SOURCE: SCAG modeling, 2016.

NOTE: * Please note that 2012 base year transportation network includes the 2015 project information from the 2015 Federal Transportation Improvement Program (FTIP) adopted in September 2014 and approved by Federal Highway Administration in December 2014, as well as projects listed in the 2012 RTP/SCS as last amended in September 2014.

**Calculation for Amendment #1

***Numbers appear to be similar due to rounding (less than 1 percent change)

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

As shown in the tables above, changes are minimal and insignificant when compared with the certified 2016 RTP/SCS PEIR. As such, the analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the program level. Therefore, incorporation of the proposed changes to the Project List would not result in any new significant region-wide impacts to transportation, traffic and security, or a substantial increase in the severity of region-wide impacts to transportation, traffic and security beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

TABLE 18 Amendment #1 to 2040 Plan Lane Miles by County (PM Peak Network)

County	Freeway (Mixed-Flow)	Toll*	Major Arterial	Minor Arterial	Collector	Freeway (HOV)	Total (All Facilities)**
Imperial	417	5	662	539	2,465	0	4,089
Los Angeles	4,788	697	8,696	9,055	6,681	360	30,277
Orange	1,432	709	3,802	3,162	1,068	195	10,368
Riverside	1,875	132	1,622	3,627	5,568	131	12,956
San Bernardino	2,657	436	2,250	4,656	7,240	147	17,386
Ventura	563	0	851	1,007	1,017	61	3,498
Total (Amendment #1)	11,733	1,980	17,883	22,046	24,039	894	78,574
Total (Original Plan)	11,732	1,968	18,024	22,075	24,033	896	78,728

NOTE: * Toll includes truck and High-occupancy toll (HOT)

**Calculation for Amendment #1

SOURCE: SCAG modeling, 2016. 2016 Regional Transportation Plan/Sustainable Communities Strategy: Highways & Arterials Appendix. Los Angeles, CA.

UTILITIES AND SERVICE SYSTEMS

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are not expected to cause any new or a substantial increase in the severity of significant impacts to utilities and service systems beyond those already identified in the 2016 RTP/SCS PEIR. Implementation of the 2016-2040 RTP/SCS would result in significant cumulative impacts, including increased demand of storm water drainage facilities and water supplies (see 2016 RTP/SCS PEIR pp. 3.18-26 – 3.18-42).

There are slight increases to Table 18, Amendment #1 to 2040 Plan Lane Miles by County (PM Peak Network) as a result of including the proposed changes to the 2016-2040 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1. However, these changes

would not substantially increase impervious surfaces and are not expected to cause any new or substantial impacts previously discussed in the certified 2016-2040 RTP/SCS PEIR.

Detailed project level analysis, including project level mitigation measures, will be conducted by the implementing agency of each project.

The analysis in the previously certified 2016 RTP/SCS PEIR adequately addresses the range of impacts that could result from the proposed projects (as revised by the 2016-2040 RTP/SCS Amendment #1) at the program level. Thus, incorporation of the proposed changes to the Project List would not result in any new significant impacts to utilities and service systems, or a substantial increase in the severity of impacts to utilities and service systems beyond those programmatically addressed in the 2016 RTP/SCS PEIR.

COMPARISON OF ALTERNATIVES

The proposed changes to the Project List identified in the 2016 RTP/SCS Amendment #1 would not significantly change the comparison of alternatives in the 2016 RTP/SCS PEIR. Potential impacts from the proposed changes to the 2016-2040 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 are anticipated to be within the scope of the programmatic-level comparison among the alternatives already considered in the 2016 RTP/SCS PEIR: 1) No Project Alternative; 2) 2012 RTP/SCS Updated with Local Input Alternative; and 3) Intensified Land Use Alternative.

The Alternatives Chapter of the previously certified 2016 RTP/SCS PEIR adequately addresses the range of alternatives to the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) at the programmatic level. Incorporation of the proposed projects identified in the 2016-2040 RTP/SCS Amendment #1 would not require comparison of any new alternatives or alternatives which are considerably different from or inconsistent with those already analyzed in the 2016-2040 RTP/SCS PEIR. Therefore, no further comparison is required at the programmatic level.

LONG TERM CEQA CONSIDERATIONS

The proposed changes to the 2016 RTP/SCS Project List identified in the 2016 RTP/SCS Amendment #1 would not significantly change the scope of the discussion presented in the Long Term CEQA Considerations Chapter of the 2016 RTP/SCS PEIR, which includes an assessment of programmatic level unavoidable impacts, irreversible impacts, growth inducing impacts and cumulative impacts (see 2016 RTP/SCS PEIR pp. 5-1 – 5-6). Unavoidable and irreversible impacts from inclusion of the proposed changes to the Project List identified in the 2016 RTP/SCS Amendment #1 are reasonably covered by the unavoidable and irreversible impacts previously discussed in the certified 2016 RTP/SCS PEIR.

At the programmatic level, any region-wide growth inducing impacts from the proposed projects (as revised by the 2016 RTP/SCS Amendment #1) are expected to be approximately equivalent to those previously disclosed in the 2016 RTP/SCS PEIR (see 2016 RTP/SCS PEIR pp. 5-1 – 5-6). Overall, the proposed changes to the Project List presented in the 2016 RTP/SCS Amendment #1 are within the scope of the broad, programmatic-level region-wide impacts identified and disclosed in the 2016 RTP/SCS PEIR. Thus, the 2016 RTP/SCS Amendment #1 would not be expected to result in any new long-term impacts that have not been analyzed in the previous 2016 RTP/SCS PEIR, or any long-term impacts that are considerably different from or inconsistent with those already analyzed in the previous 2016 RTP/SCS PEIR.

FINDINGS

After completing a programmatic environmental assessment of the proposed changes described herein to the Project List, SCAG finds that the proposed changes identified in the 2016 RTP/SCS Amendment #1 would not result in either new significant environmental effects or a substantial increase in the severity of any previously identified significant effect. The proposed changes are not substantial changes on a regional level as those have already been adequately and appropriately analyzed in the 2016 RTP/SCS PEIR. The proposed changes to the Project List do not require revisions to the programmatic, region-wide analysis presented in the previously certified 2016 RTP/SCS PEIR.

Further, SCAG finds that the proposed changes to the Project List identified in the 2016 RTP/SCS Amendment #1 do not require any new mitigation measures or alternatives previously unidentified in the 2016 RTP/SCS PEIR, or significantly affect mitigation measures or alternatives already disclosed in the 2016 RTP/SCS PEIR. As such, SCAG has assessed the proposed changes to the Project List included in 2016 RTP/SCS Amendment #1 at the programmatic level and finds that inclusion of the proposed changes would be within the range of and consistent with the findings of impacts analysis, mitigation measures and alternatives contained in the 2016 RTP/SCS PEIR, as well as the Findings of Fact and Statement of Overriding Considerations made in connection with the 2016 RTP/SCS. Therefore, a Subsequent or Supplemental EIR is not required and SCAG concludes that this Addendum to the previously certified 2016 RTP/SCS PEIR fulfills the requirements of CEQA.



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FINAL ADDENDUM #1
TO THE

PROGRAM ENVIRONMENTAL IMPACT REPORT

FOR THE
2016–2040 REGIONAL TRANSPORTATION PLAN/
SUSTAINABLE COMMUNITIES STRATEGY

A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life

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