

Linking Tahoe: Regional Transportation Plan and Sustainable Communities Strategy

Initial Study / Mitigated Negative Declaration / Initial Environmental Checklist / Finding of No Significant Effect

Prepared by:

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With Assistance from:



February 22, 2017

Environmental Checklist Cover Page

1. Project title: 2017 Regional Transportation Plan/Sustainable Communities Strategy
2. Lead agency name and address:
The Tahoe Regional Planning Agency/Tahoe Metropolitan Planning Organization is the California Environmental Quality Act (CEQA) lead agency responsible for preparing an Initial Study/Negative Declaration (IS/ND) and the lead agency for the Initial Environmental Checklist (IEC) under the Tahoe Regional Planning Compact.
Tahoe Regional Planning Agency
P.O. Box 5310
Stateline, Nevada 89449
3. Contact person and phone number
Tahoe Regional Planning Agency: Morgan Beryl, Senior Planner, mberyl@trpa.org (775) 589-5256
4. Project location:
The Lake Tahoe Region lies across the state line of California and Nevada, between the Sierra Nevada crest and the Carson Range. Approximately two-thirds of the Region is located in California, with one-third in Nevada. The Region contains an area of approximately 325,000 acres, of which approximately 123,000 acres comprise the surface of Lake Tahoe.
The geographical extent of the proposed RTP/SCS encompasses all jurisdictions within the Lake Tahoe region (See TRPA/TMPO Boundary map in the Project Description of this document). The Lake Tahoe region spans portions of five counties in two states (Nevada and California) and one incorporated city (City of South Lake Tahoe). The five counties include Washoe, Carson, and Douglas counties in Nevada and El Dorado and Placer Counties in California.
5. Project sponsor's name and address
Tahoe Regional Planning Agency and Tahoe Metropolitan Planning Organization
P.O. Box 5310
Stateline, Nevada 89449
6. General Plan designation:
The Regional Transportation Plan includes lands with a range of General Plan land use designations within both California and Nevada County and City jurisdictions. Land in the Tahoe Region is assigned to one of five classifications: Conservation, Recreation, Residential, Commercial and Public Service, and Tourist. These land use classifications are further supplemented by the Plan Area Statements and Area Plans.
7. Zoning:
The Regional Transportation Plan includes a range of zoning districts located on lands within both California and Nevada County and City jurisdictions in California, it includes lands within the City of South Lake Tahoe, and portions of El Dorado and Placer Counties. In Nevada, it includes portions of Douglas County, Washoe County, and Carson City. It also includes projects located on U.S. Forest Service land within the Lake Tahoe Basin Management Unit.
8. Description of project:
The 2017 Regional Transportation Plan/Sustainable Communities Strategy (2017 RTP/SCS) sets forth an update to the comprehensive transportation system to serve the travel needs of the Lake Tahoe Region and meet regional goals. The plan identifies a long-term vision, regional transportation goals and supportive projects, and policies and programs needed to meet these goals. The 2017 plan is an update to the 2012 Regional Transportation Plan (RTP), *Mobility*

2035, and as such identifies the projects, policies, and programs planned for implementation in the Tahoe Region through 2040, as compared to those identified in *Mobility 2035*, which had a 2035 planning horizon.

9. Surrounding land uses and setting:
The Lake Tahoe Region lies across the state line of California and Nevada, between the Sierra Nevada crest and the Carson Range. Approximately two-thirds of the Region is located in California, with one third located in Nevada. The Region contains approximately 325,000 acres, of which 123,000 acres comprise the surface of Lake Tahoe. Lake Tahoe is the dominant feature of the Region and is the primary focus of local environmental regulations to protect its clarity.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement): NA

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Attachment 4: PEV GHG Methodology
Attachment 5: PEV GHG Reductions
Attachment 6: TRPA-CARB Memo
Attachment 7: 2015 Threshold Evaluation Summary

1 Introduction

1.1 Initial Study/Initial Environmental Checklist

This Initial Study/Initial Environmental Checklist (IS/IEC) has been prepared to assess the potential environmental effects of the 2017 Lake Tahoe Regional Transportation Plan/Sustainable Communities Strategy (2017 RTP/SCS). An Initial Study is a preliminary environmental analysis that is used by the lead agency as a basis for determining whether an Environmental Impact Report (EIR), a Mitigated Negative Declaration (MND), or a Negative Declaration is required for a project under California Environmental Quality Act (CEQA) guidelines. An Initial Environmental Checklist is a preliminary environmental analysis that is used for determining whether an Environmental Impact Statement (EIS), a Mitigated Finding of No Significant Effect, or a Finding of Significant Effect (FONSE) is required for a project under TRPA guidelines. The IS/IEC contains a project description, description of environmental setting, identification of environmental effects by checklist or other similar form, explanation of environmental effects, discussion of mitigation for significant environmental effects, evaluation of the project's consistency with existing, applicable land use controls, and the name of persons who prepared the study.

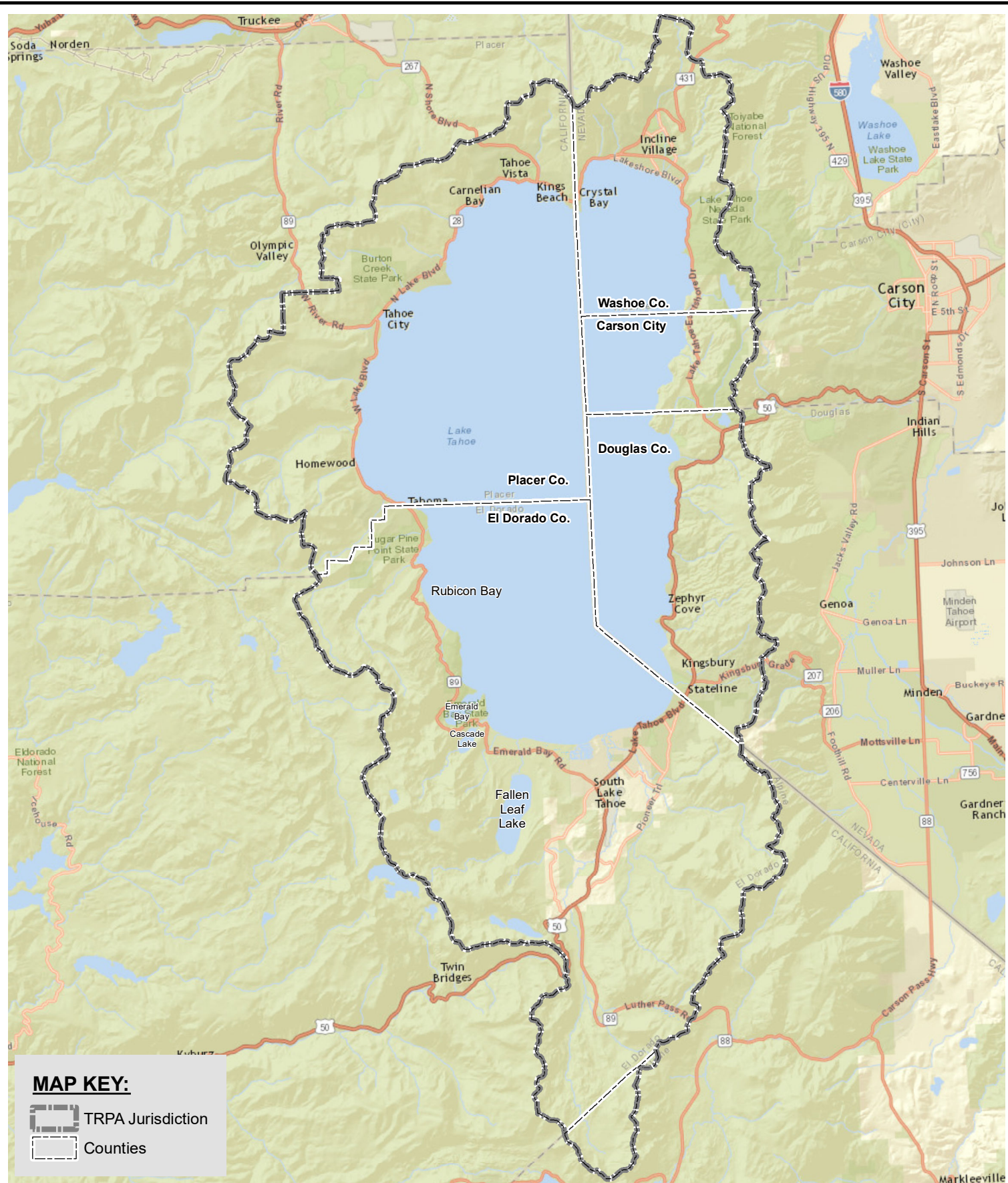
This IS/MND has been prepared pursuant to CEQA. Cal.Pub. Res. Code §21000 et seq. The CEQA lead agency for this project is the Regional Transportation Planning Authority, TRPA.

This document also serves as an IEC/FONSE prepared pursuant to the requirements of Article VI of the Tahoe Regional Planning Agency (TRPA) Rules of Procedures and Chapter 3 of TRPA's Code of Ordinances. TRPA serves as lead agency pursuant to its own regulations.

1.2 Project Location, Setting and Surrounding Land Uses

The Lake Tahoe Region lies across the state line of California and Nevada, between the Sierra Nevada crest and the Carson Range. Approximately two thirds of the Region is located in California, with one third within Nevada. The Region contains an area of approximately 325,000 acres, of which approximately 123,000 acres comprise the surface of Lake Tahoe. Lake Tahoe is the dominant feature of the Region and is the primary focus of local environmental regulations to protect its exceptional clarity.

The Lake Tahoe Region includes an established transportation system. Serving the resident and visitor populations are a local and regional highway network; public and private fixed route transit, shuttles, trolleys, and demand responsive services; general aviation transportation via the South Lake Tahoe Airport; and commercial airlines service from Reno Tahoe International Airport in Reno, NV. There are seven roadway access points into the Region. A chain of state highway segments encircle the Lake. Public transit is provided on the North Shore by the Tahoe Area Regional Transit (TART), operated by Placer County. Transit service on the South Shore is provided by BlueGO, a service of the Tahoe Transportation District, which has incorporated a variety of public and private services, including fixed route and demand response transit and neighborhood and ski shuttle services. Airport shuttle operations, including the North Lake Tahoe Express and the South Tahoe Express, provide shuttle services to the Reno-Tahoe International Airport. Portions of the Region are served by bicycle facilities, including several segments of separated, Class I shared-use trails. Private waterborne excursion and charter services provide cruising opportunities on the Lake. Both the North Shore and South Shore are additionally served by seasonal trolleys, ski and rafting shuttle services, special event shuttles, and other services funded by a combination of public and private funds.



MAP KEY:

- TRPA Jurisdiction
- Counties



TAHOE
REGIONAL
PLANNING
AGENCY

Lake Tahoe Metropolitan Planning Area Boundary



0 1 2 4 Miles

1.3 Document Organization

This document examines the environmental consequences of the 2017 Regional Transportation Plan/Sustainable Communities Strategy (2017 RTP/SCS), which updates the 2012 RTP/SCS. This environmental analysis relies largely on the analysis prepared under the joint Program Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) that evaluated the environmental effects associated with the adoption and implementation of the Lake Tahoe 2035 Regional Transportation Plan (RTP), also known as *Mobility 2035*, including the Sustainable Communities Strategy (SCS) for the California portion of the Lake Tahoe Region (2012 RTP/SCS).

The Tahoe Metropolitan Planning Organization (TMPO) and the Tahoe Regional Planning Agency (TRPA) were the lead agencies for the joint EIR/EIS prepared in accordance with the California Environmental Quality Act (CEQA) and TRPA's Code of Ordinances and Rules of Procedure, respectively. As noted above, the 2017 RTP/SCS updates the 2012 RTP/SCS.

This document has been prepared to reflect minor updates to projects, and/or TRPA, state or Federal standards that have changed the regulatory framework from the 2012 RTP/SCS to the 2017 RTP/SCS. For the majority of impact topic areas, a simple checklist is provided that refers to the relevant 2012 RTP EIS/EIR sections and mitigation measures (Section 3.5, *Abbreviated Environmental Checklist*). For those environmental impact topic areas where the regulatory environment has changed and more detail is needed to describe how previous mitigation strategies would reduce the level of environmental impact to less than significant, a more detailed description and analysis is included (Section 3.4, *Expanded Environmental Checklist*). These sections include: Transportation, Greenhouse Gases, Air Quality, Noise, and Aesthetics. A complete list of the 2012 RTP/SCS EIR/EIS mitigation measures is contained in Attachment 3 of this IS/IEC.

2 Project Description

The 2017 Regional Transportation Plan/Sustainable Communities Strategy (2017 RTP/SCS) updates planning for the comprehensive transportation system to serve the travel needs of the Lake Tahoe Region and meet regional goals. The 2017 RTP/SCS identifies a long-term vision, regional transportation goals and supportive projects, policies and programs needed to meet these goals. The 2017 RTP/SCS is an update to the 2012 Regional Transportation Plan/Sustainable Communities Strategy, *Mobility 2035*, and as such identifies the projects, policies, and programs planned for implementation in the Tahoe Region through 2040, as compared to those identified in *Mobility 2035*, which had a 2035 planning horizon. The 2012 RTP/SCS consisted of a land use scenario and a transportation strategy package and a constrained project list. The “project,” for the purposes of this environmental analysis, is the 2012 plan including the same land use strategy with some changes to the constrained project list (Appendix B), the vision, goals, and policies (Appendix A), and the programs (Chapter 3).

The vision, goals, and policies in the 2017 RTP/SCS are based, in large part on the vision, goals and policies developed for the 2012 RTP/SCS, while drawing from recent, supportive plans such as the 2016 Active Transportation Plan, the 2014 Intelligent Transportation Systems Plan, the draft 2017 Long Range Transit Plan, and local jurisdiction area plans and draft corridor plans. The policies, programs, and projects included in the 2017 plan have been vetted, modified and updated based on feedback received through multiple public and stakeholder workshops, surveys, and meetings held over the last four years. Over 800 people were engaged through qualitative and quantitative methods specifically for feedback on the 2017 RTP/SCS.

2.1 Vision

Based on input during the public outreach phase and a technical advisory committee (see Appendix C, Consultation and Coordination), TRPA updated the vision, goals and policies. The vision was updated as follows with bold representing new text and strike-out representing deleted text:

*An **first-class innovative multimodal transportation system that prioritizes bicycling, walking, and transit**, is in place that gives priority to viable alternatives to the private automobile, and serves residents and visitors appeals to users, and serves mobility needs, while contributing to improving the environmental and socioeconomic health of the Region.*

2.2 Goals and Policies

Previous versions of the regional transportation plan organized goals based on improving individual transportation modes including biking, walking, and transit. The 2017 RTP/SCS's goals are organized around describing and addressing local communities' and recreational visitor fundamental transportation needs while also conforming to state and Federal planning emphasis areas and reporting requirements. Improvements to individual transportation modes like biking, walking, and transit are now captured throughout the plan's policies and strategies, rather than called out as individual goals. However, under Goal 2, Connectivity, transit, active transportation, and intermodal specific policies are organized together. Policies in the 2017 RTP/SCS have been re-organized under the new goals listed below:

2017 RTP Goals

1. Environment: Protect and enhance the environment, promote energy conservation, and reduce greenhouse gas emissions.

2. **Connectivity:** Enhance and sustain the connectivity and accessibility of the Tahoe transportation system, across and between modes, communities, and neighboring regions, for people and goods.
3. **Safety:** Increase safety and security for all users of Tahoe's transportation system.
4. **Operations and Congestion Management:** Provide an efficient transportation network through coordinated operations, system management, technology, and monitoring.
5. **Economic Vitality and Quality of Life:** Support the economic vitality of the Tahoe Region to enable a diverse workforce, sustainable environment, and quality experience for both residents and visitors.
6. **System Preservation:** Provide for the preservation of the existing transportation system through maintenance activities that support climate resiliency, water quality, and safety.

Policies

Policies have been updated to be responsive to agency and public input, Federal and state requirements, and for consistency with local planning efforts. Policies are focused on making connections to recreational access areas, prioritizing public and active transit, making efficient use of the existing system through technology, monitoring, and transportation demand management, increasing safety and security, and supporting economic vitality and high quality of life for residents and experience for visitors. These policies build from the 2012 RTP/SCS which focused on bikeable and walkable town centers and now focuses on connecting town centers and neighborhoods to recreation sites.

Additional policies were included to reflect recent designation of the Tahoe Region as an Urban Metropolitan Planning Organization/Transportation Management Association (MPO/TMA) under the Fixing America's Surface Transportation (FAST) Act. The FAST act requires the TMPO to implement a congestion management process and prioritize transportation funding allocations to projects and programs that demonstrate performance toward meeting regional goals. Policies relevant to this are found under the Operations and Congestion Management and Environment Goals.

The goals and policies concept described above was presented to the public and stakeholders, and input from these groups was incorporated into the plan. A crosswalk comparison between the *Mobility 2035* goals and policies and 2017 RTP/SCS goals and policies is attached at the end of this document (Attachment 1).

Programs

Mobility 2035 planned three programs to support existing infrastructure and incentivize residents and visitors to shift to bicycling, walking, and taking transit: Transportation Demand Management, Transportation System Management, and Transportation Security. The 2017 plan has incorporated these programs into three new focus areas, called "Discover Tahoe," designed to better link people to their recreation destinations; "Visit Tahoe," focusing on strategies to efficiently move visitors to and from the Region; and "Everyday Tahoe," which outlines strategies to encourage walking, biking, and transit use for residents and commuters. The three programs include a range of different strategies, as appropriate, including:

- 🚶 Partnerships with Transportation Network Companies (TNCs)
- 🚶 Real-Time Transit Information
- 🚶 Free-to-the-user Transit
- 🚶 Adaptive System Management
- 🚶 Roadway Asset Management
- 🚶 Access and Amenities

- 🚦 In-Person Traffic Management
- 🚦 Roadway Traveler Information
- 🚦 Locally-Controlled Funding Strategies
- 🚦 Improved Transit Coordination between Local and Regional Providers
- 🚦 Parking Management
- 🚦 Transit and Bicycle Priority Access
- 🚦 Rewards for Electric Vehicle Use
- 🚦 Employer Trip Reduction Ordinance

Through a multi-disciplinary stakeholder process that includes public and private entities, TRPA will begin to update current regulations and spearhead the development of new incentive strategies and partnerships in each of the three focus areas. The process will focus on nationally successful best practices and incorporate stakeholder feedback and interest. These three focus areas build on the three programs included in *Mobility 2035*, incorporating all of the key elements that were analyzed in 2012. The constrained project list includes three years of funding for developing these programs.

2.3 Projects

Projects identified in the 2017 RTP/SCS will meet the needs of a wide variety of residents and visitors (e.g., pedestrians, bicyclists, commuting motorists, and resort visitors, etc.). These include new transit services, new active transportation facilities to support bicycle and pedestrian travel, water quality projects, technology projects, transportation demand management programs, corridor-level projects that provide water quality, safety, and quality of service improvements for bicyclists and pedestrians, transit, and vehicle users, as well as operations and maintenance of the transportation system. Many of the projects in the 2017 plan are the same as those identified in *Mobility 2035*, with slight modifications or updates to reflect status, or increased specificity of projects that were previously in the planning phase.

Projects that are new for the 2017 plan update include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. Design and development of these projects would require site specific environmental analysis conducted by the local jurisdictions, USFS or Caltrans. Projects would be designed to avoid significant environmental impacts and would undergo site specific, project level environmental analysis.

Appendix B includes a complete list of projects identified in the 2017 plan, both constrained (include an identified funding source) and unconstrained (desired project but no funding immediately available). The impacts evaluated here as the “project” are those that will result from changes from the 2012 to the 2017 RTP constrained project list.

The 2012 RTP/SCS Documents can be reviewed at:
www.trpa.org/regionaltransportationplan

3 Initial Study (CEQA)/Initial Environmental Checklist (TRPA)

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3.1 Environmental Factors Potentially Affected

If environmental factors are checked below, there would be at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

<input checked="" type="checkbox"/> Aesthetics	<input type="checkbox"/> Agriculture Resources	<input checked="" type="checkbox"/> Air Quality
<input checked="" type="checkbox"/> Biological Resources	<input checked="" type="checkbox"/> Cultural Resources	<input checked="" type="checkbox"/> Geology Resources
<input checked="" type="checkbox"/> Greenhouse Gas Emissions	<input checked="" type="checkbox"/> Hazards & Hazardous Materials	<input checked="" type="checkbox"/> Hydrology/Water Quality
<input checked="" type="checkbox"/> Land Use/Planning	<input type="checkbox"/> Mineral Resources	<input checked="" type="checkbox"/> Noise
<input checked="" type="checkbox"/> Population/Housing	<input checked="" type="checkbox"/> Public Services	<input checked="" type="checkbox"/> Recreation
<input checked="" type="checkbox"/> Transportation/Traffic	<input checked="" type="checkbox"/> Utilities/Service Systems	<input checked="" type="checkbox"/> Mandatory Findings of Significance

3.2 CEQA Environmental Determination

On the basis of this Initial Study:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
Nick Haven, Transportation and Long Range Planning Manager, Tahoe Regional Planning Agency	Date

3.3 TRPA environmental determination

On the basis of this TRPA Initial Environmental Checklist:

a. The proposed project could not have a significant effect on the environment and a finding of no significant effect shall be prepared on accordance with TRPA's Rules of Procedure	<input type="checkbox"/> Yes	<input type="checkbox"/> No
b. The proposed project could have a significant effect on the environment, but due to the listed mitigation measures which have been added to the project, could have no significant effect on the environment and a mitigated finding of no significant effect shall be prepared in accordance with TRPA's Rules of Procedure.	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
c. The proposed project may have a significant effect on the environment and an environmental impact statement shall be prepared in accordance with this chapter and TRPA's Rules of Procedure.	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Nick Haven, Long Range and Transportation Planning Manager, Tahoe Regional Planning Agency	Date	

3.4 Evaluation of Impacts (Expanded checklist)

3.4.1 Aesthetics (CEQA), Scenic Resources/Community Design and Light and Glare (TRPA)

This section presents the analyses for potential impacts related aesthetics, scenic resources/community design and light and glare. Table 1 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 1 Aesthetics, Scenic Resources/Community Design and Light and Glare				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
1. Have a substantial adverse effect on a scenic vista? (CEQA Ia)	Impact 3.9-2	No	Yes	Yes
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (CEQA Ib)	Impacts 3.9-1 and 3.9-2	No	No	Yes
3. Substantially degrade the existing visual character or quality of the site and its surroundings? (CEQA Ic)	Impacts 3.9-1 and 3.9-2	No	No	Yes
4. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (CEQA Id)	Impact 3.9-3	No	No	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
5. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe? (TRPA item 18a)	Impact 3.9-1 and 3.9-2	No	Yes	Yes
6. Be visible from any public recreation area or TRPA designated bicycle trail? (TRPA item 18b)	Impact 3.9-1	No	Yes	Yes
7. Block or modify an existing view of Lake Tahoe or other scenic vista seen	Impact 3.9-1	No	Yes	Yes

from a public road or other public area? (TRPA item 18c)				
8. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan? (TRPA item 18d)	Impact 3.9-2	No	No	Yes
9. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines? (TRPA item 18e)	Impacts 3.9-1 and 3.9-2	No	No	Yes
10. Include new or modified sources of exterior lighting? (TRPA item 7a)	Impact 3.9-3	No	Yes	NA
11. Create new illumination which is more substantial than other lighting, if any, within the surrounding area? (TRPA item 7b)	Impact 3.9-3	No	Yes	NA
12. Cause light from exterior sources to be cast off-site or onto public lands? (TRPA item 7c)	Impact 3.9-3	No	Yes	NA
13. Create new sources of glare through the siting of the improvements or through the use of reflective materials? (TRPA item 7d)	Impact 3.9-3	No	Yes	NA

Discussion

Changes to the environmental setting that have occurred since preparation of the *2012 Lake Tahoe Regional Transportation Plan and Sustainable Communities Strategy EIR/EIS* (2012 RTP/SCS EIR/EIS) have been documented in the 2015 Threshold Evaluation (TRPA 2016). The 2015 evaluation provides an update to the 2011 Threshold Evaluation of scenic quality scores for travel units considered in the 2012 RTP/SCS EIR/EIS, as well as completion of the draft environmental document for the *Meyers Intersection Improvements at United States Highway (US) 50 and State Route (SR) 89*. It was determined that the Meyers Intersection Improvements would have no adverse impact on aesthetic resources and may have a beneficial effect. Several trail projects and water quality improvement projects have also been added since the 2012 RTP/SCS EIR/EIS, including other corridor revitalization and active transportation projects such as the State Route 89 Recreation Corridor Improvements project, the SR 28 Central Corridor Improvements project, and the Tahoe Valley Greenbelt project. These projects could have a beneficial effect on the overall scenic quality of the Region.

One roadway unit, Unit 20B Kings Beach, moved from nonattainment into attainment with the completion of a portion of the Kings Beach Commercial Core Improvement Project. The score increased 2.5 points from the 2011 rating with scores improving in the man-made features and road structures categories. Implementation of the Kings Beach Commercial Core Improvement Project substantially upgraded the scenic quality of portions of State Route 28 through Kings Beach with reduction of travel lanes and the installation of sidewalks, roundabouts, and landscaping.

No scores for shoreline scenic units decreased since the 2011 scores. Scenic quality scores either stayed the same or improved. One shoreline unit, Unit 8 Rubicon Point increased in score in 2015 which moved this unit into attainment. This score improved because of increased vegetation growth that provides better screening of the structures when viewed from the lake.

Overall, 90 percent of the scenic resources showed little or no change in their composite ratings in the 2015 Threshold Evaluation compared to the 2011 Evaluation. Five percent showed a rapid improvement, 3.5 percent showed a moderate improvement, and 1.5 percent showed a moderate decline. The scenic resources that showed a moderate decline were the result of the gradual deterioration of older recreation areas. Therefore, there was an overall improvement in scenic ratings at a regional scale related to scenic resources associated with recreation and bike trails.

The community design threshold standard continues to be achieved as more development and redevelopment projects occur and replace development that is inconsistent with design standards and guidelines.

These changes have resulted in an overall improvement in existing visual character of the Region. No substantial adverse changes in the scenic environment nor important regulatory settings changes occurred related to aesthetics, since certification of the RTP/SCS EIR/EIS in 2012.

CEQA

1. Have a substantial adverse effect on a scenic vista?

As described under Impact 3.9-2 in the 2012 RTP/SCS EIR/EIS, scenic vistas are prominent in the Lake Tahoe Region and can be viewed from roadways around the lake and from recreation areas and trails throughout the Region. Transportation facilities may either enhance visual access to the scenic resources of the Region, such as by providing new public viewing locations, or may adversely affect scenic vistas by introducing structures that could block or interfere with existing vistas. This impact was determined to be potentially significant for the 2012 RTP/SCS.

The 2012 RTP/SCS EIR/EIS concluded that implementation of Mitigation Measure 3.9-1b would reduce the impact of substantial alteration of a scenic vista to a less-than-significant level. This mitigation requires TRPA to implement scenic impact avoidance and mitigation through TRPA Design Review. Therefore, it was concluded that this impact was reduced to a less-than-significant level.

The number or type of scenic vistas within the Region have not changed since the preparation of the 2012 RTP/SCS EIR/EIS, and the overall visual quality of the Region, including scenic vistas has improved. The 2017 RTP/SCS would affect the same area as previously analyzed, and proposed changes to the plan would not substantially alter the type or density of projects such that different or more severe aesthetic impacts would result. Further, the project would comply with all appropriate mitigation identified in the 2012 RTP/SCS EIR/EIS. Overall, substantial and adverse impacts to scenic vistas would remain **less than significant** and would be similar to what would occur under the 2012 RTP/SCS EIR/EIS. No new significant impacts or substantially more severe impacts would occur; therefore, the findings of the certified EIR/EIS remain valid and no further analysis is required.

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As described under Impacts 3.9-1 and 3.9-2 in the 2012 RTP/SCS EIR/EIS, scenic resources are prominent in the Lake Tahoe Region and can be viewed from roadways around the lake. Transportation facilities may either enhance visual access to the scenic resources of the Region, such as by providing new public viewing locations, or may adversely affect scenic resources by introducing structures that could damage scenic resources. This impact was determined to be potentially significant in the 2012 RTP/SCS EIR/EIS.

Implementation of Mitigation Measures 3.9-1a and 3.9-1b were concluded to reduce the impact of substantial damage to scenic resources to a less-than-significant level. This mitigation would require all construction to be screened from public views and TRPA to implement scenic impact avoidance and mitigation through TRPA Design Review. Therefore, these impacts would be reduced to less than significant.

The number or type of scenic resources within the Region have not changed since the preparation of the 2012 RTP/SCS EIR/EIS, and the overall visual quality of the Region, including scenic resources has improved. The project would affect the same area already analyzed and proposed changes to the plan would not substantially alter the type or density of projects such that different or more severe aesthetic impacts would result. Further, the project would comply with all appropriate mitigation identified in the 2012 RTP/SCS EIR/EIS. Overall, substantial and adverse impacts to scenic resources would be similar to what would occur under the 2012 RTP/SCS EIR/EIS. No new significant impacts or substantially more severe impacts would occur; therefore, the findings of the certified EIR/EIS remain valid and no further analysis is required. This impact would be **less than significant**.

3. Substantially degrade the existing visual character or quality of the site and its surroundings?

See impact discussion for Item 2 above. This impact would be **less than significant**.

4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As described under Impact 3.9-3 in the 2012 EIR/EIS, overhead lighting could be required for road realignments, parking areas, some pedestrian and bicycle trails in urban settings, and some landscaped, public use areas. However, the introduction of a new source of light during nighttime hours in these urban settings would not substantially alter the amount of illumination compared to existing levels of nighttime lighting. This impact was determined to be less than significant. The intent of the 2012 RTP/SCS was to set specific requirements for exterior lighting location, height, and shielding to satisfy public safety requirements but minimize off-site spillage and, to the extent feasible, reduce light pollution coming from within the Region. Changes to the Code of Ordinances required the use of cutoff shields in addition to existing lighting standards that require that lights be directly downward.

The proposed 2017 RTP/SCS would not result in substantial changes in the number or types of projects that would require nighttime lighting or that could increase glare. No substantial changes in the nighttime lighting conditions for the Region have occurred since approval of the 2012 RTP/SCS EIR/EIS. Therefore, no new significant impacts or substantially more severe impacts would occur. The findings of the certified 2012 EIR/EIS remain valid and no further analysis is required. This impact would be **less than significant**.

TRPA

5. Be visible from any state or federal highway, Pioneer Trail or from Lake Tahoe?

See impact discussion for Item 2 above. This impact would be **less than significant**.

6. Be visible from any public recreation area or TRPA designated bicycle trail?

See impact discussions for Items 1 and 2 above. As explained in the 2012 RTP/SCS EIR/EIS, in general, changes to the landscape of the Region by transportation projects have the potential to be either beneficial or adverse, depending on the setting and attainment status of scenic quality criteria of the affected Roadway Travel Unit or Shoreline Travel Unit. Scenic resources impacts are site specific and depend on the location and type of development and individual effect on resources. TRPA scenic requirements in the Code of Ordinances would avoid and reduce adverse scenic effects and many projects would improve existing scenic quality by upgrading roadway appearance and landscaping; however, the potential for development of transportation facilities that could degrade scenic quality in the shorezone and shoreland cannot be entirely dismissed, related to the Lake Tahoe Waterborne Transit Project, and in rural areas from the development of new pedestrian and bicycle trails. Although attaining and maintaining threshold standards, including those protecting scenic quality is an inherent objective of the 2012 and 2017 RTP/SCS, there would be a potential significant scenic impact related to implementation of new projects, because considerable discretion needs to be applied to projects to determine how scenic impacts would be avoided or mitigated. Nonetheless, it is reasonable to expect that significant scenic impacts would be avoided through compliance with TRPA ordinances and thresholds and implementation of adopted mitigation measures. Continued implementation of Mitigation Measures 3.9-1a and 3.9-1b would reduce potential impacts to a less-than-significant level. This impact would be **less than significant**.

7. Block or modify an existing view of Lake Tahoe or other scenic vista seen from a public road or other public area?

See impact discussion for Item 6 above. This impact would be **less than significant**.

8. Be inconsistent with the height and design standards required by the applicable ordinance or Community Plan?

See impact discussion for Item 1 above. Mitigation Measures 3.9-1a and 3.9-1b were identified to mitigate potential scenic impacts to a less-than-significant level. As explained above, the 2017 RTP/SCS would affect the same area as previously analyzed, and proposed changes to the plan would not substantially alter the type or density of projects such that different or more severe aesthetic impacts would result. Further, the project would comply with all appropriate mitigation identified in the 2012 RTP/SCS EIR/EIS. The findings of the certified 2012 EIR/EIS remain valid and no further analysis is required. This impact would be **less than significant**.

9. Be inconsistent with the TRPA Scenic Quality Improvement Program (SQIP) or Design Review Guidelines?

See impact discussions for Items 2 and 6 above. This impact would be **less than significant**.

10. Include new or modified sources of exterior lighting?

The 2012 RTP/SCS set specific requirements for exterior lighting location, height, and shielding to satisfy public safety requirements but minimize off-site spillage and, to the extent feasible, reduce light pollution coming from within the Region. Lighting standards only required that lights be directed downward and do not specifically require the use of cutoff shields. However, changes to the Code of Ordinances required the use of cutoff shields in addition to existing lighting standards that require that lights be directed downward. Although new or modified sources of lighting would be included, the 2012 RTP/SCS EIR/EIS concluded that as new development and redevelopment occur, these lighting standards would be implemented, and the impact of the 2012 RTP/SCS was determined to be beneficial for nighttime views and dark skies. Also, see the impact discussion and analysis for Item 4 above, which concludes that this impact would be **less than significant**.

11. Create new illumination which is more substantial than other lighting, if any, within the surrounding area?

See the impact discussion and analysis for Items 4 and 10 above, which concludes that this impact would be **less than significant**. The 2017 RTP/SCS would not create new illumination that is more substantial than other lighting with the surrounding area.

12. Cause light from exterior sources to be cast off-site or onto public lands?

See the impact discussion and analysis for Items 4 and 10 above, which concludes that this impact would be **less than significant**.

13. Create new sources of glare through the siting of the improvements or through the use of reflective materials?

As explained in the 2012 RTP/SCS EIR/EIS, glare results from high-shine surfaces, such as building windows (glass) and high-gloss painted surfaces. Features that generally may result in these types of impacts are facilities with substantial exterior lighting, illuminated signage, and buildings with reflective glass surfaces. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan update include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The proposed 2017 RTP/SCS would not result in substantial changes in the number or types of projects that would increase glare. No substantial changes in glare have occurred since approval of the 2012 RTP/SCS EIR/EIS. Therefore, no new significant impacts or substantially more severe impacts would occur. The findings of the certified 2012 EIR/EIS remain valid and no further analysis is required. Projects under the 2012 and 2017 RTP/SCS would comply with TRPA Code design standards. See the impact discussion and analysis for Item 4 above, which concludes that this impact would be **less than significant**.

3.4.2 Air Quality

This section presents the analyses for potential impacts to air quality. Table 2 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 2 Air Quality				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
1. Conflict with or obstruct implementation of the applicable air quality plan? (CEQA IIIa)	Impact 3.4-1	No	Yes	NA
2. Violate any air quality standards or contribute substantially to an existing or projected air quality violation? (CEQA IIIb)	Impact 3.4-2 and Impact 3.4-3	No	Yes	Yes
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (CEQA IIIc)	Impact 3.4-2, Impact 3.4-3, and Section 4	No	Yes	Yes
4. Expose sensitive receptors to substantial pollutant concentrations? (CEQA IIId)	Impact 3.4-5	No	Yes	Yes
5. Create objectionable odors affecting a substantial number of people? (CEQA IIIf)	Impact 3.4-6	No	No	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in:				
6. Substantial air pollutant emissions? (TRPA 2a)	Impact 3.4-1	No	Yes	NA
7. Deterioration of ambient (existing) air quality? (TRPA 2b)	Impact 3.4-1, 3.4-3, 3.4-4	No	Yes	Yes

8. Creation of objectionable odors? (TRPA 2c)	Impact 3.4-6	No	No	Yes
9. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally? (TRPA 2d)	Impacts 3.5-1 and 3.5-2	Yes	Yes	Yes
10. Increased use of diesel fuel? (TRPA 2e)	Impact 3.4-2	No	Yes	Yes

DISCUSSION

The 2012 RTP/SCS EIR/EIS contained an extensive evaluation of air quality impacts in the Lake Tahoe Region. Since the certification of the 2012 RTP/SCS EIR/EIS, a few new regulations applicable to the air quality effects of the RTP/SCS have been adopted or revised. All other applicable regulations not mentioned below remain unchanged from those presented in the 2012 RTP/SCS EIR/EIS.

Legislative, policy, and regulatory changes occurred at state, regional, local, and federal government levels. At TRPA, two relevant actions related to air quality occurred. TRPA adopted a series of additions to TRPA's standard conditions of approval for construction projects in November 2013, herein referred to as the TRPA's Best Construction Practices Policy, following Mitigation Measure 3.4-2 in the 2012 RTP/SCS EIR/EIS. These policy revisions include certain limits associated with construction activities within the Lake Tahoe Region. Also, TRPA's Threshold Carrying Capacity standards were updated in December 2012 and revise TRPA's threshold standard for carbon monoxide (CO) from 9 parts per million (ppm) to 6 ppm over an 8-hour period, consistent with state ambient air quality standards. Placer County Air Pollution Control District (PCAPCD) recently adopted revisions to their thresholds of significance for criteria air pollutants, precursors, and toxic air contaminants (TACs) (PCAPCD 2016a).

In addition to the regulatory changes, the available models used to quantify emissions have also changed. The California Air Resources Board (ARB) now recommends the use of EMFAC2014 to quantify emissions from mobile sources. The 2012 RTP/SCS EIR/EIS used EMFAC2011, a previous version of the model. EMFAC2014 accounts for newer regulations, such as Advanced Clean Cars and new truck and bus rules, resulting in generally lower emission factors than EMFAC2011 on a per-vehicle-mile basis - varying by location within the state (ARB 2014). The mobile source emission quantified in this analysis uses EMFAC2014. Table 8a compares the mobile source emission factors between EMFAC2011 and EMFAC2014 for criteria air pollutants analyzed in this section.






Table 3 Weighted Average Emissions Factors for Vehicle Travel in the Lake Tahoe Air Basin in 2035 ¹ (grams per mile)					
On-Road Mobile-Source Emissions Model	ROG	NO _x	CO ¹	PM ₁₀	PM _{2.5}
EMFAC2011	0.046	0.225	0.931	0.006	0.006
EMFAC2014	0.026	0.143	0.561	0.002	0.001
Percent Change	-42%	-37%	-40%	-72%	-74%
<p>Note:</p> <p>¹ 2035 is used as the analysis year to compare both models because EMFAC2011 does not model beyond calendar year 2035, while EMFAC2014 models through 2050.</p> <p>Source: EMFAC2011 (ARB 2011) and EMFAC2014 (ARB 2015b). Data compiled by Ascent Environmental in 2016.</p>					

Apart from these changes, the air quality in the Lake Tahoe Air Basin (LTAB) has not changed substantially since 2012, based on the region's attainment status for the state, national, and TRPA ambient air quality standards (AAQS) (EPA 2016, ARB 2015, TRPA 2016). For the national AAQS (NAAQS), the LTAB continues to be in a moderate maintenance area for CO. For the California AAQS (CAAQS), the LTAB continues to be a nonattainment-transitional area for ozone and a nonattainment area for PM₁₀. The LTAB remains in attainment for all other pollutants for the NAAQS and CAAQS. For the TRPA AAQS, TRPA refers to the completed the 2015 Threshold Evaluation Report, which was released in September 2016. This updates the 2011 Threshold Evaluation Report used in the 2012 RTP/SCS EIR/EIS to determine the region's attainment of TRPA AAQS. The report generally finds that air quality in the region has either remained the same or improved for most pollutant standards, similar to the designations made in 2011 except for the highest 8-hour average concentration of ozone, which has moderately improved since 2011 but has not met TRPA's targets. In the 2011 Threshold Evaluation Report, TRPA's standards for 8-hour concentration of ozone were met. TRPA's targets for the 24-hour PM₁₀ concentration were not met in either the 2011 and 2016 Threshold Evaluation Report. CO targets were also met despite the changes to TRPA's threshold standard for CO (TRPA 2016).

TRPA's Best Construction Practices Policy for Construction Emissions

TRPA is committed to continue to monitor and adaptively manage construction emissions, including criteria air pollutants, through existing permit compliance programs. Pre-grade inspections occur for every permitted project prior to any ground-disturbing activities. These inspections verify that all required permit conditions, such as the location of staging areas and the use of approved power sources are in place prior to intensive construction activities. In addition, compliance inspections occur throughout the period of construction activity to verify compliance with all permit requirements. These compliance inspections are a core function of TRPA and local jurisdiction building departments, and will continue. If an inspection determines that a project is not in compliance with permit conditions, then enforcement actions are taken, which can include stopping activity at the construction site and monetary fines.

In addition to existing permit limits, TRPA developed a Best Construction Practices Policy for Construction Emissions, pursuant to the requirements of 2012 RTP/SCS EIR/EIS mitigation measures adopted by the TRPA Governing Board. This policy addresses potentially significant construction-generated emissions of GHGs associated with development under the Lake Tahoe Regional Plan Update (RPU). The following items constitute TRPA's development of its Best Construction Practices Policy for Construction Emissions:

-  TRPA Code Section 65.8.1 was revised to, among other things, limit idling for certain diesel engines to no longer than 5 minutes in California and 15 minutes in Nevada.
-  TRPA's Standard Conditions of Approval for projects involving grading (Attachment Q, "Standard Conditions of Approval for Construction Projects") and residential projects (Attachment R, "Standard Conditions of Approval for Residential Projects") were revised to:
 -  Limit idling time for diesel powered vehicles exceeding 10,000 pounds in Gross Vehicle Weight and self-propelled equipment exceeding 25 horsepower (hp) to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits;
 -  Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, wherever feasible; and
 -  Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g., schools or hospitals).

The standard conditions of approval for residential and grading projects also include a requirement for inclusion of dust control measures where earth-moving activities would occur.

- Implementation of a Contractor Recognition Program to incentivize exceedance of regulatory requirements related to emissions-reducing construction practices.
- Implementation of a Woodstove Rebate Program for existing residence to help offset emissions generated from construction by reducing PM₁₀, reactive organic gases (ROG), and NO_x emissions from existing non-compliant woodstoves.

These changes were approved at the November 20, 2013 meeting of the TRPA Governing Board and became effective at that time.

The overall effectiveness of these measures and other efforts to attain and maintain air quality standards will continue to be monitored through a comprehensive multi-agency air quality program. The existing air quality monitoring program is being expanded to ensure adequate data continues to be available to assess the status and trends of a variety of constituents. In 2011, TRPA established additional ozone and particulate monitoring at the Stateline Monitoring Site. Working under a cooperative agreement with the TRPA, PCAPCD installed additional ozone and PM₁₀ monitors in Tahoe City and Kings Beach in 2011 (though the monitor at Kings Beach is no longer operated). In 2013, TRPA installed an additional Visibility Monitoring Station and an ozone monitor in South Lake Tahoe.

If ongoing monitoring determines that these measures and other efforts to achieve adopted air quality standards have not been successful, then TRPA will develop and implement additional compliance measures as required by Chapter 16 of the TRPA Code. Additional compliance measures could include additional required construction best practices, an expanded rebate program to replace non-conforming woodstoves or other emission-producing appliances, or restrictions on other emission sources such as off-highway vehicles or boats.

PCAPCD Revised Thresholds of Significance

On October 13, 2016, PCAPCD adopted revised CEQA thresholds of significance for criteria pollutant emissions (PCAPCD 2016a). These revised thresholds are supported by PCAPCD's California Environmental Quality Act Thresholds of Significance Justification Report released in September 2016 (PCAPCD 2016b), and are used in the evaluation of impacts related to the 2017 RTP/SCS EIR/EIS occurring within the Placer County-portion of the Tahoe Region. PCAPCD thresholds of significance are the following:

- a net increase in short-term construction-related emissions of ROG, NO_x, or PM₁₀ that exceed mass emissions of 82 pounds per day (lb/day) in Placer County (PCAPCD 2016b:12);
- a net increase in long-term operation-related (regional) emissions of ROG and NO_x that exceed mass emissions of 55 lb/day and emissions of PM₁₀ that exceed mass emissions of 82 lbs/day in Placer County (PCAPCD 2016b:12);
- exposure of sensitive receptors to TAC emissions that would exceed 10 in 1 million for the carcinogenic risk (i.e., the risk of contracting cancer) or a non-carcinogenic Hazard Index of 1 for the maximally exposed individual (PCAPCD 2012:70); and/or
- a net increase in short-term construction-related or long-term operation-related (regional) emissions of CO that would result in CO concentrations that exceed the 1-hour CAAQS of 20 ppm or the 8-hour CAAQS for the LTAB of 6 ppm.

In addition, according to PCAPCD, a project would result in a considerable contribution to a cumulative impact to air quality if it would result in:

- a net increase in long-term operation-related (regional) emissions of ROG or NO_x that exceed 55 lb/day or emissions of PM₁₀ that exceed 82 lb/day (PCAPCD 2016b:12).

The analysis below addresses the air quality impacts of the 2017 RTP/SCS relative to the changes from the 2012 RTP/SCS while accounting for the regulatory and methodological differences mentioned above.

CEQA

1. Would the project conflict with or obstruct implementation of the applicable air quality plan?

For the California portion of the LTAB, the applicable federal air quality maintenance plan for Lake Tahoe is the Carbon Monoxide Maintenance Plan (CO Maintenance Plan) originally adopted in 1996 and revised in 2004 (ARB 2004). The CO Maintenance Plan tiers off the Regional Transportation Plan – Air Quality Plan, adopted by TRPA in 1992. Impact 3.4-1 from the 2012 RTP/SCS EIR/EIS discusses consistency with air quality plans and transportation conformity. The 2017 RTP/SCS updates the plan’s build-out year and the forecast for vehicle miles travelled (VMT) in the region.

Long-term operational emissions for the 2017 RTP/SCS were updated based on revised region-wide peak daily VMT data provided by TRPA for a 2014 baseline year and 2040 build-out year. TRPA also provided VMT estimates for 2020 and 2035. Peak VMT data for attainment milestone years 2018, 2026, and 2035 were either interpolated or directly taken from TRPA VMT estimates. These milestone years are based on the federal conformity regulation (Section 93.119 (e)) that requires a conformity analysis to include the attainment milestone year of the SIP, the forecast horizon year of the applicable RTP, and have no analysis gaps greater than ten years (TMPO 2011). Part of the SIP maintenance strategy involves allocation of transportation emissions budgets to the maintenance areas, which are shown in Table 4.

To determine whether the 2017 RTP/SCS would continue to meet the transportation emission budgets, daily CO emissions associated with VMT were modeled using EMFAC 2014 and compared with the applicable emissions budget for the respective portions of the LTAB (i.e., Placer and El Dorado Counties). EPA approved the use of EMFAC2014 for transportation conformity in California on December 14, 2015 (EPA 2015). As shown in Table 4 below, CO emissions estimated using EMFAC2014 for the 2017 RTP/SCS would conform to the emissions budgets for 2018; no emission budgets have been set for 2026 or 2035. Thus, the anticipated CO emissions would be within the analysis already evaluated in the 2012 RTP/SCS EIR/EIS under Impact 3.4-1. Thus, the conclusions of the 2012 RTP/SCS EIR/EIS are confirmed as valid and the air quality impact remains **less than significant**.

Table 4 2017 RTP/SCS Mobile-Source Carbon Monoxide Emissions Transportation Conformity Analysis						
Attainment Milestone Year	CO Maintenance Area					
	Eastern El Dorado County (South Shore)			Eastern Placer County (North Shore)		
	Estimated Emissions (TPD)	Emissions Budget (TPD)	Budget Met?	Estimated Emissions (TPD)	Emissions Budget (TPD)	Budget Met?
2018	1.36	10	Yes	0.99	11	Yes
2026	0.63	-	n/a	0.47	-	n/a
2035	0.41	-	n/a	0.31	-	n/a
Notes: CO = carbon monoxide; EMFAC = Mobile-Source Emission Factor Model; TPD = tons per day.						
Source: Data compiled by Ascent Environmental 2016 (2017 RTP/SCS Appendix E)						

2. Would the project violate any air quality standards or contribute substantially to an existing or projected air quality violation?

Construction-Generated Emissions of Criteria Pollutants and Precursor Emissions

The types of short-term construction-generated emission activity would generally be the same under the 2017 RTP/SCS as the 2012 RTP/SCS. The differences between the 2012 RTP and the 2017 RTP consist of 31 new projects (seven Corridor Revitalization/Complete Streets, 10 Transit, seven Active Transportation, four TSM/ITS, and three Operations and Maintenance); and four projects that have been removed from the list (one Active Transportation, two TSM/ITS, and one TMDL/Stormwater). In addition, 28 projects have been completed since the 2012 RTP/SCS EIR/EIS was prepared. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan update include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The 2017 RTP would include most of the same projects as under the 2012 RTP/SCS, some of which are currently being implemented. New projects that would require construction include new interregional transit services, bicycle infrastructure, and corridor revitalization projects, which are similar in type to those included in the 2012 RTP/SCS.

One of the two largest infrastructure construction projects in the 2012 RTP, State Route 89/Fanny Bridge Community Revitalization Project, has been approved and construction has been initiated. The US 50/South Shore Community Revitalization Project is the other large project. Although the 2012 RTP EIR/EIS concluded that project-related construction impacts on air quality would be significant and unavoidable (see Impact 3.4-2 of the 2012 RTP EIR/EIS), a project-level analysis of the SR 89/Fanny Bridge concluded that construction-related ROG, NO_x, PM₁₀, PM_{2.5}, and CO emissions would be less than significant (see Impact 4.2-2 of the SR 89/Fanny Bridge EIR/EIS/EA).

Projects listed in the 2017 RTP/SCS would be constructed at an equivalent or smaller scale than the State Route 89/Fanny Bridge Community Revitalization Project, based on current project descriptions and a comparison of anticipated construction costs and project type (See Attachment 2). Because construction of the SR 89/Fanny Bridge project was determined to have less-than-significant impacts on air quality, project-level construction under the 2017 RTP/SCS would have a similar impact level. This would include construction for all 88 projects identified in the 2012 RTP that continue to remain on the constrained list of projects under the 2017 RTP/SCS and the eight new projects. Therefore, the maximum daily criteria pollutants and precursor emissions would not exceed air quality standards at the project-level with the implementation of TRPA's Best Construction Practices Policy and compliance with all applicable PCAPCD or EDCAQMD rules; and construction emissions would not exceed air district thresholds that could violate air quality standard and could contribute substantially to an existing or projected air quality violation.

Long-Term, Operation-Related (Regional) Emissions of Criteria Air Pollutants and Precursor Emissions

In the 2012 RTP/SCS EIR/EIS, operational emissions of criteria air pollutants and precursors were evaluated for the entire Region using the EMFAC2011 and EMFAC2007 models. Per ARB recommendations, the revised region-wide mobile-source emissions modeling was conducted using EMFAC2014 along with updated VMT data provided by TRPA for 2014 baseline year and 2040 build-out year for the 2017 RTP/SCS. VMT in the Basin would increase by approximately 231,000 VMT/day by 2040 compared to 2014 conditions under the 2017 RTP/SCS. Updated mobile-source emissions modeling results are summarized in Table 5 for ozone precursors, ROG and NO_x, and particulate matter, because the LTAB remains in nonattainment for these pollutants for the CAAQS and TRPA AAQS.

Table 5 Operational Mobile-Source Emissions (Entire Tahoe Region) ¹					
	2014	2040			Percent or Net Change from 2014
		On-Road Vehicle	Waterborne Transit	Total Mobile Source	
Peak Daily VMT	1,937,070	2,168,384			11.9%
ROG (tons/year) ²	350	53	4	57	-293
NO _x (tons/year) ²	604	109	27	136	-469
PM ₁₀ (tons/year) ²	37	34	1	35	-2
PM _{2.5} (tons/year) ²	19	13	1	14	-5
<p>Notes: NO_x = oxides of nitrogen; PM₁₀ = particulate matter less than 10 microns in diameter; PM_{2.5} = particulate matter less than 2.5 microns in diameter; ROG = reactive organic gases; VMT = vehicle miles traveled.</p> <p>¹ VMT and vehicle trips were attributed to TMPO using the Regional Transportation Advisory Committee (RTAC) method.</p> <p>Totals may not sum exactly because of rounding.</p> <p>² Peak daily activity converted to annual activity using a conversion factor of 256</p> <p>Source: Data compiled by Ascent Environmental 2016 (2017 RTP/SCS Appendix D).</p>					

As shown in Table 5, travel model projections for the proposed 2017 RTP/SCS indicate an overall reduction in criteria air pollutants despite an increase in regional VMT by 11.9 percent compared to existing (2014) conditions. This analysis is similar to that in the 2012 RTP/SCS (under Alternative 3) that also estimated an overall reduction in criteria air pollutants despite an increase in regional VMT by 8.8 percent compared to existing (2010) conditions (Impact 3.4-3 in the 2012 RTP/SCS EIR/EIS). Overall reductions in mobile source emissions is due to stricter vehicle emissions standards over the planning period as reflected in both EMFAC2011 and EMFAC2014 emission factors. Thus, the 2017 RTP/SCS would result in a substantial long-term reduction in emissions of ozone precursors and a slight reduction in particulate matter, which is similar to the results under Impact 3.4-3 in the 2012 RTP/SCS EIR/EIS.

Conclusion

The analysis above shows that criteria air pollutant emissions from mobiles sources would be substantially reduced in the long-term, a beneficial effect, and the criteria air pollutant emissions from the construction of projects listed in the 2017 RTP/SCS would be less than significant, considering the implementation of TRPA's adopted Best Construction Practices Policy Mitigation Measure 3.4-2, and Mitigation Measure 3.4-1 in the 2012 EIR/EIS. Therefore, the criteria air pollutant emissions impact of the 2017 RTP/SCS, considering both construction and operational emissions, and the conclusions of the 2012 RTP/SCS EIR/EIS are confirmed as valid and the impact would remain **less than significant**.

3. **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?**

Section 4 of the 2012 RTP/SCS EIR/EIS evaluated cumulative air quality impacts of actions in the Lake Tahoe Region over the planning period of the RTP/SCS. Cumulative impacts on air quality associated with the 2017 RTP/SCS would be similar to and are within the scope of the analysis in the 2012 RTP/SCS EIR/EIS. Because the nature of air quality is inherently cumulative, the impact discussions in CEQA Checklist Items 1 and 2 above serve as the cumulative impact analysis related to air quality effects.

As discussed under CEQA Checklist Item 1 above, the 2017 RTP/SCS would result in mobile-source CO emissions well within the emission budgets allocated for transportation conformity which is the basis for the Lake Tahoe CO Maintenance Plan. Since the 2017 RTP/SCS would not conflict with or obstruct regional CO maintenance efforts, the 2017 RTP/SCS would result in a **less than significant** local carbon monoxide impact.

As discussed in CEQA Checklist Item 1 above, although daily VMT would increase, mobile-source emissions associated with the 2017 RTP/SCS would decrease over the plan implementation period, because of increasingly stringent vehicle emission standards. Construction emissions would also be generated throughout the implementation period, but Mitigation Measure 3.4-1 would ensure that those emissions would not exceed applicable project-level air district thresholds that are meant to abate cumulative air quality effects. On a cumulative level, the 2017 RTP/SCS would result in net reductions in mobile source emissions and would at least meet air district thresholds during project-level construction. Thus, the implementation of the 2017 RTP/SCS **would not contribute to a cumulatively significant regional air quality impact.**




4. Would the project expose sensitive receptors to substantial pollutant concentrations?

Exposure of sensitive receptors to concentrations of CO or TAC emissions could result in negative health impacts.

CO Impacts

Localized CO impacts were analyzed under Impact 3.4-4 of the 2012 RTP/SCS EIR/EIS, which found that all affected intersections would be anticipated to operate at level of service D or better. With respect to localized CO impacts, the Transportation Project-Level Carbon Monoxide Protocol (Garza et al. 1997) states that signalized intersections that operate at an unacceptable level of service (LOS) represent a potential for a CO violation, also known as a “hot spot.” Thus, an analysis of CO concentrations is typically recommended for receptors located near signalized intersections that are projected to operate at LOS E or F.

In the case of worsened LOS, the Sacramento Metropolitan Air Quality Management District (SMAQMD) has developed the following additional screening criteria for localized CO impacts. The SMAQMD screening method was developed using emission factors from ARB’s EMFAC2011 model. Adjusting for the 40 percent lower CO emission factors modeled in EMFAC2014 (see Table 3) and more stringent 8-hour CO standards for the Lake Tahoe area (6 ppm vs. 9.0 ppm), it is appropriate to use the adjusted-SMAQMD screening method for screening of CO impacts for intersections in the LTAB. The applicable screening criteria are as follows (SMAQMD 2009:4-5).

-  The project would not result in an affected intersection experiencing more than 35,111 vehicles per hour (vph) (adjusted from 31,600 vph for the Sacramento area);
-  The project would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway, or other locations where horizontal or vertical mixing of air would be substantially limited; and
-  The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

Note that the CO criteria have been adjusted to reflect the current CO standards for the Lake Tahoe Region and the lower emission factors estimated by EMFAC2014 compared to EMFAC2011.

Under the 2017 RTP/SCS and according to the traffic analysis discussed in Section 3.4.5 in this IS/IEC, all affected intersections would operate at LOS D or better by 2040 except for the intersection between State Route (SR) 28 and SR 267 in Kings Beach, which would operate at LOS E. However, the peak PM hour traffic volume at this intersection would not exceed 2,800 vph (and would operate at LOS E for no more than four

hours) (Donkor pers. comm., 2016). Thus, the SR 28/SR 267 intersection would meet screening criteria for localized CO impacts of 35,111 vph, and the intersections affected by the 2017 RTP/SCS would result in a less-than-significant localized CO impact.

TAC Impacts

With respect to other types of pollutant concentrations, Impact 3.4-5 of the 2012 RTP/SCS EIR/EIS determined that the proposed project would not involve siting of sensitive receptors or siting of any new stationary sources of TAC emissions, and it would not result in exposure of sensitive receptors to substantial TAC concentrations. The 2012 RTP/SCS EIR/EIS concluded that projects built under the 2012 RTP/SCS would result in:

- f** less-than-significant long-term exposure of sensitive receptors in the Region to TACs and
- f** less-than-significant short-term TAC exposure for project-related construction as long as activities adopted the best construction practices identified in Mitigation Measure 3.4-5 of the 2012 RTP/SCS EIR/EIS.

Because the type and scale of projects under the 2017 RTP/SCS are similar to those analyzed under the 2012 RTP/SCS EIR/EIS, the 2017 RTP/SCS would result in TAC impacts similar to those under the 2012 RTP/SCS. Also, the level of TAC emissions from project construction under the 2017 RTP/SCS would be reduced to less-than-significant levels because TRPA's Best Construction Practices Policy are now required for all project construction in the Region. Therefore, long-term exposure of sensitive receptors in the Region to TACs would be less than significant, and short-term TAC exposures would also be less than significant for construction related to projects proposed in the 2017 RTP/SCS. Therefore, this impact would be **less than significant**.

5. Would the project create objectionable odors affecting a substantial number of people?

Impact 3.4-6 of the 2012 RTP/SCS EIR/EIS determined that neither project construction nor operation would create objectionable odors affecting a substantial number of people, nor would the 2012 RTP/SCS result in the siting of sensitive receptors in proximity to an odor source. The 2017 RTP/SCS proposes projects of similar scope and size to those included in the 2012 RTP/SCS. Thus, the conclusions of the 2012 RTP/SCS EIR/EIS remain valid and the impact would be **less than significant**.

TRPA

6. Would the project result in substantial air pollutant emissions?

The 2017 RTP/SCS implements projects and programs that are designed to reduce air pollutant emissions. The construction and operation of projects will comply with the Federal, State, TRPA Code of Ordinances, and other applicable rules including the TRPA's Best Construction Practices Policy. Conformity with federal and state air quality regulations is demonstrated in the CEQA impact discussion, question 1 above. Impacts would be **less than significant**.

7. Would the project result in deterioration of ambient (existing) air quality?

The 2017 RTP/SCS implements projects and programs that are designed to reduce air pollutant emissions. The construction and operation of projects will comply with the Federal, State, TRPA Code of Ordinances, and other applicable rules including the TRPA's Best Construction Practices Policy. Conformity with federal and state air quality regulations is demonstrated in the CEQA impact discussion, question 1 above. Impacts would be **less than significant**.

8. Would the project result in creation of objectionable odors?

Impact 3.4-6 of the 2012 RTP/SCS EIR/EIS determined that neither project construction nor operation would create objectionable odors affecting a substantial number of people, nor would the 2012 RTP/SCS

result in the siting of sensitive receptors in proximity to an odor source. The 2017 RTP/SCS proposes projects of similar scope and size to those included in the 2012 RTP/SCS. Thus, the conclusions of the 2012 RTP/SCS EIR/EIS remain valid and the impact would be **less than significant**.

9. Would the project result in alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally?

The 2017 RTP/SCS program of projects are not of sufficient size to alter the climate of the local project area or the Lake Tahoe Region. Potential changes to the climate as a result of greenhouse gas emissions is evaluated in Checklist Section 3.4.3 of this IS/EIC. Impacts would be **less than significant**.

10. Would the project result in increased use of diesel fuel?

The 2017 RTP/SCS program of projects would result in an increase in diesel fuel consumption for three primary reasons. The plan will include short-term construction activities that use diesel-powered equipment; increase overall VMT, including that of diesel vehicles; and expand transit projects that may increase the use of diesel fuel. Any expansions to transit fleets will include programs to use alternative-fuel and electric and zero emission vehicles by public and private fleets (2017 RTP/SCS Policy 1.4) to the extent feasible. The anticipated increase in diesel fuel consumption would not be sufficient to result in significant air quality impacts, based on the analysis provided above. Impacts would be **less than significant**.

3.4.3 Greenhouse Gas Emissions

This section presents the analyses for potential impacts related to greenhouse gas (GHG) emissions. Table 6 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 6 Greenhouse Gas Emissions				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? (CEQA VIIa)	Impact 3.5-1	No	Yes	Yes
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (CEQA VIIb)	Impact 3.5-1 and 3.5-2	No	Yes	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in:				
3. Alteration of climate, air movement, moisture, or temperature? (TRPA 2d)	Impact 3.5-1	No	Yes	Yes

DISCUSSION

The 2012 RTP/SCS EIR/EIS contained an extensive evaluation of greenhouse gas (GHG) emissions and transportation-related reduction strategies in the Lake Tahoe Region. Since the certification of the EIR/EIS and as described below, several new policies and plans applicable to GHG emissions have been adopted or revised. All other applicable regulations not mentioned below remain essentially unchanged from those presented in the 2012 RTP/SCS EIR/EIS.

Legislative, policy, and regulatory changes occurred at state, regional, local, and federal government levels. Regarding California government actions related to GHG, Governor Brown signed Senate Bill (SB) 32 and Assembly Bill (AB) 197 in August 2016, which extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which requires ARB to achieve

a statewide GHG emission reduction of at least 40 percent below 1990 levels no later than December 31, 2030. At TRPA, two relevant actions related to GHG reduction occurred. TRPA adopted a series of additions to its standard conditions of approval for construction projects in November 2013, herein referred to as TRPA Best Construction Practices Policy; the practices were adopted to implement Mitigation Measure 3.4-2 in the 2012 RTP/SCS EIR/EIS. These policy revisions include certain limits associated with construction activities within the Lake Tahoe Region. TRPA also released its Sustainability Action Plan in December 2013, which is an advisory plan that addresses the agency's approach to reducing GHG from all sectors in the Region, including transportation. Placer County Air Pollution Control District (PCAPCD) recently adopted revisions to their thresholds of significance for GHGs (PCAPCD 2016a). The White House Council on Environmental Quality (CEQ) finalized its non-regulatory guidance on GHG emissions and the effects of climate change in August 2016. CEQ no longer recommends a limit of 25,000 MTCO₂e over which "a qualitative and quantitative assessment [of a proposed action] would be meaningful to decision makers and the public" (CEQ 2010, 2016). The finalized guidance removes references to a quantitative limit and, instead, advises Federal agencies to consider the GHG emissions caused by Federal actions, adapt their actions to consider climate change effects throughout the process, and address these issues in their agency procedures.

In addition to the regulatory changes, the available models used to quantify emissions have also changed. The California Air Resources Board (ARB) now recommends the use of EMFAC2014 to quantify emissions from mobile sources. The 2012 RTP/SCS EIR/EIS used EMFAC2011, a previous version of the model. EMFAC2014 accounts for newer regulations, such as Advanced Clean Cars and new truck and bus rules, resulting in generally lower emission factors than EMFAC2011 on a per-vehicle-mile basis (varying by location within the state) (ARB 2014). The mobile source emission quantified in this analysis uses EMFAC2014.



TRPA Best Construction Practices Policy for Construction Emissions

TRPA is committed to continue to monitor and adaptively manage construction emissions, including GHG, through existing permit compliance programs. Pre-grade inspections occur for every permitted project prior to any ground-disturbing activities. These inspections verify that all required permit conditions, such as the location of staging areas and the use of approved power sources, are in place prior to intensive construction activities. In addition, compliance inspections occur throughout the period of construction activity to verify compliance with all permit requirements. These compliance inspections are a core function of TRPA and local jurisdiction building departments, and will continue. If an inspection determines that a project is not in compliance with permit conditions, then enforcement actions are taken, which can include stopping activity at the construction site and monetary fines.

In addition to existing permit limits, TRPA developed a Best Construction Practices Policy for Construction Emissions, pursuant to the requirements of 2012 RTP EIR/EIS mitigation measures adopted by the TRPA Governing Board. This policy addresses potentially significant construction-generated emissions of GHGs associated with development under the Lake Tahoe Regional Plan Update (RPU). The following items constitute TRPA's development of its Best Construction Practices Policy for Construction Emissions:

TRPA Code Section 65.8.1 was revised to, among other things, limit idling for certain diesel engines to no longer than 5 minutes in California and 15 minutes in Nevada.

TRPA's Standard Conditions of Approval for projects involving grading (Attachment Q, "Standard Conditions of Approval for Construction Projects") and residential projects (Attachment R, "Standard Conditions of Approval for Residential Projects") were revised to:

-  Limit idling time for diesel powered vehicles exceeding 10,000 pounds in Gross Vehicle Weight and self-propelled equipment exceeding 25 horsepower (hp) to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits;
-  Utilize existing power sources (e.g., power poles) or clean-fuel generators rather than temporary diesel power generators, wherever feasible; and

- 📌 Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g., schools or hospitals).

The standard conditions of approval for residential and grading projects also include a requirement for inclusion of dust control measures where earth-moving activities would occur.

- 📌 Implementation of a Contractor Recognition Program to incentivize exceedance of regulatory requirements related to emissions-reducing construction practices.
- 📌 Implementation of a Woodstove Rebate Program for existing residence to help offset emissions generated from construction by reducing PM₁₀, reactive organic gases (ROG), and NO_x emissions from existing non-compliant woodstoves.

These changes were approved at the November 20, 2013 meeting of the TRPA Governing Board and became effective at that time.

The overall effectiveness of these measures and other efforts to attain and maintain air quality standards will continue to be monitored through a comprehensive multi-agency air quality program. If ongoing monitoring determines that these measures and other efforts to achieve adopted air quality standards have not been successful, then TRPA will develop and implement additional compliance measures as required by Chapter 16 of the TRPA Code. While the compliance requirement is directed at criteria air pollutants, measures related to idling time and existing power sources would also have GHG-reduction co-benefits. Additional compliance measures could include additional required construction best practices, an expanded rebate program to replace non-conforming woodstoves or other emission-producing appliances, or restrictions on other emission sources such as off-highway vehicles or boats.

PCAPCD Revised Thresholds of Significance

On October 13, 2016, PCAPCD adopted revised CEQA thresholds of significance for evaluating whether the GHG emissions of different types of projects would be a cumulatively considerable contribution to climate change (PCAPCD 2016b). These revised thresholds are supported by PCAPCD's California Environmental Quality Act Thresholds of Significance Justification Report released in September 2016 (PCAPCD 2016b). PCAPCD's proposed GHG thresholds reflect the CEQA projects reviewed by PCAPCD over the last 13 years (2003-2015) and the CEQA significance thresholds adopted by other air districts in the Sacramento Area (PCAPCD 2016b:5). PCAPCD recommends an array of GHG thresholds for determining whether a project's GHG emissions would be cumulatively considerable. PCAPCD's recommendations include:

a "floor" mass emission threshold of 1,100 MT CO₂e/year, which, if not exceeded, means the project's GHGs would be less than cumulatively considerable (regardless of the project's GHG efficiency).

a "bright-line cap" mass emission threshold of 10,000 MT CO₂e/year levels, which, if exceeded, means the project's GHGs would be cumulatively considerable regardless of the project's GHG efficiency; and

GHG efficiency-based thresholds for land use development projects, depending on whether the project is rural or urban and residential or non-residential (e.g., 4.5 MT CO₂e/year per capita and 26.5 MT CO₂e/year/1,000 square feet for residential and non-residential land uses in urban areas, respectively) (PCAPCD 2016b:E-2).

For the 2017 RTP/SCS IS/IEC, the net change in GHGs from existing conditions were evaluated in light of the mass emission thresholds recently adopted by PCAPCD. The mass emission thresholds are appropriate, because per-capita and per-square-footage efficiency metrics are not suitable for evaluating the transportation projects proposed under the 2017 RTP/SCS. The analysis below addresses the GHG impacts of the 2017 RTP/SCS relative to the changes from the 2012 RTP/SCS (the Modified Alternative 3 analyzed in the EIR/EIS) while accounting for the regulatory differences mentioned above.

Lake Tahoe Sustainability Action Plan

Released in December 2013 after the adoption of the 2012 RTP/SCS, the Sustainability Action Plan (SAP) provides tools to assist local governments, agencies, businesses, residents, visitors, and community groups with prioritizing and adopting consistent sustainability actions throughout the Lake Tahoe Region. The SAP represents an integrated approach to reducing GHG emissions and striving toward zero-impact in all aspects of sustainability, including transportation. Accounting for growth scenarios and land use and transportation strategies aimed at reducing GHG emissions under the 2012 RTP/SCS, the SAP describes the Region's GHG emissions inventory, forecast, and reduction targets. The SAP also includes climate change and adaptation strategies vetted through the Lake Tahoe Sustainability Collaborative and the Tahoe Basin Partnership for Sustainable Communities.

Table 7 below summarizes major recommended actions in the SAP that have the potential to reduce GHG emissions, including those from transportation, during construction and operation of land uses and protect against the effects of climate change. Within the SAP, TMPO and TRPA established a GHG reduction goal for the Tahoe Region of 5 percent and 49 percent below the 2005-2010 average baseline by 2020 and 2035, respectively. Note that the SAP and the recommended actions shown in Table 13a are advisory and have not been adopted into the TRPA Code of Ordinances. Thus, the recommended actions are not currently mandated by TRPA or TMPO (Lake Tahoe Sustainable Communities Program 2013). However, some sustainability actions are supported by policies in the 2017 RTP, and these are included in Table 7.

Table 7 Summary of Recommended Sustainability Actions with GHG Reduction Potential		
Sustainability Benefit	Sustainability Action	Applicable 2017 RTP/SCS Policy
Construction-Related GHG Reduction Actions	Local Construction Materials Procurement in New Development	N/A
	Best Construction Practices	N/A
	Enforce Idling Time Limitations	N/A
	Construction and Demolition Debris Diversion	N/A
	Alternative Fueled Vehicle Fleet	1.4 Facilitate the use of electric and zero emission vehicles and fleets by supporting deployment of vehicle charging infrastructure within the Region, and supporting incentives and education of residents, businesses, and visitors related to the use of electric and zero emission vehicles.
Operation-Related GHG Reduction Actions	Green Building Ordinance	N/A
	Property Assessed Clean Energy Financing Program	N/A
	Energy Efficient Lighting Development Standards	N/A
	Energy Star Appliances	N/A
	Community Choice Aggregation	N/A
	Renewable Energy Standards or Incentives for New Development	N/A
	Innovative Approaches to Energy Generation and Distribution	N/A
	Complete Neighborhoods	1.1 Support mixed-use development that encourages walking, bicycling, and easy access to existing and planned transit stops in town centers.

		5.1 Encourage community revitalization projects that comprehensively support regional and local transportation, housing, land use, environment, and other goals.
	Expand Bicycle and Pedestrian Network	<p>1.3 Mitigate the regional and cumulative traffic impacts of new, expanded, or revised developments or land uses by prioritizing projects and programs that enhance non-automobile travel modes.</p> <p>2.14 Construct, upgrade, and maintain pedestrian and bicycle facilities consistent with the active transportation plan.</p> <p>2.15 Accommodate the needs of all categories of travelers by designing and operating roads for safe, comfortable, and efficient travel for roadway users of all ages and abilities, such as pedestrians, bicyclists, transit riders, motorists, commercial vehicles, and emergency vehicles.</p>
	Improve Transit Services	<p>2.2 Provide frequent transit service to major summer and winter recreational areas.</p> <p>2.3 Establish regional partnerships with surrounding metropolitan areas to expand transit to and from Lake Tahoe.</p> <p>2.4 Improve the existing transit system for the user making it frequent, fun, and free in targeted locations. Consider and use increased frequency, preferential signal controls, priority travel lanes, expanded service areas, and extended service hours.</p> <p>2.9 Develop formal guidelines or standards for incorporating transit amenities in new development or redevelopment as conditions of project approval.</p> <p>2.10 Provide public transit services at locations nearby school campuses.</p> <p>2.11 Coordinate public and private transit service, where feasible, to reduce service costs of service and avoid service duplication.</p>
	Streetscape and Bicycle Amenities	<p>1.3 Mitigate the regional and cumulative traffic impacts of new, expanded, or revised developments or land uses by prioritizing projects and programs that enhance non-automobile travel modes.</p> <p>2.14 Construct, upgrade, and maintain pedestrian and bicycle facilities consistent with the active transportation plan.</p>

		<p>2.15 Accommodate the needs of all categories of travelers by designing and operating roads for safe, comfortable, and efficient travel for roadway users of all ages and abilities, such as pedestrians, bicyclists, transit riders, motorists, commercial vehicles, and emergency vehicles.</p> <p>6.1 Preserve the condition of sidewalks and bicycle facilities and where feasible, maintain their year-round use.</p>
	Electric Vehicle Charging Network	1.4 Facilitate the use of electric and zero emission vehicles and fleets by supporting deployment of vehicle charging infrastructure within the Region, and supporting incentives and education of residents, businesses, and visitors related to the use of electric and zero emission vehicles.
	Alternative Fueled Vehicle Fleet	1.4 Facilitate the use of electric and zero emission vehicles by individuals and in public and private fleets by supporting increased deployment of vehicle charging infrastructure within the Region and surrounding areas, and supporting incentives and education of residents, businesses, and visitors related to the use of electric and zero emission vehicles.
	Solid Waste Diversion	N/A
	Water Efficiency Measures/Water Conservation	N/A
	Replace Wood Stoves and Wood Fireplaces	N/A
	Local Food Production & Farmers Markets	N/A
	Urban Forestry	N/A
Climate Change Impacts	Vulnerability Assessment and Outreach	N/A
	Wildfire Emergency Response	N/A
	Emergency and Disaster Preparedness Training	3.4 Support emergency preparedness and response planning, including the development of regional evacuation plans, and encourage appropriate agencies to use traffic incident management performance measures.
	100-year Storm Event Planning	N/A
	Prohibit Development in 100-Year Flood Plain	N/A
	Evacuation Access	3.4 Support emergency preparedness and response planning, including the development of regional evacuation plans, and encourage appropriate agencies to use traffic incident management performance measures.
	Coordinated Hazard Mitigation Planning	N/A
<p>Notes: GHG = greenhouse gas, TRPA = Tahoe Regional Planning Association</p> <p>Source: Lake Tahoe Sustainable Communities Program 2013: Table 1.1</p>		

CEQA

1. Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction-Generated Greenhouse Gas Emissions

Construction-related GHG emissions were analyzed under Impact 3.5-1 of the 2012 RTP/SCS EIR/EIS. The differences between the 2012 RTP/SCS and the 2017 RTP/SCS consist of 31 new projects (seven Corridor Revitalization/Complete Streets, ten Transit, seven Active Transportation, four ITS, and three Operations and Maintenance); and four projects that have been removed from the list (one Active Transportation, two ITS, and one TMDL/Stormwater). In addition, 28 projects have been completed since the 2012 RTP/SCS EIR/EIS was prepared. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan update include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways.

Similar to the conclusion in the 2012 EIR/EIS, the 2017 RTP/SCS would result in construction-related GHG emissions associated with several transportation infrastructure projects. One of the two largest infrastructure construction projects in the 2012 RTP, the State Route 89/Fanny Bridge Community Revitalization Project, has been approved and construction has been initiated. The US 50/South Shore Community Revitalization Project is the other large project. The SR 89/Fanny Bridge environmental analysis concluded that construction-related GHG emissions would be less than significant (see Impact 4.6-1 of the SR 89/Fanny Bridge Community Revitalization EIR/EIS/EA). Projects listed in the 2017 RTP/SCS would be constructed at an equivalent or smaller scale than the State Route 89/Fanny Bridge Community Revitalization Project, based on a comparison of anticipated construction costs and project type (See Attachment 2). As discussed in the 2012 RTP/SCS EIR/EIS, although detailed construction information for transportation projects in the RTP is not known at this time, use of heavy-duty equipment, construction worker commute trips, material deliveries, and vendor trips would be involved. These activities would result in GHG emissions that would be finite in duration, but when all the construction projects taken together over the implementation period of the RTP, construction-related emissions of GHGs could be substantial without environmentally protective policies and/or mitigation measures.

Implementation of TRPA's Best Construction Practices Policy pursuant to Mitigation Measure 3.5-1 from the 2012 EIR/EIS has occurred and provides environmental protections. As noted in the project description, projects would have to demonstrate compliance with TRPA's Best Construction Practices Policy as a condition of approval. The policy would require reductions in construction-generated GHGs, as would implementation of the previously identified GHG-reducing actions in Mitigation Measure 3.5-1 of the 2012 EIR/EIS. Together, implementation of the policy and the mitigation commitments in the 2012 EIR/EIS would reduce potential construction-related GHG emissions to **less than significant** levels.

Operational Greenhouse Gas Emissions

GHG emissions and climate change impacts of the 2012 RTP/SCS were evaluated in Section 3.5 of the 2012 Draft RTP/SCS EIR/EIS. The methods of analysis for GHG estimation have evolved since the previous EIR/EIS was prepared. Since that time, the Air Resources Board released EMFAC2014, replacing EMFAC2011, the model that was used in the 2012 RTP/SCS EIR/EIS to estimate emission factors from mobile sources in California. EMFAC2014 accounts for newer regulations, such as Advanced Clean Cars and new truck and bus rules, resulting in generally lower emission factors than EMFAC2011 on a per-vehicle-mile basis (ARB 2014b). This analysis updates the mobile source emissions impact analysis using EMFAC2014 and assumes that emission factors from EMFAC2014 are applicable to vehicle activity in the Nevada portion of the Basin as well, consistent with the methodology used in the 2012 RTP/SCS EIR/EIS.

The 2017 RTP/SCS also includes new measures to increase the share of battery- and plug-in-hybrid electric vehicles, additional to the measures that were presented in the 2012 RTP/SCS. This includes increased deployment of charging stations facilitated by the Plug-In Electric Vehicle Infrastructure Readiness Plan for the Tahoe-Truckee Basin (TRPA September 2016). The GHG reductions associated with a greater

percentage of battery electric vehicles (BEVs) and plug-in electric hybrid vehicles (PHEVs) are based on the projection that the miles driven by electric vehicles (EVs) would increase in the Tahoe Region above what is already accounted for in EMFAC2014. TRPA expects that drivers of BEVs and PHEVs would be able to drive more electric miles, because of the increased deployment of charging stations in the Region. Emissions reductions beyond EMFAC estimates due to TRPA's proposed EV measures were estimated by ICF International (ICF 2016 (See Attachment 5)).

Based on TRPA's changes to the list of transportation projects, implementation of the 2017 RTP/SCS would decrease the projected VMT in the Tahoe Basin in 2035 from 1,585,335 daily VMT (as analyzed under Alternative 3 in Impact 3.5-1 of the 2012 EIR/EIS) to 1,149,601 daily VMT. For this analysis, the baseline year is updated to 2014 from 2010 to accommodate new VMT estimates that characterize updated existing conditions. Due to the updated baseline year, 2040 is used as the buildout year for evaluation of the 2017 RTP/SCS, 5 years longer than the previous projection year of 2035.

The updated emissions factor model, proposed VMT changes, and mode-share changes associated with new EV measures in the Region constitute new information related to the RTP/SCS, and an updated analysis of the 2017 RTP/SCS's generation of GHG emissions has been conducted. The aforementioned adjustments and resulting mass GHG emissions for 2014 and 2040 are presented in Table 8 and discussed in further detail below. It is assumed that waterborne transit emissions would remain unchanged from the forecasts in the 2012 RTP/SCS. Table 8 updates Table 3.5-6 in the Draft 2012 RTP/SCS EIR/EIS.

Table 8 2017 RTP/SCS Mobile-Source Greenhouse Gas Emissions (Entire Tahoe Basin) ¹			
	2014	2040	% Change from 2014
Peak Daily VMT	1,937,070	2,168,384	11.9%
Average emissions per mile ² (g CO ₂ /mi)	529	293	-44.7%
Vehicle-related GHG Emissions (tons CO ₂ e/day) ³	1,142	707	-38.1%
Vehicle-related GHG Emissions (MT CO ₂ e/year) ⁴	265,294	164,194	-38.1%
Emissions reductions from Electric Vehicle measures (MT CO ₂ e/year) ⁵	NA	-2,521	-
New Waterborne Transit Emissions (MT CO ₂ e/year)	0	3,168	-
Total Mobile-source Emissions (MT CO₂e/year)⁶	265,294	164,842	-37.9%
Total Net Increase in Mobile-Source GHG Emissions (MT CO₂e/year)		-100,452	
Notes: GHG = greenhouse gas; MT = metric tons; CO ₂ e = carbon dioxide equivalents, VMT = vehicle miles traveled, NA = not available			
¹ VMT and vehicle trips were attributed to TMPO using the RTAC method, which excludes through-trips. The method for determining VMT Threshold Standard attainment includes all in-Basin VMT.			
² As modeled using emission factors from EMFAC2014 for the TMPO jurisdictional area. This includes the entire on-road vehicle fleet in the Region, including autos, buses, light-, medium-, and heavy-duty vehicles and trucks.			
³ Converted to CO ₂ e based on the ratio between CO ₂ , CH ₄ , and N ₂ O emissions as reported for the on-road vehicle section in California's 2014 statewide GHG inventory (ARB 2016).			
⁴ Conversion of peak daily to annual emissions based on a factor of 256 "days" per year was provided by TRPA. This accounts for lower VMT during weekends and holidays.			
⁵ As estimated by ICF International. (Attachment 5)			
⁶ Sum of annual vehicle-related and waterborne transit emissions.			
Source: Data compiled by Ascent Environmental 2016 (2017 RTP/SCS Appendix D).			
Please see 2017 RTP/SCS Appendix D for detailed modeling results.			

The 2012 RTP/SCS EIR/EIS estimated that future mobile-source emissions in the Region (under Alternative 3) would increase by 36,778 MTCO₂e, or 12.1 percent, from 2010 to 2035 alongside an 8.8 percent increase in VMT over the same time period. Travel model projections for the proposed 2017 RTP/SCS indicate a 38 percent decrease in emissions alongside an increase in regional VMT by 11.9 percent compared to existing (2014) conditions. These differences reflect revisions made in EMFAC2014 that include updated refinements made to the mobile source emissions forecasts in ARB's EMFAC model that include greater change-over in the future fleet to more fuel-efficient, cleaner vehicles that would on average emit less GHGs per vehicle than previously predicted. Also, a growing portion of the VMT would be zero-emission battery and near-zero emission plug-in-hybrid electric vehicles, due to new electric vehicle measures. Table 13c below compares the emissions factors per mile between EMFAC2011 and EMFAC2014 for the average vehicle within the TMPO region.

Table 9 Comparison of EMFAC2011 and EMFAC2014 CO ₂ Emission Factors for the TMPO Region ¹			
Year	EMFAC2011 (g CO ₂ /mi)	EMFAC2014 (g CO ₂ /mi)	Percent Change from EMFAC2011
2010	544	545	0.2%
2014	544	529	-2.8%
2035	556	302	-45.7%
2040	NA ²	293	NA

Notes: TMPO = Tahoe Metropolitan Planning Organization, CO₂ = carbon dioxide, NA = not available.
¹ Excludes credits from the Low Carbon Fuel Standards and Pavley regulations
² EMFAC2011 only forecasts emissions through calendar year 2035.
Source: ARB 2016

As shown in Table 9, EMFAC2014 predicts that mobile sources would emit nearly half as much CO₂ emissions per mile than estimated under EMFAC2011 and result in an overall reduction in emissions between 2014 and 2040, despite a greater projected future percent increase in VMT by 2040, compared to existing conditions, than was estimated in the previous analysis. The emissions reductions are primarily due to stricter state and federal policies that will improve future vehicle fuel efficiency (and, therefore, reduce GHG emissions further per average vehicle) more than were previously accounted for under EMFAC2011. Consequently, the combination of improved vehicle fuel efficiency, which would reduce per-vehicle GHG emissions, and the travel efficiency offered by the transportation projects listed in the RTP would result in a beneficial GHG impact for long-term, operational emissions. For a detailed explanation of the difference in methodology used to estimate greenhouse gas emissions for the 2012 vs 2017 Plan, (see Attachment 6, *TRPA-CARB Memo*).

Conclusion

The analysis described above demonstrates that mobile source GHG emissions would be substantially reduced in the long-term, a beneficial effect, and the GHG emissions from construction of projects listed in the 2017 RTP/SCS would be less than significant, considering the implementation of TRPA's adopted best construction practices policy and Mitigation Measure 3.5-1 in the 2012 EIR/EIS. Therefore, the GHG emissions impacts of the 2017 RTP/SCS, considering both construction and operational emissions, would be **less than significant**.

2. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Construction-Generated Greenhouse Gas Emissions

As discussed above, the types and amount of GHG-generating construction activity under the 2017 RTP/SCS would be mitigated to less-than-significant conditions under the implementation of TRPA's Best Construction Practices Policy and Mitigation Measure 3.5-1 from the 2012 EIR/EIS. The effectiveness of TRPA's Best Construction Practices Policy is demonstrated in the environmental analysis of the SR 89/Fanny Bridge Community Revitalization Project, one of the largest projects under the 2012 RTP/SCS, which concluded that construction-related GHG emissions would be less than significant (see Impact 4.6-1 of the 2012 RTP/SCS EIR/EIS). Thus, construction-related emissions of projects under the 2017 RTP/SCS, which are similar in scope to projects in the 2012 RTP/SCS, would not result in a substantial contribution to global climate change and would not conflict with the AB 32 Scoping Plan and the GHG reduction targets specified by SB 32. Thus, the 2017 RTP/SCS would not result in emissions that conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

Operational Greenhouse Gas Emissions

The 2012 RTP/SCS EIR/EIS addressed the RTP's consistency with SB 375 targets and AB 32 goals for the California portion of the Region under Impact 3.5-2. Both of these policies aim to reduce GHG emissions. ARB issued TMPO regional GHG reduction targets pursuant to SB 375. The reduction targets for TMPO are a 7 and 5 percent reduction in GHG emissions from light-duty vehicles per capita by 2020 and 2035, respectively, compared with 2005. The 2012 RTP/SCS determined that the region would reduce GHG emissions from light-duty vehicles per capita by 12.1 percent and 7.2 percent by 2020 and 2035, respectively, exceeding prescribed targets. In 2013, ARB released a resolution formally accepting TMPO/TRPA's determination that the Final SCS would meet the region's GHG emission reduction targets (ARB 2013).

As discussed in (a), above, the emission factors forecasts under EMFAC2014 are considerably lower than those from EMFAC2011, which was used in the 2012 RTP/SCS EIR/EIS analysis. The use of EMFAC2014 emission factors for the 2017 RTP/SCS analysis also affect the methods used to calculate SB 375 target analysis. Because SB 375 targets were originally based on modeling done in EMFAC2011, ARB provided a methodology to estimate the ability of a region to meet SB 375 targets using EMFAC2014 factors while adjusting for the difference between the two model versions (ARB 2015).

VMT and vehicle trips for the California portion of the Basin under the 2017 RTP/SCS were obtained from the TRPA travel demand model (see 2017 RTP/SCS Appendix D) and were estimated using the RTAC method (discussed in Transportation Section 3.4.5 below). Mobile-source emissions associated with VMT from automobiles, light- and medium-duty trucks were estimated using ARB's recommended methodology with respect to using EMFAC2014 emission factors (ARB 2016). Results of mobile-source GHG emissions modeling from automobiles and light- and medium-duty trucks are summarized below in Table 10.

Table 10 2017 RTP/SCS Mobile-Source Greenhouse Gas Emissions for California Portion of Basin ¹					
2005		2020		2035	
Daily VMT ²	1,041,890	Daily VMT	1,038,998	Daily VMT	1,149,601
Population ²	41,377	Population	43,341	Population	45,166
VMT/capita/day	25.18	VMT/capita/day	23.97	VMT/capita/day	25.45
GHG Emissions (tons/day) ³	445	GHG Emissions (tons/day) ³	428	GHG Emissions (tons/day) ³	461
GHG Emissions/Capita (pounds/person/day)	21.52	GHG Emissions/Capita (pounds/person/day)	19.75	GHG Emissions/Capita (pounds/person/day)	20.41

	% change GHG/capita from 2005	-8.2	% change GHG/capita from 2005	-5.2
	Adjusted % change GHG/capita from 2005 ⁴	-8.8	Adjusted % change GHG/capita from 2005 ⁴	-5.0
	SB 375 Target	-7	SB 375 Target	-5
	SB 375 Target Met?	Yes	SB 375 Target Met?	Yes

Notes: GHG = greenhouse gas; MT = metric tons; VMT = vehicle miles traveled.

¹ VMT and vehicle trips were attributed to TMPO using the RTAC method.

² Population and VMT differ from the 2005 estimates presented in the 2012 RTP/SCS EIR/EIS. This is due to corrections made by TRPA that better reflect conditions in 2005.

³ GHG emissions were estimated for the portion of the vehicle fleet comprised of autos, light-, and medium-duty vehicles. 2020 and 2035 values account for additional reductions from proposed electric vehicle measures. This method was reviewed and approved by ARB (Attachment 4)

⁴ Percent change adjusted by difference between EMFAC2011 and EMFAC2014 to allow for equal comparison with prescribed SB375 targets, per ARB recommended methodology (ARB 2015). Adjustment calculations are presented in RTP/SCS Appendix E.

Source: Data compiled by Ascent Environmental (Appendix D, E)

See Appendix D for detailed model output.

The 2017 RTP/SCS would result in a net reduction in total mobile-source GHG emissions associated with light-duty vehicles in the California portion of the Basin in both 2020 and 2035 compared to 2005 levels, despite an increase in population. The proposed plan would meet the GHG/capita reduction targets of 7 percent below 2005 levels by 2020 and 5 percent below 2005 levels by 2035 required by SB 375. Because the proposed plan would meet both of the applicable SB 375 targets, the 2017 RTP would qualify as an SCS. When compared to the analysis under Impact 3.5-2 in the 2012 RTP/SCS EIR/EIS (for Alternative 3), the proposed plan would result in less reductions in emissions, but would still meet SB 375 targets.

Conclusion

The analysis above shows that the GHG emissions resulting from the construction of projects under the 2017 RTP/SCS would be less than significant with the implementation of TRPA's Best Construction Practices. Also, per-capita light-duty mobile source emissions would meet SB 375 targets for TMPO, demonstrating consistency with AB 32. Thus, the 2017 RTP/SCS would be consistent with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases, and this impact would be **less than significant**.

TRPA

3. Would the Project significantly alter climate, air movement, moisture, or temperature?

The 2017 RTP program of projects are not of sufficient size to alter the climate of the local project area or the Lake Tahoe Region. Please see the discussion under CEQA Checklist item 1, above, for an analysis of GHG emissions.

3.4.4 Noise and Vibration

This section presents the analyses of potential impacts related to noise and vibration. Table 11 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 11 Noise and Vibration				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do proposed changes or new circumstances involve new significant impacts or substantially more severe impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
1. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? (CEQA XIIa)	Impacts 3.6-3, 3.6-4, 3.6-5	No	Yes	Yes
2. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? (CEQA XIIb)	Impact 3.6-2	No	No	Yes
3. A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project? (CEQA XIIc)	Impact 3.6-5	No	Yes	Yes
4. A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project? (CEQA XIId)	Impact 3.6-1	No	No	Yes
5. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels? (CEQA XIle)	Page 3.6-10	No	No	NA

6. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels? (CEQA XIIIf)	Page 3.6-10	No	No	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do proposed changes or new circumstances involve new significant impacts or substantially more severe impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
7. Increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan? (TRPA 6a)	Impacts 3.6-3, 3.6-4, 3.6-5	No	Yes	Yes
8. Exposure of people to severe noise levels? (TRPA 6b)	Impacts 3.6-3, 3.6-4, 3.6-5	No	Yes	Yes
9. Single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold? (TRPA 6c)	Page 3.6-10	No	No	NA
10. The placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dB or is otherwise incompatible.	Not Applicable	No	Yes	NA
11. Exposure of existing structures to levels of ground vibration that could result in structural damage?	Impact 3.6-2	No	No	Yes

Discussion

Since the 2012 RTP/SCS EIR/EIS there have been no changes to noise regulations relevant to the 2017 RTP/SCS Update at the federal, state, and County levels. However, since the adoption of TRPA's 2012 Regional Plan Update (TRPA 2012) and 2012 RTP/SCS (Tahoe Metropolitan Planning Organization [TMPO] and TRPA 2012b) TRPA has implemented some new noise policies and programs. For this reason, and because TRPA's noise thresholds serve as the basis for this impact analysis, all current applicable TRPA noise thresholds and policies are presented prior to the impact discussion below.

Lake Tahoe Regional Plan

The elements of the TRPA Regional Plan related to noise include the following: Noise Subelement of the Goals and Policies of the Regional Plan (TRPA 2012); the TRPA Code of Ordinances (TRPA Code), Chapter 68, "Noise Limitations"; and plan area statements, community plans, and area plans (TRPA 2016). These elements are described below, followed by a summary of TRPA's best construction practices policy for construction-generated noise and vibration, TRPA's Region-wide traffic noise mitigation program, and exterior noise policy for mixed-use development.

Goals and Policies

The Regional Plan Noise Subelement of the Goals and Policies includes a goal to attain and maintain CNEL standards that is relevant to the project (Goal N-2) (TRPA 2012:2-26 through 2-28). The underlying policy intended to help achieve that goal includes: establishing specific site design criteria for projects to reduce noise from transportation corridors and which may include using earthen berms, and barriers (Policy N-2.1). The transportation corridor CNEL values override land use-based CNELs within 300 feet of the applicable roadway (TRPA 2012:2-26).




Code of Ordinances

Chapter 68, "Noise Limitations," of the TRPA Code is intended to implement the Noise Subelement of the Goals and Policies document and to attain and maintain TRPA's noise-related Environmental Threshold Carrying Capacities (shown below).

TRPA Code Section 68.4, "Community Noise Levels," states that TRPA shall use CNELs to measure community noise levels and that individual plan area statements shall set forth CNELs that shall not be exceeded by any one activity or combination of activities. The CNELs set forth in the plan area statements are based on the land use classification, the presence of transportation corridors, and the applicable threshold standard. Plan area statements essentially provide plan CNELs and other planning standards specific to a local area within the Tahoe Region. Because this is a plan-level evaluation, the CNELs established by individual plan area statements are not presented or applied in this analysis.

Best Construction Practices Policy for the Minimization of Exposure to Construction-Generated Noise and Ground Vibration

TRPA requires the following standard conditions, among others, for all project construction activity that involves grading; these conditions also apply to the construction of residential projects (TRPA [no date]a:6; TRPA [no date]b:4 to 5).

-  Any normal construction activities creating noise in excess of the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 a.m. and 6:30 p.m.
-  Engine doors shall remain closed during periods of operation except during necessary engine maintenance.
-  Stationary equipment (e.g. generators or pumps) shall be located as far as feasible from noise-sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.

Region-Wide Traffic Noise Mitigation Program

TRPA developed a Region-wide traffic noise mitigation program pursuant to the requirements of Mitigation Measure 3.6-1 in the Regional Plan Update (RPU) EIS (TRPA 2012c:3.6-15 through 3.6-16) and Mitigation Measure 3.6-4 in the 2012 RTP/SCS EIR/EIS (Tahoe Metropolitan Planning Organization [TMPO] and TRPA 2012b:3.6-25 and 3.6-26). The Region-wide traffic noise mitigation program aims to attain and maintain TRPA's contour-based CNEL thresholds in the highway transportation corridors in the Region. The attainment status of these transportation corridor noise thresholds is evaluated every four years in the noise chapter of TRPA's Threshold Evaluation. The *2015 Threshold Evaluation Report* is the most recent version of this report published by TRPA (TRPA 2016).

Also, as stated in the RPU EIS, TRPA will only approve individual projects that can demonstrate compliance with TRPA's CNEL thresholds (TRPA 2012c:3.6-16).

Exterior Noise Policy for Mixed-Use Development

TRPA developed new project review requirements for mixed-use development pursuant to the requirements of Mitigation Measure 3.6-4 in the RPU EIS (TRPA 2012c:3.6-23 through 3.6-24). These requirements were developed to address the fact that new residential units and TAUs with outdoor activity areas that are included as part of redevelopment in town centers (as well as in the Regional Center, the High-Density Tourist District) could be in areas that are exposed to high exterior noise levels (TRPA 2012c:3.6-23 [See the impact discussion for the selected RPU Alternative, Alternative 3]). TRPA requires that each project be evaluated to determine whether it would result in the placement of residential or tourist accommodation uses in areas where the existing noise level exceeds 60 CNEL or is otherwise incompatible. TRPA also requires that each project be assessed to determine whether it would result in the generation of incompatible noise levels in close proximity to existing residential or tourist accommodation uses (see TRPA Initial Environmental Checklist questions 6d and 6e). This 60 CNEL level as stated in TRPA Initial Environmental Checklist question 6d is not a threshold standard and does not supersede any applicable TRPA land use-based or contour-based noise threshold standards. Rather, this 60 CNEL standard, as well as question 6e in the TRPA Initial Environmental Checklist, serve as a screening criteria to determine whether a project-specific noise analysis is needed, in which case a project-specific noise analysis would be required to examine whether a proposed project would result in incompatible noise levels or the exceedance of any TRPA noise threshold standards. If a proposed project would result in incompatible noise levels, feasible mitigation measures would be required prior to approval.

Environmental Threshold Carrying Capacities

TRPA has established environmental thresholds for nine resources, including noise. There are two noise threshold indicators, single noise events and cumulative noise events, which are summarized below and serve as the basis for the current environmental analysis.

Single Noise Events

A noise event can be defined as an unexpected increase in acoustic. Single Noise Event Threshold Standards adopted by TRPA are based on the numerical value associated with the maximum measured level in acoustical energy during an event. This threshold establishes maximum noise levels (Table 12) for aircraft, watercraft, motor vehicles, motorcycles, off-road vehicles, and snowmobiles.

Cumulative Noise Events

TRPA adopted CNEL standards for different zones within the Region to account for expected levels of serenity, as shown in Table 12. The standards, established in the Goals and Policies, apply to the entire Lake Tahoe region. The noise limitations established in Chapter 68 of the TRPA Code do not apply to noise from TRPA-approved construction or maintenance projects, or the demolition of structures, provided that such activities are limited to the hours between 8:00 a.m. and 6:30 p.m. Further, the noise limitations of Chapter 68 shall not apply to emergency work to protect life or property.

TRPA's transportation corridor noise standards for US 50 and State Routes (SRs) 431, 28, 89, 207, and 267 are most relevant to the 2017 RTP/SCS. As indicated in Note 4 of Table 12, TRPA's transportation corridor

noise thresholds for US 50 and SRs 431, 28, 89, 207, and 267 override TRPA's land use-based CNEL thresholds at all locations within 300 feet from the edge of the roadway (TRPA 2012:2-26).

Table 12 TRPA Regional Plan Cumulative Noise Levels	
Single Noise Events	Noise Measurement
Boats (not to exceed any of 3 tests)	82 dB measured at 50 feet with engine at 3,000 rpm
	SAE test J1970 or SAEJ1970, Shoreline Test, 75 dB (standard adopted 7/03)
	SAE Test J2005, Stationary Test, 88 dB if watercraft manufactured on or after 1/1/93 and 90 dB if watercraft manufactured before 1/1/93 (standard adopted 7/03)
Motor Vehicles (less than 6,000 pounds GVW)	76 dB running at <35/mph (82 dB running at >35/mph) measured at 50 feet
Motor Vehicles (greater than 6,000 pounds GVW)	82 dB running at <35/mph (86 dB running at >35/mph) measured at 50 feet
Motorcycles	77 dB running at <35/mph (86 dB running at >35/mph) measured at 50 feet
Off-road Vehicles	72 dB running at <35/mph (86 dB running at >35/mph) measured at 50 feet
Snowmobiles	82 dB running at <35/mph measured at 50 feet
[Land Use-Based] Community Noise Equivalent Levels: Background levels shall not exceed the following:¹	
Land Use Category	CNEL, dB
High Density Residential	55
Low Density Residential	50
Hotel/motel facilities	55
Commercial area	65
Industrial	65
Urban Outdoor Recreation	55
Rural Outdoor Recreation	50
Wilderness and Roadless Areas	45
Critical Wildlife Areas	45
Policy Statement: It shall be a policy of the TRPA Governing Board in the development of the Regional Plan to define, locate, and establish CNEL levels for transportation corridors.	
Transportation [Corridor Noise Standards]²	
U.S. 50	65 ⁽³⁾ dB CNEL
State Routes 89, 207, 28, 267 and 431	55 ⁽³⁾ dB CNEL
South Lake Tahoe Airport	60 ⁽⁴⁾ dB CNEL
Notes: CNEL = community noise equivalent level measurements are weighted average of sound level gathered throughout a 24-hour period; dB = decibels; mph = miles per hour; rpm = revolutions per minute	
¹ The title of this table used in the TRPA Code is "TRPA Regional Plan Cumulative Noise Levels."	
² For this analysis, these standards are referred to as "land use-based CNEL thresholds."	
³ For this analysis, these CNEL standards are referred to as "transportation corridor noise thresholds."	
⁴ This transportation corridor noise threshold overrides the land use CNEL thresholds and is limited to an area within 300 feet from the edge of the road.	
⁵ This threshold applies to those areas impacted by the approved flight paths.	
Source: TRPA Code of Ordinances, Chapter 68	

The distinction between the two types of TRPA noise thresholds (land use-based and transportation) presented in Table 12 is explained below.

1. TRPA's CNEL thresholds for land use types, which are referred to in this IS/IEC as land use-based noise thresholds; and
2. TRPA's noise threshold for transportation noise corridors.

TRPA's land use-based noise thresholds indicate maximum levels of noise exposure for specific types of land uses (e.g., High Density Residential, Low Density Residential, Hotel/Motel Facilities). TRPA's transportation corridor noise standards, including its threshold for the transportation corridors, are referred to as contour-based noise threshold. TRPA's transportation corridor noise standards indicate how loud traffic noise can be at a distance of 300 feet from the edge of the highway. For instance, the transportation corridor noise threshold for US 50 specifies that the 65 CNEL noise contour generated by traffic on US 50 shall not extend more than 300 feet from the highway's edge. Note that if the 65 CNEL of a segment of US 50 extends to 300 feet from the highway edge the traffic noise levels will be greater than 65 CNEL at locations closer to the highway (e.g., approximately 68-69.5 CNEL 150 feet from the highway and approximately 71-72 CNEL 75 feet from the highway, applying the standard attenuation rate for roadway noise) and this condition is considered to be in attainment of the noise threshold established for the US 50 transportation corridor. Thus, the land use-based noise thresholds and contour-based transportation corridor noise thresholds established by TRPA are fundamentally different metrics. This represents a change in the methodology to analyze effects from the noise impact analysis for the 2012 RTP/SCS EIR/EIS (TMPO and TRPA 2012b). The summary of traffic noise level estimates presented in the program-level analysis of the 2012 RTP/SCS EIR/EIS were noise level estimates at a distance of 100 feet from the centerline of each highway segment (TMPO and TRPA 2012b:3.6-22).

Environmental Setting

Noise-Sensitive Land Uses

Noise-sensitive land uses generally include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern due to the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Parks, schools, historic sites, cemeteries, and recreation areas are also generally considered sensitive to increases in exterior noise levels. Places of worship and other similar places where low interior noise levels are of great importance are also considered noise-sensitive. Noise-sensitive land uses are also considered to be vibration-sensitive. Specifically, commercial and industrial buildings where ground vibration (including vibration levels that may be well below those associated with human annoyance) could interfere with operations within the building would be most sensitive to ground vibration.

Noise Sources and Ambient Noise Levels

The predominant source of noise in areas that would be directly affected by implementation of the 2017 RTP/SCS is vehicle traffic traveling on the highways in the Tahoe Region, including US 50 and State Routes 431, 28, 89, 207, and 267. Other noise sources include motorized watercraft activity on the lake, landscape maintenance and snow removal activities (e.g., grass cutting, leaf blowing, snow plowing and blowing) at residential and commercial land uses, and activities typical of urban and suburban environments, such as people recreating outside.

The extent to which existing land uses in the Region are affected by existing traffic noise depends on their proximity to the roadways and sensitivity to noise. Table 13 summarizes existing traffic noise levels along highway segments in the Region. More specifically, Table 13 shows the contour of the applicable TRPA transportation corridor noise standard (i.e., 55 CNEL or 65 CNEL) for each highway segment, the existing distance of that contour from the highway's edge, and the existing traffic noise level 100 feet from the highway centerline. Existing traffic noise contours were modeled in accordance with the FHWA Traffic Noise Model, Version 2.5 (FHWA 2004) using traffic volumes from the transportation impact analysis

discussed in Section 3.4.5 in this IS/IEC. Table 13 presents noise information on highway segments approaching key intersections where congestion occurs, which is consistent with the approach in the transportation impact analysis.

Table 13 Summary of Existing (2016) Traffic Noise Contour Distances and Traffic Noise Levels along Highway Segments in the Tahoe Region ¹				
	Segment Number/Name	Applicable Contour of TRPA Noise Threshold (dB, CNEL)	Distance from Highway Edge to Contour (feet)	Noise Level 100 feet from Highway Centerline (dB, CNEL)
1	US 50, SR 89 (Luther Pass Road) to Navahoe Drive	65	63	63.9
2	US 50, Pioneer Trail to Arapahoe Street	65	69	63.8
3	US 50, SR 89 to Dunlap Drive	65	82	65.7
4	US 50, Tahoe Keys Boulevard to Winnemucca Avenue	65	78	65.5
5	US 50, Edgewood Circle to Al Tahoe Boulevard	65	75	65.3
6	US 50, Pioneer Trail to Park Avenue / Heavenly Village Way	65	71	65.0
7	US 50, Lake Parkway to SR 207 (Kingsbury Grade Road)	65	77	65.0
8	US 50, SR 207 (Kingsbury Grade Road) to Kahle Drive	65	61	63.9
9	SR 28, West of US 50	55	246	61.2
10	SR 28, Red Cedar Drive to W. Lakeshore Boulevard	55	284	62.1
11	SR 28, Cal Neva Drive to Stateline Road	55	301	62.4
12	SR 28, Brassie Avenue to SR 267 (North Shore Boulevard)	55	334	63.2
13	SR 28, North Lake Boulevard to Lake Forest Road	55	399	64.2
14	SR 89, South of Lester Beach Road	55	175	59.1
15	SR 89, Fallen Leaf Road / Heritage Way to Valhalla Road	55	135	57.5
16	SR 89, Tucker Avenue to US 50 (Lake Tahoe Blvd.)	55	248	61.7
17	SR 267, North Avenue to Tiger Avenue	55	244	61.1
18	SR 89, US 50 to Pomo Street	55	358	63.5
19	US 50, North of Lincoln Highway	65	42	61.2
20	SR 207, US 50 to Kahle Drive	55	293	62.4
21	US 50, SR 28 to Kings Canyon Road	65	85	65.7
22	SR 431, SR 28 to 2nd Creek Drive	55	252	61.3
23	SR 267, Tahoe Rim Trail to Gas Line Road	55	503	65.7
24	SR 89, West of Fairway Drive	55	507	65.7
Notes: dB = decibels; CNEL =community noise equivalent level				
¹ Traffic noise levels and contours were modeled in accordance with the Federal Highway Administration Traffic Noise Model (FHWA 2006) using traffic volumes provided by the transportation analysis. The traffic noise levels are considered coarse estimates because they do not consider the noise-attenuating effects of topography or the presence of nearby stands of forest or man-made structures. Refer to RTP/SCS Appendix D for detailed traffic noise modeling input data and output results.				
Source: Modeling by Ascent Environmental 2016.				

As shown in Table 13 the modeled existing (2016) 55 CNEL contour extends further than 300 feet from the highway edge along five highway segments, including the segments of SR 28 between Cal Neva Drive to

Stateline Road, SR 28 between Brassie Avenue to SR 267 (North Shore Boulevard), SR 28 between North Lake Boulevard and Lake Forest Road, SR 89 between US 50 and Pomo Street, SR 267 between the Tahoe Rim Trail and Gas Line Road, and SR 89 west of Fairway Drive. Thus, existing traffic noise levels are not in attainment of TRPA's contour-based transportation corridor noise threshold of 55 CNEL for these five highway segments.

The distances to the 55 CNEL contour shown in Table 13 are conservative—that is, more distant from the highway than they actually are—because they do not account for shielding provided by any nearby stands of coniferous trees or buildings and other made-made structures located along the modeled roadway segments. This consideration is important because studies have found that a dense stand of trees can provide additional noise reduction of 5 to 7 decibels (dB) between a receiver and a noise source (Hoover & Keith Inc. 2000:6-9, as cited in Caltrans 2013a:7-8). Also, for an at-grade facility in an average developed area where the first row of buildings covers at least 40 percent of total area (i.e., no more than 60 percent spacing), the reduction provided by the first row is reasonably assumed to be 3 dB, with 1.5 dB for each additional row (Caltrans 2013a:2-35). For these reasons, the contour distances shown in Table 14 indicate whether the 55 CNEL may *potentially* extend more than 300 feet from the highway edge under existing conditions.

The results of this traffic noise modeling are generally consistent with the findings of TRPA's *2015 Threshold Evaluation Report*. According to the *2015 Threshold Evaluation Report*, the traffic noise level within the US 50 corridor and the SR 431 corridor are "at or somewhat better than target" with respect to TRPA's applicable transportation corridor noise standard but there is "insufficient data" to determine whether the traffic noise level along these highway corridors are worsening or improving (TRPA 2016:10-49 and 10-61). The *2015 Threshold Evaluation Report* also indicates that the traffic noise levels within the corridors of SRs 28, 89, 207, and 267 are "somewhat worse than target" with respect to TRPA's applicable transportation corridor noise standards but there is "insufficient data" to determine whether the traffic noise levels along these corridors are worsening or improving (TRPA 2016:10-46, 10-52, 10-55, and 10-58).

CEQA

1. **Would the Project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

Long-Term, Operational, Transit-, Bike-, and Pedestrian-Related Noise Levels

Impact 3.6-3 of the 2012 RTP/SCS EIR/EIS, beginning on page 3.6-19, evaluated long-term, operational, noise levels that might be associated with new bike trails and pedestrian improvements, expanded transit services, new waterborne transit infrastructure and service, and potentially new park-and-ride lots to support vanpools and inter-regional transit shuttles. This analysis determined this impact to be less than significant because noise associated with the operation of these activities would not expose noise-sensitive receptors to excessive noise levels that would exceed applicable standards.

The differences between the 2012 RTP/SCS and the 2017 RTP/SCS consist of 31 new projects (seven Corridor Revitalization/Complete Streets, 10 Transit, seven Active Transportation, four TSM/ITS, and three Operations and Maintenance); and four projects that have been removed from the list (one Active Transportation, two TSM/ITS, and one TMDL/Stormwater). In addition, 28 projects have been completed since the 2012 RTP/SCS EIR/EIS was prepared. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan update include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The types and locations of transit-, bike-, and pedestrian-related facilities and improvements that would be developed under the 2017 RTP/SCS Update would be similar to those evaluated for the 2012 RTP/SCS. Thus, the conclusions of the 2012 RTP/SCS EIR/EIS remain valid and no further analysis is required.

Long-Term Traffic Noise Levels Along Existing Roadway Alignments

Impact 3.6-4 of the 2012 RTP/SCS EIR/EIS, beginning on page 3.6-21, evaluated long-term traffic noise levels along existing roadways. As described in the regulatory setting above, the program-level analysis of traffic noise under Impact 3.6-4 examined whether there would be a change in the traffic noise level at a distance of 100 feet from the centerline of each modeled highway segment (TMPO and TRPA 2012b:3.6-22). It determined that, even though increased vehicle trips on highways in the Region would result in nominal increases in traffic noise levels (i.e., less than 3 dB), increases in traffic noise levels would occur in highway corridors (i.e., within 300 feet of the highway edge) that are currently not in attainment with respect to the CNEL standards established by TRPA for highway corridors. In addition, the 2012 RTP/SCS EIR/EIS determined that traffic noise levels beyond the highway corridor (i.e., at distances greater than 300 feet from the highway edge) may also exceed CNEL standards established by TRPA for particular land use types, including the 55 CNEL standard for high-density residential land uses, the 50 CNEL standard for low-density residential land uses, the 55 CNEL standard for urban outdoor recreation uses, and the 50 CNEL standard for rural outdoor recreation areas. Moreover, the analysis concluded that traffic noise levels could exceed noise standards established by the local city or county general plan at land uses located near the freeways and that this would be a significant impact.

Although the 2017 RTP/SCS would include the same types of projects that were part of the 2012 RTP/SCS, the traffic analysis prepared for this document indicates that some highway segments would experience different traffic volumes than was determined for the 2012 RTP/SCS. To provide a comparison to the traffic noise levels estimated for the 2012 RTP/SCS, traffic noise levels were also modeled for the traffic volumes projected under the 2017 RTP/SCS. The traffic noise modeling was based on Average Daily Traffic (ADT) volumes and their distribution over the roadway network in the Region (see Section 6.14.18, under Table 24, Traffic and Transportation of this IS/IEC for a detailed discussion of traffic volume projections). Table 14 presents the estimated traffic noise levels for the 2040 planning horizon year of the 2016 RTP/SCS. Table 14 also presents the estimated traffic noise levels for the 2010 baseline year and 2035 planning horizon year used in the 2012 RTP/SCS EIR/EIS. This allows for the projected traffic noise levels of the 2012 RTP/SCS to be compared with those for the 2017 RTP/SCS. The traffic noise levels in Table 14 are presented using two different metrics. The first metric is the traffic noise level at of 100 feet from the centerline of the highway segment. This allows for the simple comparison between the 2012 RTP/SCS and the 2017 RTP/SCS. The second metric is the distance of the applicable CNEL contour from the edge of the highway segment. This indicates whether the traffic noise level would be in attainment of applicable transportation corridor noise threshold established by TRPA. TRPA's contour-based threshold is explained in greater detail in the regulatory setting, above.

As shown in Table 14, the traffic noise levels 100 feet from the centerline of each modeled highway segment would not be substantially different in 2040 with implementation of the 2017 RTP/SCS than was estimated for 2035 in the 2012 RTP/SCS EIR/EIS. Moreover, traffic volumes and associated traffic noise levels along many of the highway segments in 2040 would be lower than the levels projected for 2035 in the 2012 RTP/SCS EIR/EIS. Most importantly, none of the traffic noise levels projected for 2040 for the 2017 RTP/SCS would be more than 3 dB greater than the traffic noise levels estimated along the same highway segment for the baseline 2010 in the 2012 RTP/SCS EIR/EIS. This finding is important because changes in noise levels of 1 to 2 dB are generally not perceptible and people are only able to begin to detect sound level increases of 3 dB in typical noisy environments (Caltrans 2013a:2-45).

Because implementation of the 2017 RTP/SCS would not result in substantially louder traffic noise levels in 2040 than the baseline levels and 2035 levels presented in the 2012 RTP/SCS EIR/EIS, this would not be a significantly more severe impact than the impact identified in the 2012 RTP/SCS EIR/EIS.

Pursuant to the requirements of Mitigation Measure 3.6-1 in the Regional Plan Update (RPU) EIS (TRPA 2012c:3.6-15 through 3.6-16) and Mitigation Measure 3.6-4 of the 2012 RTP/SCS EIR/EIS, and as discussed in the regulatory setting above, TRPA developed its Region-wide traffic noise mitigation program. This program aims to reduce traffic noise levels along highways in the Region where they currently exceed applicable TRPA standards and to maintain traffic noise levels along highways in the Region where they currently do not exceed TRPA thresholds. With this mitigation, the 2012 RTP/SCS EIR/EIS determined that

this impact would be reduced to a less-than-significant level. Moreover, as stated in the RPU EIS, TRPA would only approve individual projects that can demonstrate compliance with TRPA's CNEL thresholds (TRPA 2012:3.6-16).

The 2017 RTP/SCS would include the same types of projects in the same general proximity to nearby existing buildings and structures that were part of the 2012 RTP/SCS. Thus, the program-level impact conclusions of the 2012 RTP/SCS EIR/EIS regarding traffic noise remain valid and no further analysis is required.

Segment Number/Name		Distance of Traffic Noise Contours from Highway Edge (feet) ¹				Traffic Noise Levels 100 feet from Centerline of Highway Segment (CNEL) ¹				
		Applicable Contour of TRPA Noise Threshold (db, CNEL)	Baseline (2010) Provided in 2012 RTP/SCS EIR/EIS	2035 Projection from 2012 RTP/SCS EIR/EIS	2040 Projection	Baseline (2010) Provided in 2012 RTP/SCS EIR/EIS	2035 Projection from 2012 RTP/SCS EIR/EIS	Difference between 2035 and 2010 Baseline	2040 Projection	Difference between 2040 and 2010 Baseline
1	US 50, SR 89 (Luther Pass Road) to Navahoe Drive	65	67	70	78	64.2	64.4	0.2	64.9	0.7
2	US 50, Pioneer Trail to Arapahoe Street	65	75	78	78	64.2	64.4	0.2	64.5	0.3
3	US 50, SR 89 to Dunlap Drive	65	90	95	87	66.2	66.4	0.2	66.0	-0.2
4	US 50, Tahoe Keys Boulevard to Winnemucca Avenue	65	86	91	83	66.0	66.2	0.2	65.8	-0.2
5	US 50, Edgewood Cir. to Al Tahoe Boulevard	65	82	86	79	65.7	65.9	0.2	65.6	-0.1
6	US 50, Pioneer Trail to Park Avenue / Heavenly Village Way	65	74	76	74	65.2	65.4	0.2	65.3	0.1
7	US 50, Lake Parkway to SR 207 (Kingsbury Grade Road)	65	83	86	81	65.4	65.6	0.2	65.3	-0.1
8	US 50, SR 207 (Kingsbury Grade Road) to Kahle Drive	65	69	74	64	64.5	64.9	0.4	64.2	-0.3
9	SR 28, West of US 50	55	276	323	266	61.9	62.9	1.0	61.7	-0.2
10	SR 28, Red Cedar Drive to W. Lakeshore Boulevard	55	312	324	309	62.7	62.9	0.2	62.6	-0.1
11	SR 28, Cal Neva Drive to Stateline Road	55	316	317	326	62.7	62.8	0.1	62.9	0.2

12	SR 28, Brassie Avenue to SR 267 (N Shore Boulevard)	55	381	393	371	64.0	64.2	0.2	63.8	-0.2
13	SR 28, N Lake Boulevard to Lake Forest Road	55	430	458	449	64.7	65.1	0.4	65.0	0.3
14	SR 89, South of Lester Beach Road	55	190	216	196	59.6	60.4	0.8	59.8	0.2
15	SR 89, Fallen Leaf Road / Heritage Way to Valhalla Road	55	147	169	150	58.0	58.9	0.9	58.1	0.1
16	SR 89, Tucker Avenue to US 50 (Lake Tahoe Boulevard)	55	350	368	265	63.7	64.0	0.3	62.1	-1.6
17	SR 267, North Avenue to Tiger Avenue	55	266	280	269	61.7	62.0	0.3	61.7	0.0
18	SR 89, US 50 to Pomo Street	55	388	411	490	64.0	64.4	0.4	65.5	1.5
19	US 50, North of Lincoln Hwy	65	46	49	49	61.7	62.0	0.3	62.0	0.3
20	SR 207, US 50 to Kahle Drive	55	329	331	310	63.1	63.1	0.0	62.7	-0.4
21	US 50, SR 28 to Kings Canyon Road	65	96	96	94	66.3	66.3	0.0	66.2	-0.1
22	SR 431, SR 28 to 2nd Creek Drive	55	272	280	268	61.8	62.0	0.2	61.7	-0.1
23	SR 267, Tahoe Rim Trail to Gas Line Road	55	542	577	577	66.2	66.5	0.3	66.6	0.4
24	SR 89, West of Fairway Drive	55	478	511	591	65.3	65.8	0.5	66.7	1.4

Notes: dB = decibels; CNEL =community noise equivalent level

¹ Traffic noise levels and contours were modeled in accordance with the Federal Highway Administration Traffic Noise Model (FHWA 2006) using traffic volumes provided by the transportation analysis. The traffic noise levels are considered coarse estimates because they do not consider the noise-attenuating effects of topography or the presence of nearby stands of forest or man-made structures. Refer to 2017 RTP/SCS Appendix D for detailed traffic noise modeling input data and output results.

Source: Data provided by Ascent Environmental in 2016

Long-Term Traffic Noise Levels Along Realigned Roadways

Impact 3.6-5 of the 2012 RTP/SCS EIR/EIS, beginning on page 3.6-26, evaluated long-term traffic noise levels along realigned roadways, specifically the SR 89/Fanny Bridge Community Revitalization Project and the US 50 South Shore Community Revitalization Project. This analysis determined this to be a significant impact at the program level because projects involving the realignment of existing roadways would relocate traffic and attendant noise to locations that were previously more quiet and to where future traffic noise levels could exceed applicable noise thresholds and standards established by TRPA as well as noise standards established by local jurisdictions. Mitigation Measure 3.6-5 of the 2012 RTP/SCS EIR/EIS required detailed, project-specific noise studies of roadway realignment projects and the implementation of project-specific measures to ensure that TRPA noise thresholds would not be exceeded and to ensure that traffic noise levels that would expose noise-sensitive receptors to levels that exceed applicable standards of local jurisdictions would be reduced to the extent necessary. Mitigation Measure 3.6-5 required TRPA not to approve any roadway realignment project that would cause traffic noise levels to exceed a noise threshold standard designated by TRPA, or that would result in a long-term noise level increase, of any magnitude, in an area where the applicable TRPA noise threshold is already exceeded. Mitigation Measure 3.6-5 included an array of measures that could be used to achieve these performance criteria.

The 2017 RTP/SCS does not include any roadway alignment projects that were not part of the 2012 RTP/SCS. Thus, the program-level impact conclusions of the 2012 RTP/SCS EIR/EIS remain valid and no further analysis is required.

A detailed project review has been conducted in the *State Route 89/Fanny Bridge Community Revitalization Project EIR/EIS/EA* (TTD, TRPA, and FHWA 2014). This analysis included mitigation to ensure that traffic noise levels along the realigned segment of SR 89 does not exceed 55 CNEL at a distance of 300 feet from the highway edge, thereby ensuring that the project would not result in an exceedance of applicable. A project-level review of the proposed US 50/South Shore Community Revitalization Project is currently underway.

Conclusion

The analysis above shows that the conclusions of the 2012 RTP/SCS EIR/EIS remain valid and that implementation of TRPA's best construction practices policy for construction-generated noise and vibration, TRPA's Region-wide traffic noise mitigation program, existing exterior noise policy for mixed-use development, and Mitigation Measures 3.6-4 and 3.6-5 would reduce this impact to a **less-than-significant level**, consistent with the conclusion of the 2012 RTP/SCS EIR/EIS.

2. Would the Project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impact 3.6-2 of the 2012 RTP/SCS EIR/EIS, beginning on page 3.6-16, evaluated sources of ground vibration associated with the 2012 RTP/SCS. This analysis determined that implementation of the 2012 RTP/SCS would include construction activities that could expose nearby buildings, structures, and people to excessive levels of ground vibration mainly because of the potential for impact pile driving and blasting to occur. More specifically, existing structures located within 100 feet of impact pile driving activity, within 60 feet of sonic pile driving, or within 85 feet of blasting activity, could become damaged. Moreover, people residing in dwellings located within 300 feet of impact pile driving, within 175 feet of sonic pile driving, or within 250 feet of blasting, could experience excessive ground vibration levels that exceed the Federal Transit Administration's (FTA) human response standards. This was determined to be a significant impact of the 2012 RTP/SCS. Pursuant to Mitigation Measure 3.6-2 of the 2012 RTP/SCS EIR/EIS, TRPA developed a Best Construction Practices Policy for the Minimization of Exposure to Construction-Generated Noise and Ground Vibration, and Mitigation Measure 3.6-2 requires TRPA to only approve individual construction projects that would comply with these best construction practices. As a result, the 2012 RTP/SCS EIR/EIS determined that this impact would be reduced to a **less-than-significant level**.

The 2017 RTP/SCS Update would include the same types of projects in the same general proximity to nearby existing buildings and structures that were part of the 2012 RTP/SCS. Thus, the program-level impact conclusions of the 2012 RTP/SCS EIR/EIS regarding ground vibration remain valid and no further analysis is required. Implementation of TRPA's Best Construction Practices Policy for Construction-Generated Noise and Vibration and Mitigation Measure 3.6-2 would reduce the magnitude of this impact to a **less-than-significant level**, consistent with the conclusion of the 2012 RTP/SCS EIR/EIS.

3. Would the Project result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Please refer to the discussion of Long-Term Traffic Noise Levels Along Existing Roadway Alignments in item 1).

4. Would the Project result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Impact 3.6-1 of the 2012 RTP/SCS EIR/EIS, beginning on page 3.6-12, evaluated noise levels that would likely be generated during the construction of projects implemented under the 2012 RTP/SCS. It explains that the types of construction equipment used to build transportation facilities (e.g., excavators, dozers, graders, pile drivers) could generate noise levels ranging from 75 to 101 dB at 50 feet from a construction site; and, thus, construction activity could generate noise levels that exceed applicable noise standards established by TRPA and/or expose nearby residences and other noise-sensitive receptors to noise levels that exceed applicable noise standards established by the general plan or noise ordinance of the local city or county. For this reason, the 2012 RTP/SCS EIR/EIS determined this to be a significant impact. Pursuant to Mitigation Measure 3.6-1 of the 2012 RTP/SCS EIR/EIS, TRPA developed a Best Construction Practices Policy for the Minimization of Exposure to Construction-Generated Noise and Ground Vibration, and Mitigation Measure 3.6-1 requires TRPA to only approve individual construction projects that would comply with these best construction practices. As a result, the 2012 RTP/SCS EIR/EIS determined that this impact would be reduced to a less-than-significant level. The 2017 RTP/SCS Update would include the same types of projects in the same general proximity to nearby existing buildings and structures that were part of the 2012 RTP/SCS. Thus, the program-level impact conclusions of the 2012 RTP/SCS EIR/EIS regarding temporary or periodic increases in ambient noise levels remain valid and no further analysis is required. Implementation of TRPA's Best Construction Practices Policy for Construction-Generated Noise and Vibration would reduce the magnitude of this impact to a **less-than-significant level**, consistent with the conclusion of the 2012 RTP/SCS EIR/EIS.

5. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?

Under the heading, "Methods and Assumptions" on page 3.6-10, the 2012 RTP/SCS EIR/EIS briefly explains that the 2012 RTP/SCS would not result in changes to operations of the Lake Tahoe Airport or any other airport or private airstrip in the Region. Therefore, no changes to the noise environment from aircraft activity in the Region were anticipated from implementation of the 2012 RTP/SCS because it would not result in increased takeoffs and landings or a change to the mix of aircraft types that use the airport. This would also be the case with the 2017 RTP/SCS Update. There would be **no impact**.

6. For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the project area to excessive noise levels?

Similar to the 2012 RTP/SCS, implementation of the 2017 RTP/SCS would not result in the development of new land uses or relocation of existing land uses such that noise-sensitive receptors would be located closer to an existing airport or private airstrip. Also, as described in item 4), implementation of the 2017 RTP/SCS would not result in any changes to aircraft operations at the Lake Tahoe Airport or any private airstrips. There would be **no impact**.

TRPA

7. **Would the Project result in increases in existing Community Noise Equivalency Levels (CNEL) beyond those permitted in the applicable Plan Area Statement, Community Plan or Master Plan?**

Please refer to the discussion of Long-Term Traffic Noise Levels along Existing Roadway Alignments in item 1)

8. **Would the Project result in exposure of people to severe noise levels?**

Refer to discussion of long-term traffic noise increases under item 1), short-term construction noise under item 4), and aircraft noise under items 5) and 6).

9. **Would the Project result in single event noise levels greater than those set forth in the TRPA Noise Environmental Threshold?**

On page 3.6-10, the 2012 RTP/SCS EIR/EIS explains that the 2012 RTP/SCS would not result in changes to goals, policies, or implementation measures pertaining to single-event noise, and no features of the 2012 RTP/SCS would be expected to affect the frequency or intensity of single-event noise incidences. Similarly, no changes to levels of activity by recreational watercraft, motorcycles, off-road vehicles, and over-snow vehicles were anticipated under the 2012 RTP/SCS because it was not expected to result in additional recreational boating facilities, trails, or recreation areas for these types of vehicles. Furthermore, it was determined that the types of recreational watercraft, motorcycles, off-road vehicles, and over-snow vehicles, as well as on-road vehicles, would not change as a result of the 2012 RTP/SCS alternatives. TRPA single-event noise standards, shown in Table 12 above, would continue to apply to all of these noise sources. This would also be the case with the 2017 RTP/SCS Update, and this would be a **less-than-significant impact**.

10. **Would the Project result in the placement of residential or tourist accommodation uses in areas where the existing CNEL exceeds 60 dB or is otherwise incompatible.**

This checklist question was added to TRPA's IEC after the 2012 RTP/SCS EIR/EIS and 2012 RPU EIS were prepared. The 2017 RTP/SCS would not result in the development of residential or tourist accommodation uses in areas where the existing noise level exceeds 60 CNEL or is otherwise incompatible. There would be **no impact**.

11. **Would the Project result in exposure of existing structures to levels of ground vibration that could result in structural damage?**

Please refer to the discussion of potential ground vibration impacts in item 2).

3.4.5 Transportation and Traffic (CEQA), Traffic and Circulation (TRPA)

This section presents the analyses for potential impacts to transportation, traffic and circulation. Table 15 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 15 Transportation, Traffic and Circulation				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
Would the project:				
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? (CEQA XVIa)	Impacts 3.3-1, 3.3-2, 3.3-3, 3.3-4, and 3.3-5	No	Yes	Yes
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? (CEQA XVIb)	Impacts 3.3-1, 3.3-2, 3.3-3, 3.3-4, and 3.3-5	No	Yes	Yes
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (CEQA XVIc)	Page 3.6-10, Section 3.6, "Noise" and Impact 3.14-4, Section 3.14, "Hazards and Public Safety"	No	No	NA
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or	Impact 3.3-5	No	No	NA

incompatible uses (e.g., farm equipment)? (CEQA XVId)				
5. Result in inadequate emergency access? (CEQA XVIe)	Impact 3.13-5, Section "Public Services and Utilities"	No	No	NA
6. Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? (CEQA XVIIf)	Impacts 3.3-4 and 3.3-5	No	No	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/Resolve Impacts?
Would the project result in:				
7. Generation of 200 or more new Daily Vehicle Trip Ends (DVTE)? (TRPA 13a)	NA	No	No	NA
8. Changes to existing parking facilities, or demand for new parking? (TRPA 13b)	Chapter 2	No	No	NA
9. Substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities? (TRPA 13c)	Impacts 3.3-1, 3.3-2, 3.3-3, 3.3-4, and 3.3-5	No	Yes	Yes
10. Alterations to present patterns of circulation or movement of people and/or goods? (TRPA 13d)	Impacts 3.3-1, 3.3-2, 3.3-3, 3.3-4, and 3.3-5	No	Yes	Yes
11. Alterations to waterborne, rail or air traffic? (TRPA 13e)	Impact 3.3-4	No	Yes	Yes
12. Increase in traffic hazards to motor vehicles, bicyclists, or pedestrians? (TRPA 13f)	Impact 3.3-5	No	No	NA

DISCUSSION

Regulatory Background

Since the 2012 RTP/SCS EIR/EIS, there have been changes to federal, state, and local transportation regulations relevant to the 2017 RTP/SCS. These new or updated regulations are discussed below.

The Fixing America's Surface Transportation Act

Since Moving Ahead for Progress in the 21st Century (MAP-21), a longer term five-year federal funding bill, Fixing America's Surface Transportation (FAST) Act was signed into law in December 2015, and the FHWA is currently finalizing rules for implementation. The FAST Act authorizes \$305 billion through fiscal year

2020 for highways, highway and motor vehicle safety, public transportation, rail, and research and technology programs, and provides a dedicated source of federal dollars for freight projects for the first time. The FAST Act expands the scope of consideration of the metropolitan planning process to include: consideration of intercity transportation (including intercity buses, intercity bus facilities, and commuter vanpool providers); improving transportation system resiliency and reliability; reducing (or mitigating) the stormwater impacts of surface transportation; and enhancing travel and tourism. In addition, it requires strategies to reduce the vulnerability of existing transportation infrastructure to natural disasters. In February 2016, the FAST Act upgraded TRPA's status to an urban metropolitan planning organization, which requires TRPA to develop, establish, and implement a formal congestion management process.

Metropolitan Planning General Requirements

Under the FAST Act/MAP-21, the U.S. Department of Transportation (USDOT) requires metropolitan planning organizations to prepare long-range transportation plans (RTPs) and update them every four years if they are in areas designated as "nonattainment" or "maintenance" for federal air quality standards. Prior to enactment of MAP-21, the primary federal requirements regarding RTPs were included in the metropolitan transportation planning rules—Title 23 CFR Part 450 and 49 CFR Part 613 (i.e., Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users or SAFETEA-LU, enacted in 2005). The FAST Act/MAP-21 makes several changes to the statutes that underpin these regulations.

Senate Bill 743

California Governor Jerry Brown signed SB 743 into law on September 27, 2013, which will change the way that public agencies evaluate the transportation impacts of projects under CEQA. In August 2014, the Governor's Office of Planning and Research (OPR) circulated its draft changes to the CEQA guidelines implementing SB 743 for public comment. Revised draft guidelines were released on January 20, 2016. In addition to new exemptions for projects that are consistent with specific plans, SB 743 is intended to replace congestion-based metrics, such as auto delay and level of service (LOS), with Vehicle Miles Traveled (VMT) as the basis for determining significant environmental impacts, once OPR's guidelines are approved for implementation. The guidelines may provide specific exceptions to the use of VMT for environmental impact analysis. Furthermore, parking impacts will not be considered significant impacts on the environment for select development projects within infill areas with nearby frequent transit service. The intention of the new guidelines is to more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.

These revisions to the CEQA Guidelines are currently in draft form. The California Natural Resources Agency has not yet initiated the administrative law procedures for adoption of the guidelines, which will include public review of proposed guidelines and consideration of public comments. Also, while the draft versions of the guidelines have proposed to replace use of congestion-based metrics as a threshold of significance, this would not preclude agencies from using these metrics, such as vehicle delay, when applying them to local general plan policies, conditions of approval, or other planning requirements. Until the CEQA guidelines are adopted, use of congestion-based metrics in CEQA environmental impact analysis is permissible.

Placer County General Plan

The 2012 RTP EIR/EIS included transportation-related policies from the *1994 Placer County General Plan*. The General Plan was updated in 2013. In the 2013 update, a new Policy 3.A.8 was added, and Policy 3.A.7 was updated to refer to the County's congestion management plan for LOS on state highways. Policies 3.A.8 through 3.A.14 in the 1994 General Plan were subsequently renumbered.

Environmental Setting

2017 RTP Update Modeling Methodology and Results

Level of Service – Intersections

Modeling for intersection LOS was updated for the 2017 RTP/SCS. This update extended the build-out year from 2020 to 2040. The analysis assumptions for the updated LOS modeling includes the following:

- 2020 Conditions has same signal timing plan as Existing Conditions. For 2040 Conditions, signal timing plans are optimized to the forecasted volumes.
- The peak hour factor approach is based on traffic counts for all analysis years.
- Default values were used for heavy vehicles (3 percent) and conflicting bicyclists (2 per hour).
- Conflicting pedestrian volumes are from counts collected in August 2010. The pedestrian calls per hour are based on the conflicting pedestrian volumes.
- Lane configurations are the same for all analysis years at all intersections except SR 28/SR 89, which is a single-lane roundabout under 2020 and 2040 conditions.
- The HCM 2010 analysis methodology was used. For the roundabout configuration at SR 28/SR 89, the default follow-up and critical headway values were adjusted to the California calibration values reported in Chapter 33 of the HCM 2010.

The changes to intersection LOS as a result of extending the build-out year are shown below in Table 16.

Table 16 Intersection Operations, Existing and Existing Plus Plan						
ID	Intersection	Jurisdiction	City/Community	Average Delay in seconds - LOS		
				Existing	2020	2040
1	SR 28 / SR 267	Caltrans	Kings Beach	D / 43	D / 54	E / 69
2	SR 28 / Village Boulevard	NDOT	Incline Village	C / 31	C / 33	D / 37
3	US 50 / SR 89 (south Y)	Caltrans	South Lake Tahoe	C / 25	C / 26	C / 27
4	US 50 / Ski Run Boulevard	Caltrans	South Lake Tahoe	C / 24	C / 25	C / 25
5	US 50 / Park Avenue	Caltrans	South Lake Tahoe	D / 39	D / 40	D / 39
6	SR 28 / SR 89	Caltrans	Tahoe City	C / 23	C / 16	C / 24
7	US 50 / SR 207	NDOT	Kingsbury	C / 23	C / 24	C / 27
Notes: Existing conditions representative of a Friday afternoon/evening peak hour in August.						
Source: Fehr & Peers 2016.						

Level of Service – Roadways

Modeling updates for the 2017 RTP/SCS also included updates to LOS for affected roadways. For the updated LOS analysis, the roadway segments have been revised from the segments used in the 2012 EIR/EIS. Table 17 lists the updated roadway segment names compared to the descriptions used in the 2012 RTP/SCS. The results of the roadway segment LOS analysis are shown in Table 18.

Table 17 Roadway Segments Description				
ID	Previous 2012 RTP/SCS Description		New 2017 RTP/SCS Description	
	Roadway	Cross Street	Roadway	Segment
1	US 50 milepost (mp) 70.62	SR 89	US 50	SR 89 (Luther Pass Rd.) to Navahoe Dr.
2	US 50 mp 71.48	Pioneer	US 50	Pioneer Trail to Arapahoe St.
3	US 50 mp 75.45	Wye	US 50	SR 89 to Dunlap Dr.
4	US 50 mp 76.41	Keys	US 50	Tahoe Keys Blvd. to Winnemucca Ave.
5	US 50 mp 77.33	Al Tahoe	US 50	Edgewood Cir. to Al Tahoe Blvd.
6	US 50 mp 80.14	Park	US 50	Pioneer Trail to Park Ave. / Heavenly Village Way
7	US 50 ATR 0521109	Parkway	US 50	Lake Parkway to SR 207 (Kingsbury Grade Rd.)
8	US 50 sta 0041	Kingsbury	US 50	SR 207 (Kingsbury Grade Rd.) to Kahle Dr.
9	SR 28 sta 0035	Spooner	SR 28	West of US 50
10	SR 28 ATR 3122409	W. Lakeshore	SR 28	Red Cedar Dr. to W. Lakeshore Blvd.
11	SR 28 mp 11.00	Stateline	SR 28	Cal Neva Dr. to Stateline Rd.
12	SR 28 mp 9.34	SR 267	SR 28	Brassie Ave. to SR 267 (N Shore Blvd.)
13	SR 28 mp 1.85	Lake Forest	SR 28	N Lake Blvd. to Lake Forest Rd.
14	SR 89 mp 19.54	Bliss Park	SR 89	South of Lester Beach Rd.
15	SR 89 mp 11.69	Fallen Leaf	SR 89	Fallen Leaf Rd. / Heritage Way to Valhalla Rd.
16	SR 89 mp 8.67	TC Wye	SR 89	Tucker Ave. to US 50 (Lake Tahoe Blvd.)
17	SR 267 mp 9.28	North Avenue	SR 267	North Ave. to Tiger Ave.
18	SR 89 MP 0.00 Alpine-El Dorado	Luther	SR 89	US 50 to Pomo St.
19	US 50 MP 65.62 Echo Lake Road	Echo	US 50	North of Lincoln Hwy
20	SR 207 ATR 0531509- sta 0024	Kingsbury	SR 207	US 50 to Kahle Dr.
21	US 50 ATR 252125	Spooner	US 50	SR 28 to Kings Canyon Rd.
22	SR 431 sta 770	Mt. Rose	SR 431	SR 28 to 2nd Creek Dr.
23	SR 267 MP 6.23 Martis Peak Rd	SR 267	SR 267	Tahoe Rim Trail to Gas Line Rd.
24	SR 89 MP 13.72 Squaw Valley Rd	SR 89	SR 89	West of Fairway Dr.
Source: Fehr & Peers 2016				

Table 18 Existing and Existing Plus Project Roadway Segment Level of Service										
ID	Roadway Segments		Existing				2040			
	Roadway	2017 RTP/SCS Roadway Segment	ADT	LOS	PM Peak Hour Volume	LOS	ADT Forecasts	LOS	PM Peak Hour Forecasts	LOS
1	US 50	SR 89 (Luther Pass Rd.) to Navahoe Dr.	17,600	C or better	1,760	E	22,570	F	2,060	F
2	US 50	Pioneer Trail to Arapahoe St.	17,200	C or better	1,710	E	20,260	D	1,940	F

3	US 50	SR 89 to Dunlap Dr.	39,500	D	3,230	E	42,380	E	3,420	F
4	US 50	Tahoe Keys Blvd. to Winnemucca Ave.	37,500	D	3,070	E	39,870	D	3,210	E
5	US 50	Edgewood Cir. to Al Tahoe Blvd.	39,000	D	3,190	E	41,280	E*	3,300	E*
6	US 50	Pioneer Trail to Park Ave. / Heavenly Village Way	36,500	D	3,220	E	38,450	D	3,320	E*
7	US 50	Lake Parkway to SR 207 (Kingsbury Grade Rd.)	33,738	C or better	2,980	D	36,090	D	3,020	E
8	US 50	SR 207 (Kingsbury Grade Rd.) to Kahle Dr.	25,980	C or better	2,370	D	27,780	C or better	2,450	D
9	SR 28	West of US 50	6,805	C or better	610	C or better	7,610	C or better	660	C or better
10	SR 28	Red Cedar Dr. to W. Lakeshore Blvd.	16,494	E	1,510	E	18,660	E	1,630	E
11	SR 28	Cal Neva Dr. to Stateline Rd.	17,900	E	1,650	E	20,110	E**	1,790	E**
12	SR 28	Brassie Ave. to SR 267 (N Shore Blvd.)	21,500	C or better	1,970	D	24,930	F	2,190	F
13	SR 28	N Lake Blvd. to Lake Forest Rd.	13,700	D	1,350	D	16,280	E	1,510	E
14	SR 89	South of Lester Beach Rd.	6,000	C or better	730	D	7,010	C or better	810	D
15	SR 89	Fallen Leaf Rd. / Heritage Way to Valhalla Rd.	6,400	C or better	860	D	7,370	C or better	940	D
16	SR 89	Tucker Ave. to US 50 (Lake Tahoe Blvd.)	18,200	C or better	1,720	D	19,950	C or better	1,900	D
17	SR 267	North Ave. to Tiger Ave.	13,100	D	1,280	D	15,100	E	1,460	E
18	SR 89	US 50 to Pomo St.	3,400	C or better	390	C or better	5,370	C or better	540	C or better
19	US 50	North of Lincoln Hwy	15,100	E	1,620	E	18,020	E**	1,790	E**
20	SR 207	US 50 to Kahle Dr.	13,153	D	1,350	D	14,250	D	1,370	D
21	US 50	SR 28 to Kings Canyon Rd.	14,349	C or better	1,290	C or better	16,150	C or better	1,360	C or better
22	SR 431	SR 28 to 2nd Creek Dr.	6,700	C or better	620	C or better	7,340	C or better	670	C or better
23	SR 267	Tahoe Rim Trail to Gas Line Rd.	10,600	D	1,040	D	12,960	D	1,240	D
24	SR 89	West of Fairway Dr.	16,600	E	1,660	E	20,740	E**	1,870	E**

Source: Fehr & Peers 2016

LOS in **bold font** indicates an exceedance of the LOS standard

* Operations degrade from four or less hours at LOS E (acceptable) to five or more hours of LOS E (unacceptable)

** Currently unacceptable LOS E operations are degraded to a significant degree (v/c ratio increases by more than 0.05)

Vehicles Miles Traveled (VMT)

The 2012 RTP/SCS EIR/EIS analyzed VMT per capita instead of overall VMT. VMT per capita is a valid metric for helping to address greenhouse gas analysis, but it is not a transportation standard under TRPA regulations or CEQA requirements, and is not a strong measure of transportation impacts because overall traffic could still increase under this measure. The 2012 RTP/SCS EIR/EIS referenced the appropriate standard of significance for transportation impacts, which was the VMT Threshold Standard, as analyzed in

the 2012 Regional Plan Update EIS (RPU EIS), which was in process at the same time as the 2012 RTP/SCS EIR/EIS, and recently reported on in the 2015 Threshold Evaluation Report.

The VMT Threshold Standard, as reported in the 2015 Threshold Evaluation Report is 2,030,938 VMT. The 2040 VMT forecast for the 2017 RTP/SCS is 2,168,384 VMT. Appendix *D, Model Documentation* of the 2017 RTP/SCS explains the methodology for estimating vehicle miles traveled for the 2017 RTP/SCS. Based on the updated VMT modeling, the relevant environmental significance conclusion for VMT in the 2017 RTP/SCS would be the same as the 2012 RPU, which was cited in the 2012 RTP/SCS EIR/EIS. The mitigation presented in the 2012 RPU EIS would be applicable to the current RTP and would adequately resolve the impact.

Mitigation Measure 3.3-3 (from RPU EIS)











Additional mitigation will be required for all alternatives to further reduce VMT to achieve the VMT Threshold Standard. The following percent reductions would be necessary for each alternative:

Alternative 3: 6.8 percent reduction.

To ensure that the VMT Threshold Standard is achieved, TRPA will develop and implement a program for the phased release of land use allocations followed by monitoring and forecasting of actual roadway traffic counts and VMT. New CFA, TAUs, and residential allocations will be authorized for release by the TRPA Governing Board every four years, beginning with the approval of the Regional Plan. Approval of the release of allocations will be contingent upon demonstrating, through modeling and the use of actual traffic counts, that the VMT Threshold Standard will be maintained over the subsequent four-year period.

The 2020 VMT forecast is 1,965,640 VMT, therefore, the 2017 RTP is in compliance with Mitigation Measure 3.3-3 from the 2012 RPU EIS.

Bicycle Facilities

-  West Shore Bike Trail Extension & Improvements - Homewood**
-  Pioneer Trail Pedestrian Upgrades**
-  Harrison Avenue Streetscape Improvement & Bike Trail**
-  Sawmill 2B Bike Path and Erosion Control Project**
-  Lake Tahoe Boulevard Bike Trail Project**
-  South Tahoe Greenway Shared-Use Trail - Phase 1a**
-  Snow Creek Wetlands Restoration (National Avenue East Side - from Toyon Road to Existing Forest Service Path)**
-  Nevada Stateline to Stateline Bikeway Laura Drive to Round Hill Pines Beach (Phases 1B, 1C, 1D)**
-  South Lake Tahoe Bicycle Bridges Repair**
-  South Lake Tahoe Class I Path Reconstruction**

1. **Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

The types of short-term construction-related traffic would generally be the same under the 2017 RTP/SCS as the 2012 RTP/SCS. The differences between the 2012 RTP and the 2017 RTP consist of 31 new projects (seven Corridor Revitalization/Complete Streets, ten Transit, seven Active Transportation, four ITS, and three Operations and Maintenance); and four projects that have been removed from the list (one Active Transportation, two ITS, and one TMDL/Stormwater). In addition, 28 projects have been completed since the 2012 RTP/SCS EIR/EIS was prepared. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan update include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The 2017 RTP/SCS would include most of the same projects as under the 2012 RTP/SCS, some of which are currently being implemented. New projects that would require construction include new bicycle infrastructure and corridor revitalization projects, which are similar in type to those included in the 2012 RTP/SCS. The 2017 RTP/SCS also updates the plan's build-out year and the forecast for VMT in the Region. VMT in the Region would increase by approximately 231,000 VMT/day by 2040 compared to 2014 conditions under the 2017 RTP/SCS.

The 2012 RTP/SCS EIR/EIS concluded that there would be a significant impact on roadway segment operations (see Impact 3.3-1 in the 2012 EIR/EIS), but implementation of Mitigation Measure 3.3-1 would reduce the magnitude of this impact to a less-than-significant level. This mitigation requires TRPA to develop and implement a program for the phased release of land use allocations in four-year cycles in conjunction with future updates of the Regional Plan and RTP, monitoring of LOS, and a suite of responsive measures, if monitoring indicates a decrease in LOS. It was concluded that this impact was reduced to a less-than-significant level by Mitigation Measure 3.3-1.

As shown in Table 18, updated modeling for the 2017 RTP/SCS indicates that five additional roadway segments would operate at an unacceptable level when extending the build-out year from 2035 to 2040. The nine roadway segments are as follows:

1. US 50: SR 89 (Luther Pass Rd.) to Navahoe Dr. – operations degrade from four or fewer hours of LOS E (i.e., acceptable) to an unacceptable LOS F.
2. US 50: Pioneer Trail to Arapahoe St. – operations degrade from four or fewer hours of LOS E (i.e., acceptable) to an unacceptable LOS F.
3. US 50: SR 89 to Dunlap Dr. – operations degrade from unacceptable LOS E operations to an unacceptable LOS F.
4. US 50: Edgewood Cir. to Al Tahoe Blvd. – operations degrade from four or fewer hours of LOS E (i.e., acceptable), to five or more hours of LOS E (i.e., unacceptable).
5. US 50: Pioneer Trail to Park Ave. / Heavenly Village Way – operations degrade from four or fewer hours of LOS E (i.e., acceptable), to five or more hours of LOS E (i.e., unacceptable).
6. SR 28: Cal Neva Dr. to Stateline Rd. – currently unacceptable LOS E operations are degraded to a significant degree (v/c ratio increases by more than 0.05).

7. SR 28 at Kings Beach¹ – operations degrade from an acceptable LOS D (for four or fewer hours) to an unacceptable LOS F.
8. US 50: North of Lincoln Hwy – currently unacceptable LOS E operations are degraded to a significant degree (v/c ratio increases by more than 0.05).
9. SR 89: West of Fairway Dr. – currently unacceptable LOS E operations are degraded to a significant degree (v/c ratio increases by more than 0.05).

Although modeling through 2040 indicates that additional roadway segments would operate at an unacceptable level under the 2017 RTP/SCS, Mitigation Measure 3.3-1 in the 2012 RTP/SCS EIR/EIS would still apply to reduce this impact to a less-than-significant level. Mitigation Measure 3.3-1 requires TRPA to develop and implement a program in conjunction with the Regional Plan and RTP to ensure that traffic and circulation impacts related to the 2017 RTP/SCS would be consistent with applicable plans and policies related to circulation. Mitigation Measure 3.3-1 also requires responsive measures, if monitoring indicates a decrease in LOS. The following list of projects will be constructed to ensure this mitigation measure is implemented and effective.

- 🔹 Meyers Intersection Improvements at: US Highway 50 and State Route 89 and at Pioneer Trail and US Highway 50 (addressing #1, #2, and #8, above);
- 🔹 Tahoe Valley Greenbelt (addressing #3, above)
- 🔹 Lake Tahoe Boulevard Class 1 Bicycle Trail (Viking Way to South Wye) (addressing #3, above)
- 🔹 Al Tahoe Safety and Mobility Enhancement Project (addressing #4, above)
- 🔹 US 50 South Shore Community Revitalization Project (addressing #5, above)
- 🔹 Nevada Stateline to Stateline Bikeway-Crystal Bay to Incline. This is currently on the unconstrained project list. (addressing #6, above).
- 🔹 SR 89/Fanny Bridge Community Revitalization Project (addressing #9, above)

Additionally, as shown in the 2017 RTP/SCS Chapter 3: The Plan, under the section “Infrastructure Projects Supported by Incentive Programs”. TRPA will be working with partner agencies and private entities to update existing and implement new transportation demand management strategies. These will address daily commute travel, entry and exit into the basin, and recreational access. Beyond this work, if vehicle miles traveled surpasses those projected in the RTP, the 2020 update will include additional mobility and funding strategies to address congestion levels. With continued monitoring and implementation of the responsive measures listed above, this impact would remain **less than significant with mitigation**.

The 2012 RTP/SCS EIR/EIS concluded that there would be a less-than-significant impact on intersection operations under Alternative 3 (see Impact 3.3-2 of the 2012 EIR/EIS) because Alternative 3 would not cause any study intersections to degrade to LOS F. As shown in Table 16, updated modeling of the 2017 RTP/SCS indicates that one intersection (SR 28 / SR 267) would operate at LOS E in 2040. Additional analysis of this intersection shows that the total intersection volume drops by approximately 23 percent after 1 hour and 15 minutes; therefore, it would not be likely that the LOS E condition would occur for 5 or

¹ At its January 27, 2010 Governing Board meeting, TRPA made a finding of overriding considerations to allow degradation of roadway Level of Service below applicable standards at this location.

more hours. Therefore, this impact would remain **less than significant** and would be similar to what would occur under the 2012 RTP/SCS EIR/EIS.

The 2012 RTP/SCS EIR/EIS concluded that there would be a beneficial effect on transit service (see Impact 3.3-4 in the 2012 EIR/EIS) and bicycle and pedestrian safety (Impact 3.3-5 in the 2012 EIR/EIS). The 2017 RTP/SCS would include most of the same projects as under the 2012 RTP/SCS, some of which are currently being implemented. New projects that would require construction include bicycle infrastructure and corridor revitalization projects, which are similar in type to those included in the 2012 RTP/SCS. Therefore, the 2017 RTP/SCS would also have a **beneficial effect** on transit, bicycle, and pedestrian facilities and would not conflict with adopted policies, plans, or programs related to these facilities.

With implementation of mitigation, all potential impacts to the circulation system would be reduced to a less-than-significant level, and the 2017 RTP/SCS would not conflict with any applicable plans, policies, or ordinances related to the circulation system. This impact would remain **less than significant with mitigation** and would be similar to what would occur under the 2012 RTP/SCS EIR/EIS.

2. Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Please refer to the discussion of affects to circulation in the plan area, including LOS, in item 1).

3. Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Under the heading, "Methods and Assumptions" on page 3.6-10, the 2012 RTP/SCS EIR/EIS briefly explains that the 2012 RTP/SCS would not result in changes to operations of the Lake Tahoe Airport or any other airport or private airstrip in the Region. In addition, Impact 3.14-4 in the 2012 RTP/SCS EIR/EIS concluded that the 2012 RTP/SCS would not result in the construction of tall buildings or structures in the vicinity of an airport that would violate the Airport CLUP airport restriction policy. Therefore, no changes to the air traffic patterns were anticipated from implementation of the 2012 RTP/SCS because it would not result in increased takeoffs and landings or a change to the mix of aircraft types that use the airport or be inconsistent with the Airport CLUP. As explained above, the 2017 RTP/SCS would include most of the same projects as under the 2012 RTP/SCS, some of which are currently being implemented. New projects that would require construction include bicycle infrastructure and corridor revitalization projects, which are similar in type to those included in the 2012 RTP/SCS. The 2017 RTP/SCS would not include new projects that would affect air traffic patterns, and there would be **no impact**.

4. Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

As disused under Impact 3.3-5 in the 2012 RTP/SCS EIR/EIS, the 2017 RTP/SCS would have a beneficial effect on bicycle and pedestrian safety. This would also be the case with the 2017 RTP/SCS because the projects in the 2017 RTP/SCS would be the same, or similar in type, to those included in the 2012 RTP/SCS. Implementation of Mitigation Measure 3.3-1 from the 2012 EIR/EIS requires the implementation of measures, if feasible, to construct additional multi-modal corridor improvements (beyond those listed in the RTP project list) should LOS monitoring project that applicable LOS goals and policies will not be met. These improvements could include modification of access control and widening and realigning roadways to improve curves. Additionally, individual transportation projects would be subject to, or are currently undergoing, project-level environmental analyses to determine project-specific impacts, including the potential for hazards. The environmental and design review processes would ensure that projects constructed under the 2017 RTP/SCS would not result in sharp curves or dangerous intersections, or result in incompatible uses. This impact would be **less than significant**.

5. Would the project result in inadequate emergency access?

The 2012 RTP/SCS EIR/EIS concluded that closing off one or more lanes of a roadway under Alternative 3 could impair emergency routes and result in a potentially significant impact (Impact 3.13-5), but that with the implementation of Mitigation Measure 3.13-1 the impact would be reduced to a less-than-significant level. This mitigation requires TRPA to prepare and implement a traffic control plan that would ensure construction activities are coordinated with affected agencies to ensure emergency access is not substantially deteriorated. Therefore, it was concluded that this impact was reduced to a less-than-significant level.

The 2017 RTP/SCS would affect the same area as previously analyzed, and proposed changes to the plan would not substantially alter the type or density of projects such that different or more severe impacts to emergency access would result. Further, the project would comply with all appropriate mitigation identified in the 2012 RTP/SCS EIR/EIS. Overall, substantial and adverse impacts to emergency access would remain **less than significant** and would be similar to what would occur under the 2012 RTP/SCS EIR/EIS. No new significant impacts or substantially more severe impacts would occur; therefore, the findings of the certified EIR/EIS remain valid and no further analysis is required.

6. Would the project conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Please refer to the discussion of effects on the transportation system, including transit, bicycle, and pedestrian facilities in item 1).

TRPA

7. Would the project result in generation of 200 or more new Daily Vehicle Trip Ends (DVTE)?

The 2017 RTP/SCS would not include new land uses that would generate daily trips in the long-term. In addition, the purpose of the bicycle and transit projects included in the 2017 RTP/SCS is to reduce daily vehicle trips within the plan area. Although construction of projects under the 2017 RTP/SCS would generate additional vehicle trips, these trips would be temporary. There would be **no impact**.

8. Would the project result in changes to existing parking facilities, or demand for new parking?

As discussed in Chapter 2 of the 2012 RTP/SCS EIR/EIS, the 2012 plan would include projects that have the potential to increase parking demand, but would also include projects that would decrease the demand for parking and projects that would increase or improve parking facilities. Individual transportation projects would be subject to, or are currently undergoing, project-level environmental analyses to determine project-specific impacts of each project, including providing adequate parking for those projects that would increase demand. This would also be the case with the 2017 RTP/SCS. This impact would be **less than significant**.

9. Would the project result in substantial impact upon existing transportation systems, including highway, transit, bicycle or pedestrian facilities?

Please refer to the discussion of effects on the transportation system, including transit, bicycle, and pedestrian facilities in item 1).

10. Would the project result in alterations to present patterns of circulation or movement of people and/or goods?

Please refer to the discussion of effects on circulation in the plan area in item 1).

11. Would the project result in alterations to waterborne, rail or air traffic?

Please refer to the discussion of effects on the transportation system in item 1), and the discussion of effects on air traffic in item 3) above.

12. Would the project result in an increase in traffic hazards to motor vehicles, bicyclists, or pedestrians?

Please refer to the discussion of effects on the transportation system, including transit, bicycle, and pedestrian facilities in item 1), and the discussion of hazards in item 4) above.

3.5 Evaluation of Impacts (Abbreviated Checklist)

3.5.1 Biological Resources (Stream Environment Zones, Wetlands, Wildlife and Vegetation)

This section presents the analyses for potential impacts related to biological resources. Table 19 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 19 Biological Resources (Stream Environment Zones, Wetlands, Wildlife and Vegetation)				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/Resolve Impacts?
Would the project:				
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (CEQA IVa)	Impact 3.10-4	No	No	Yes
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service? (CEQA IVb)	Impact 3.10-1	No	No	Yes
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (CEQA IVc)	Impact 3.10-1	No	No	Yes
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (CEQA IVd)	3.10-3, 3.10-4	No	No	Yes
5. Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance? (CEQA IVe)	3.10-2	No	No	Yes
6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other	Section 5.1.2	Not Applicable	Not Applicable	Not Applicable

approved local, regional, or state habitat conservation plan? (CEQA IVf)				
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/ Resolve Impacts?
Would the project result in:				
7. Removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system? (TRPA 4a)	Impact 3.7-4	No	No	NA
8. Removal of riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table? (TRPA 4b)	Impact 3.10-1	No	No	Yes
9. Introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species? (TRPA 4c)	Section 5.1.2	No	No	NA
10. Change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)? (TRPA 4d)	Impacts 3.10-3, 3.10-4, 3.10-6	No	No	Yes
11. Reduction of the numbers of any unique, rare or endangered species of plants? (TRPA 4e)	Impact 3.10-4	No	No	Yes
12. Removal of streambank and/or backshore vegetation, including woody vegetation such as willows? (TRPA 4f)	Impacts 3.10-2, 3.10-3	No	No	Yes
13. Removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications? (TRPA 4g)	Impact 3.10-2	No	No	Yes
14. A change in the natural functioning of an old growth ecosystem? (TRPA 4h)	Impact 3.10-2	No	No	Yes
15. Change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)? (TRPA 5a)	Impacts 3.10-3, 3.10-4	No	No	Yes
16. Reduction of the number of any unique, rare or endangered species of animals? (TRPA 5b)	Impact 3.10-4	No	No	Yes

17. Introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals? (TRPA 5c)	Impacts 3.10-3, 3.10-4	No	No	Yes
18. Deterioration of existing fish or wildlife habitat quantity or quality? (TRPA 5d)	Impacts 3.10-3, 3.10-4	No	No	Yes

Discussion

Projects that are new for the 2017 plan update include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. Design and development of these projects would require site specific environmental analysis conducted by the local jurisdictions, USFS or Caltrans. Projects would be designed to avoid sensitive biological resources.

Regulatory Framework

TRPA Thresholds

Changes to the environmental setting that have occurred since preparation of the 2012 RTP/SCS EIR/EIS have been documented in the 2015 Threshold Evaluation (TRPA 2016). Vegetation and wildlife threshold standards have remained largely unchanged from 2011 to 2015. Some vegetation communities continue to be in non-attainment. Those include the common vegetation communities of meadow and wetland, deciduous riparian, yellow pine forest, red fir forest as well as some more rare plant communities. A complete list of the environmental thresholds and attainment status over time is included in Attachment 7 of this document.

Special Status Species

CNPS online Inventory of Rare and Endangered Plants, The California Natural Diversity Database, TRPA GIS data, and USFS GIS data were used as the primary sources to identify and map reported occurrences of special-status species and sensitive natural communities within the Plan area for the 2012 RTP/SCS EIS/EIR. As these sources are updated periodically, they will be consulted during site specific planning, design and evaluation of projects in the 2017 RTP/SCS. A combination of data sources and survey efforts would additionally be used to determine the specific biological resources known or with potential to occur on a project site.

CEQA

1. **Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

The potential impacts to special status species were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. **Impacts would be less than significant.**

2. **Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?**

The potential impacts on riparian habitat or other sensitive natural community were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. **Impacts would be less than significant.**

3. **Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

The potential impacts on wetlands were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. **Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The potential impact on fish and wildlife species movement or native nursery sites were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-3 and 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant for migration of fish and wildlife species and potentially beneficial for long term impacts to stream and lake habitats**.

5. **Would the Project conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance?**

The potential impacts on special status species were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

6. **Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

This impact area was included in the 2012 RTP/SCS EIR/EIS Section 5.1 *Effects Found Not To Be Significant* as there are no adopted habitat conservation plans, natural community conservation plans in the planning area. There would be **no impact**.

TRPA

7. **Would the Project result in removal of native vegetation in excess of the area utilized for the actual development permitted by the land capability/IPES system?**

The potential impacts related to removal of vegetation in excess of that permitted by the IPES system were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.7-4. Because projects included in the 2017 RTP/SCS would be subject to the same IPES standards, be similar in nature, scale and location and with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

8. **Would the Project result in removal of riparian vegetation other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table?**

The potential impacts on riparian habitat related to groundwater were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

9. **Would the Project result in introduction of new vegetation that will require excessive fertilizer or water, or will provide a barrier to the normal replenishment of existing species?**

This impact area was included in the 2012 RTP/SCS EIR/EIS Section 5.1 *Effects Found Not To Be Significant* as the transportation projects included in the plan would not require excess fertilizer or water and would not introduce vegetation that would provide a barrier to the normal replenishment of existing species. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. There would be **no impact**.

10. Would the Project result in change in the diversity or distribution of species, or number of any species of plants (including trees, shrubs, grass, crops, micro flora and aquatic plants)?

The potential impacts on diversity and distribution of species were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-3, 3.10-4, and 3.10-6. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant for distribution of species in general and potentially beneficial in the long term for stream and lake habitats.**

11. Would the Project result in reduction of the numbers of any unique, rare or endangered species of plants?

The potential impacts on numbers of species population were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant.**

12. Would the Project result in removal of streambank and/or backshore vegetation, including woody vegetation such as willows?

The potential impacts related to tree removal and to riparian areas were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-2, 3.10-3. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant and potentially beneficial** in the long term for stream and lake habitats.

13. Would the Project result in removal of any native live, dead or dying trees 30 inches or greater in diameter at breast height (dbh) within TRPA's Conservation or Recreation land use classifications?

The potential impacts related to tree removal were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant.**

14. Would the Project result in a change in the natural functioning of an old growth ecosystem?

The potential impacts related to tree removal were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant.**

15. Would the Project result in change in the diversity or distribution of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms, insects, mammals, amphibians or microfauna)?

The potential impacts related to diversity and distribution of species were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-3, 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant and potentially beneficial** in the long term for stream and lake habitats.

16. Would the Project result in reduction of the number of any unique, rare or endangered species of animals?

The potential impact species populations were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. **Impacts would be less than significant.**

17. Would the Project result in introduction of new species of animals into an area, or result in a barrier to the migration or movement of animals?

The potential impacts related to animal migration were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-3, 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant and potentially beneficial** in the long term for stream and lake habitats.

18. Would the Project result in deterioration of existing fish or wildlife habitat quantity or quality?

The potential impacts related to fish and wildlife habitat quantity and quality were evaluated in the 2012 RTP/SCS EIS/EIR Impacts 3.10-3, 3.10-4. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant and potentially beneficial** in the long term for stream and lake habitats.

3.5.2 Land Use and Planning

This section presents the analyses for potential impacts related to Land Use and Planning. Table 20 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 20 Land Use and Planning				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Physically divide an established community? (CEQA Xa)	Impact 3.2-1	No	No	NA
2. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? (CEQA Xb)	Impact 3.2-2	No	No	NA
3. Conflict with any applicable habitat conservation plan or natural community conservation plan? (CEQA Xc)	Section 5.1	NA	NA	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
4. Include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan? (TRPA 8a)	Impact 3.2-2	No	No	NA
5. Expand or intensify an existing non-conforming use? (TRPA 8b)	Impact 3.2-2	No	No	NA

DISCUSSION

The goals, policies and programs in the 2017 RTP/SCS are consistent with the land use scenario included in the preferred alternative in the 2012 RTP/SCS. Goals of the plan include improving connectivity and mobility within and between communities in the Tahoe Region, which will result in more sustainable land use and support of land use goals and policies contained in the Regional Plan.

Projects that are new for the 2017 plan include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. These projects would be consistent with existing land use plans and policies.

CEQA

1. Would the Project physically divide an established community?

The potential impacts related to community cohesion were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.2-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

2. Would the Project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

The potential impacts related to existing land use plans and policies were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.2-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3. Would the Project conflict with any applicable habitat conservation plan or natural community conservation plan?

This impact area was included in the 2012 RTP/SCS EIR/EIS Section 5.1 *Effects Found Not To Be Significant* as there are no habitat conservation plans or natural community conservation plans in the Tahoe Region. There will be **no impact**.

TRPA

4. Would the Project include uses which are not listed as permissible uses in the applicable Plan Area Statement, adopted Community Plan, or Master Plan?

The potential impacts related to existing land use plans and policies were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.2-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. Would the Project expand or intensify an existing non-conforming use?

The potential impacts related to existing land use plans and policies were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.2-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3.5.3 Population and Housing

This section presents the analyses for potential impacts related to population and housing. Table 21 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 21 Population and Housing				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? (CEQA XIIIa)	Impact 3.12-1	No	No	Yes
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (CEQA XIIIb)	Impact 3.12-2	No	No	Yes
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? (CEQA XIIIc)	Impact 3.12-2	No	No	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
4. Alter the location, distribution, density, or growth rate of the human population planned for the Region? (TRPA 11a)	Impact 3.12-1	No	No	Yes
5. Include or result in the temporary or permanent displacement of residents? (TRPA 11b)	Impact 3.12-2	No	No	Yes
6. Affect existing housing, or create a demand for additional housing? To determine if the proposal will affect existing housing or create a demand for additional housing, please answer the following questions: (1) Will the proposal decrease the amount of housing in the Tahoe Region? (2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households? (TRPA 12a)	Impact 3.12-2	No	No	Yes

7. Will the proposal result in the loss of housing for lower-income and very-low-income households? (TRPA 12b)	Impact 3.12-2	No	No	Yes
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Discussion

The land use scenario would remain the same under the 2017 RTP/SCS as that analyzed in the 2012 plan, with similar effects on population and housing. Larger highway re-alignment projects could result in removal of structures including businesses and housing.

Projects that are new for the 2017 plan include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. These projects would be consistent with existing land use plans and policies.

CEQA

1. **Would the Project induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

The potential impacts related to population growth were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be less than significant.

2. **Would the Project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

The US 50/South Shore Community Revitalization Project would potentially result in the displacement of housing. However, these impacts were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-2 and are being analyzed in a separate project specific environmental analysis. No further evaluation is required for the 2017 RTP/SCS. Impacts would be less than significant.

3. **Would the Project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

The US 50/South Shore Community Revitalization Project would potentially result in the displacement of housing. However, these impacts were analyzed in the 2012 SCS/RTP EIS/EIR Impact 3.12-2 and are being analyzed in a separate project specific environmental analysis. No further evaluation is required for the 2017 RTP/SCS. Impacts would be less than significant.

TRPA

4. **Would the Project alter the location, distribution, density, or growth rate of the human population planned for the Region?**

The potential impacts related to population growth were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be less than significant.

5. **Would the Project include or result in the temporary or permanent displacement of residents?**

The US 50/South Shore Community Revitalization Project would potentially result in the displacement of housing. However, these impacts were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-2 and are being analyzed in a separate project specific environmental analysis. No further evaluation is required for the 2017 RTP/SCS. Impacts would be less than significant.

6. Would the Project affect existing housing, or create a demand for additional housing?

(1) Will the proposal decrease the amount of housing in the Tahoe Region?

(2) Will the proposal decrease the amount of housing in the Tahoe Region historically or currently being rented at rates affordable by lower and very-low-income households?

The US 50/South Shore Community Revitalization Project would potentially result in the displacement of housing. However, these impacts were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-2 and are being analyzed in a separate project specific environmental analysis. No further evaluation is required for the 2017 RTP/SCS. Impacts would be **less than significant**.

7. Would the Project result in the loss of housing for lower-income and very-low-income households?

The US 50/South Shore Community Revitalization Project would potentially result in the displacement of housing. However, these impacts were analyzed in the 2012 SCS/RTP EIR/EIS Impact 3.12-2 and are being analyzed in a separate project specific environmental analysis. No further evaluation is required for the 2017 RTP/SCS. Impacts would be **less than significant**.

3.5.4 Agriculture and Forestry Resources

This section presents the analyses for potential impacts related to agriculture and forestry resources. Table 22 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 22 Agriculture and Forestry Resources				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Do Prior Environmental Documents Mitigations Address/ Resolve Impacts?
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the CA Resources Agency, to a non-agricultural use? (CEQA IIa)	Section 5.1.1	NA	No	NA
2. Conflict with existing zoning for agricultural use, or a Williamson Act contract? (CEQA IIb)	Section 5.1.1	NA	No	NA
3. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (CEQA IIc)	Section 5.1.1	NA	No	NA
4. Result in the loss of forest land or conversion of forest land to non-forest use? (CEQA IId)	Impact 3.10-2	NA	No	NA
5. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? (CEQA IIe)	Section 5.1.1	NA	No	NA

DISCUSSION

Agricultural Resources are discussed in Section 5.1.1, *Effects Not Found to Be Significant* as there is currently no land designated for agricultural use in the Tahoe Region. Impacts related to forestry resources are discussed in Section 3.5.1, *Biological Resources* and impacts related to land use and zoning are discussed in Section 3.5.2, *Land Use and Planning*, in this IS/IEC.

CEQA

1. **Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to a non-agricultural use?**

No agriculturally zoned land exists within the project area. Thus, there is **no impact**.

2. **Would the Project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

The RTP/SCS does not conflict with zoning for agricultural use or a Williamson Act contract because no agriculturally zoned land exists within the project area. Thus, there is **no impact**.

3. **Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resource Code section 12220(g), timberland (as defined by Public Resource Code section 4526) or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

The RTP/SCS does not conflict with zoning of forest land, timberland or timberland zoned Timberland Production. There is **no impact**.

4. **Would the Project result in the loss of forest land or conversion of forest land to non-forest use?**

Projects implemented under the RTP/SCS may result in removal of individual trees, but would not result in the conversion of forest land to non-forest use. Impacts related to tree removal are analyzed in Impact 3.10-2 of the 2012 EIS/EIR. Because projects included in the 2017 RTP/SCS are similar in nature, scale, and location with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. **Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

There is no farmland in the planning area, therefore **there will be no impact**.

3.5.5 Cultural Resources (CEQA) and Archaeological/Historical (TRPA)

This section presents the analyses for potential impacts related to cultural resources. Table 23 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 23 Cultural Resources (CEQA) and Archaeological/Historical (TRPA)				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? (CEQA 5a)	Impact 3.15-1	No	No	Yes
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5? (CEQA 5b)	Impact 3.15-2	No	No	Yes
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (CEQA 5c)	Impact 3.15-4, 3.9-1, 3.9-2	No	No	NA
4. Disturb any human remains, including those interred outside of formal cemeteries? (CEQA 5d)	Impact 3.15-3	No	No	Yes
5. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either: 1. A site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code section 5020.1(k), or 2. A resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.	Not Applicable			

TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
6. Will the proposal result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building? (TRPA 20a)	Impacts 3.15-1, 3.15-2	No	No	Yes
7. Is the proposed project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records? (TRPA 20b)	Impacts 3.15-1, 3.15-2	No	No	Yes
8. Is the property associated with any historically significant events and/or sites or persons? (TRPA 20c)	Impact 3.15-1	No	No	Yes
9. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values? (TRPA 20d)	Impact 3.15-5	No	No	Yes
10. Will the proposal restrict historic or pre-historic religious or sacred uses within the potential impact area? (TRPA 20e)	Impact 3.15-5	No	No	Yes

DISCUSSION

Tribal consultation, if requested as provided in Public Resources Code Section 21080.3.1, must begin prior to release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. Information provided through tribal consultation may inform the lead agency's assessment as to whether tribal cultural resources are present, and the significance of any potential impacts to such resources. Prior to beginning consultation, lead agencies may request information from the Native American Heritage Commission regarding its Sacred Lands File, per Public Resources Code sections 5097.9 and 5097.94, as well as the California Historical Resources Information System administered by the California Office of Historic Preservation.

The Washoe Tribe of Nevada and California is an important partner in transportation planning at Lake Tahoe, as Lake Tahoe is the traditional center of the Washoe world. The tribe owns and manages land in the Region, such as Meeks Bay Resort and Marina and Cave Rock on the East Shore of the lake that serves as a transportation gateway into Lake Tahoe. The Washoe are the original inhabitants of the Lake Tahoe Region. The Tribe and TRPA have acknowledged the mutual benefit of a formalized process for communication for land, transportation, and resource management decision making and other governmental relations. Both parties have a strong interest in the protection of social, biological, and tribal cultural resources in the Lake Tahoe Region and recognize that collaboration and cooperation is the best method to achieve these goals. The Washoe Tribe was consulted throughout the planning process as described in the 2017 RTP/SCS Appendix C Public Participation, *Consultation and Cooperation*.

Projects that are new for the 2017 plan include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. At least one of the new projects involves changes at a known historic site, such as the USFS project upgrades to the Visitor Center at the Tallac Historic Site. The project development and site design for all projects would include an inventory of historic resources and

development of mitigation measures, if necessary, in consultation with the California and Nevada State Offices of Historic Preservation (SHPO).

CEQA

1. Would the Project cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

Potential impacts related to historic resources were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.15-1. Because projects included in the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

2. Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Potential impacts related to archaeological resources were evaluated in the 2012 RTP EIR/EIS Impact 3.15-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3. Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Potential impacts related to paleontological resources were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.15-4, and geologic features were evaluated in Impacts 3.9-1 and 3.9-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. Would the Project disturb any human remains, including those interred outside of formal cemeteries?

Potential impacts related to disturbance of human remains was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.15-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either:

1) a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, that is listed or eligible for listing on the California Register of Historical Resources, or on a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

2) a resource determined by a lead agency, in its discretion and supported by substantial evidence, to be significant according to the historical register criteria in Public Resources Code section 5024.1 (c), and considering the significance of the resource to a California Native American tribe.

As described in the discussion section above, the Washoe Tribe was included in the preliminary stages of the 2017 plan development and were consulted in accordance with the requirements of Public Resources Code section 21080.3.1.

TRPA

6. Will the Project result in an alteration of or adverse physical or aesthetic effect to a significant archaeological or historical site, structure, object or building?

Potential impacts related to archaeological resources were evaluated in the 2012 RTP EIR/EIS Impact 3.15-1, and 3.15-2. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

7. Is the Project located on a property with any known cultural, historical, and/or archaeological resources, including resources on TRPA or other regulatory official maps or records?

Potential impacts related to archaeological and historical resources were evaluated in the 2012 RTP EIR/EIS Impact 3.15-1, and 3.15-2. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

8. Is the Project associated with any historically significant events and/or sites or persons?

Potential impacts related to historical resources were evaluated in the 2012 RTP EIR/EIS Impact 3.15-1. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

9. Does the Project have the potential to cause a physical change which would affect unique ethnic cultural values?

Potential impacts related to ethnic and cultural values were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.15-5. As described in the discussion section above, the Washoe Tribe was included in the preliminary stages of the 2017 plan development and were consulted in accordance with the requirements of Public Resources Code section 21080.3.1. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

10. Will the Project restrict historic or pre-historic religious or sacred uses within the potential impact area?

Potential impacts related to ethnic and cultural values were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.15-5. As described in the discussion section above, the Washoe Tribe was included in the preliminary stages of the 2017 plan development and were consulted in accordance with the requirements of Public Resources Code section 21080.3.1. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3.5.6 Hazards and Hazardous Material (CEQA) and Risk of Upset and Human Health (TRPA)

This section presents the analyses for potential impacts related to hazards and human health. Table 24 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 24 Hazards and Hazardous Material (CEQA) and Risk and Upset and Human Health				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (CEQA VIIIa)	Impact 3.14-1	No	No	Yes
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (CEQA VIIIb)	Impact 3.14-1	No	No	Yes
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (CEQA VIIIc)	Impact 3.14-1	No	No	Yes
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? (CEQA VIId)	Impact 3.14-2	No	No	Yes
5. For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (CEQA VIIf)	Impact 3.14-4	No	No	Yes
6. For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the project area? (CEQA VIIf)	Impact 3.14-2	No	No	Yes
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? (CEQA VIIfg)	Impact 3.13-5	No	No	Yes
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (CEQA VIIfh)	Impact 3.14-3	No	No	Yes

TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
9. Involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions? (TRPA 10a)	Impact 3.14-1	No	No	Yes
10. Involve possible interference with an emergency evacuation plan? (TRPA 10b)	Impact 3.13-5	No	No	Yes
11. Creation of any health hazard or potential health hazard (excluding mental health)? (TRPA 17a)	Impacts 3.14-1, 3.14-2, 3.14-5	No	No	Yes
12. Exposure of people to potential health hazards? (TRPA 17b)	Impact 3.14-1	No	No	Yes

DISCUSSION

Construction of transportation projects included in the 2017 RTP/SCS could result in transport of hazardous materials or create a temporary environment that exposes people and the environment to hazardous conditions. In all cases where construction of transportation infrastructure or systems are developed, project level environmental analysis would be conducted to ensure that all locations of hazardous materials have been identified, and the all regulations related to protection of the environment and public is ensured.

Projects that are new for the 2017 RTP/SCS include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. These projects pose a similar level of risk to human health and exposure to hazardous materials as the 2012 RTP/SCS as discussed below.

CEQA

1. Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

The potential for transportation projects to result in impacts related to the transport and use of hazardous materials was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.14-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

2. Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

The potential for transportation projects to result in impacts related to the release of hazardous materials was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.14-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3. Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The potential for transportation projects to result in impacts related to the release of hazardous materials was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.14-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. **Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

Projects could be located near or on sites that are included on a list of hazardous materials sites, however this potential impact was evaluated in the 2012 RTP EIS/EIR Impact 3.14-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. **For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the project area?**

Projects could be located within vicinity of an airport (South Lake Tahoe) or affected by an airport land use plan. Airport safety hazards were evaluated in the 2012 RTP EIR/EIS Impact 3.14-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

6. **For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the project area?**

Projects could be located within vicinity of an airstrip (South Lake Tahoe). Airport safety hazards were evaluated in the 2012 RTP EIR/EIS Impact 3.14-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

7. **Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

Transportation projects could result in temporary traffic delays during construction but would not interfere with adopted response or emergency evacuation plans. Emergency response is evaluated in the 2012 RTP/SCS EIR/EIS Impacts 3.13-5. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. **There would be no impact.**

8. **Would the Project expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

Potential impacts from wildland fire risk were evaluated in the 2012 RTP EIR/EIS Impact 3.14-3. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

TRPA

9. **Would the Project involve a risk of an explosion or the release of hazardous substances including, but not limited to, oil, pesticides, chemicals, or radiation in the event of an accident or upset conditions?**

The potential for transportation projects to result in impacts related to the release of hazardous materials was evaluated in the 2012 RTP EIR/EIS Impact 3.14-1. Because projects under the 2017 RTP would result in a comparable level of hazard, are similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

10. **Would the Project involve possible interference with an emergency evacuation plan?**

Transportation projects could result in temporary traffic delays during construction but would not interfere with adopted response or emergency evacuation plans. These types of plans are described and evaluated in the 2012 RTP EIR/EIS Section 3.13-5. Because projects under the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. There would be **no impact**.

11. Would the Project result in creation of any health hazard or potential health hazard (excluding mental health)?

The potential for transportation projects to result in the creation of hazardous impacts related to hazardous materials, wildland fire, hazardous sites, proximity to airports and exposure to vector borne diseases was evaluated in the 2012 RTP EIR/EIS Impacts 3.14-1, 3.14-2, 3.14-3, 3.14-4 and 3.14-5. Because projects under the 2017 RTP/SCS would result in a comparable level health hazard, are similar in nature scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

12. Would the Project result in exposure of people to potential health hazards?

The potential for transportation projects to expose people to health hazards related to hazardous materials, wildland fire, hazardous sites, proximity to airports and exposure to vector borne diseases was evaluated in the 2012 RTP EIR/EIS Impacts 3.14-1, 3.14-2, 3.14-3, 3.14-4 and 3.14-5. Because projects under the 2017 RTP/SCS would result in a comparable level health hazard, are similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3.5.7 Mineral Resources (CEQA) and Natural Resources (TRPA)

This section presents the analyses for potential impacts related to mineral resources and natural resources. Table 25 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 25 Mineral Resources and Natural Resources				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (CEQA XIa)	Section 5.1.3	No	No	NA
2. 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? (CEQA XIb)	Section 5.1.3	No	No	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
3. A substantial increase in the rate of use of any natural resources? (TRPA 9a)	Impacts 3.10-2, 3.13-2	No	No	Yes
4. Substantial depletion of any non-renewable natural resource? (TRPA 9b)	Impacts 3.10-2, 3.13-2	No	No	Yes

DISCUSSION

The 2012 EIR/EIS includes impacts to mineral resources in Section 5.1.3, *Effects Found Not to be Significant* as no mineral resource recovery sites have been identified in the Tahoe Region. The use or removal of natural resources was evaluated in Chapter 3.10 *Biological Resources* and Chapter 3.13 *Public Services and Utilities*. Projects under the 2017 RTP/SCS, like the 2012 RTP/SCS will result in more efficient use of natural resources through transportation network enhancements and infrastructure improvements.

CEQA

- Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

There are no mineral resource recovery sites in the Tahoe Region, therefore there is **no impact**.

- Would the Project 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?**

There are no mineral resource recovery sites in the Tahoe Region, therefore there is **no impact**.

TRPA

3. Would the Project result in a substantial increase in the rate of use of any natural resources?

Potential impacts to natural resources were evaluated in the 2012 RTP/SCS EIR/EIS Impacts 3.10-2 and 3.13.2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. Would the Project result in a substantial depletion of any non-renewable natural resource?

Potential impacts to natural resources were evaluated in the 2012 RTP/SCS EIR/EIS Impacts 3.10-2 and 3.13.2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3.5.8 Utilities and Service Systems (CEQA) and Energy and Utilities (TRPA)

This section presents the analyses for potential impacts to utilities, energy and service systems. Table 26 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 26 Utilities and Service Systems (CEQA) and Energy and Utilities (TRPA)				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (CEQA XVIIa)	Impact 3.13-4	No	No	Yes
2. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (CEQA XVIIb)	Impact 3.13-4	No	No	Yes
3. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (CEQA XVIIc)	Section 3.13.4	No	No	Yes
4. Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed? (CEQA XVIIId)	Impact 3.13-2	No	No	Yes
5. Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments? (CEQA XVIIe)	Impact 3.13-4	No	No	Yes
6. Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs? (CEQA XVIIIf)	Section 3.13.4	No	No	Yes
7. Comply with federal, state, and local statutes and regulations related to solid waste? (CEQA XVIIIg)	Section 3.13.4	No	No	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
8. Use of substantial amounts of fuel or energy? (TRPA 15a)	Section 3.13.4	No	No	NA
9. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy? (TRPA 15b)	Section 3.13.4	No	No	NA

10. Except for planned improvements, will the proposal result in a need for new systems, or substantial alterations to the following utilities:				
11. Power or natural gas? (TRPA 15a)	Impact 3.13-1	No	No	Yes
12. Communication systems? (TRPA 15b)	Impact 3.13-1	No	No	Yes
13. Utilize additional water which amount will exceed the maximum permitted capacity of the service provider? (TRPA 15c)	Impact 3.13-2	No	No	Yes
14. Utilize additional sewage treatment capacity which amount will exceed the maximum permitted capacity of the sewage treatment provider? (TRPA 15d)	Impact 3.13-4	No	No	Yes
15. Storm water drainage? (TRPA 15e)	Impact 3.8-2	No	No	Yes
16. Solid waste and disposal?	Impact 3.13-3	No	No	Yes

DISCUSSION

Projects included in the RTP/SCS could include the extension of existing, or construction of new electric, gas, water, wastewater, and stormwater infrastructure to serve new transportation facilities, such as the Lake Tahoe Waterborne Transit terminal(s) or bathroom and water fountains associated with new bike trails and other trailhead locations. Because the RTP/SCS is not a growth-inducing plan (see Chapter 5 of the 2012 RTP EIR/EIS, “Other TRPA- and CEQA-Mandated Sections”), impacts associated with implementation of the plan would not be expected to cause substantial long term effects to existing utility systems. Section 3.13.4 of 2012 RTP EIR/EIS included the following issues in those dismissed from further evaluation as the project would result in no impact: Impacts to Existing Utility Systems, Impacts to Schools, Impacts to Law Enforcement, Fire and Emergency Services, and Increases in Long Term Solid Waste Production.

Projects that are new for the 2017 RTP/SCS include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways.

1. Would the Project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

See above under “Discussion”. There would be **no impact**.

2. Would the Project require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

See above under “Discussion”. There would be **no impact**.

3. Would the Project require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The potential impacts related to stormwater facilities were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.8-2. Because projects included in the 2017 RTP/SCS will be similar in nature, scale, and location, with site specific design and mitigation, no further analysis is required. **Impacts would be beneficial.**

4. Would the Project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

See above under “Discussion”. There would be **no impact**.

5. **Would the Project result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments?**

See above under "Discussion". There would be **no impact**.

TRPA

6. **Would the Project be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?**

See above under "Discussion". There would be **no impact**.

7. **Would the Project comply with federal, state, and local statutes and regulations related to solid waste?**

See above under "Discussion". There would be **no impact**.

3.5.9 Geology and Soils (CEQA) and Land (TRPA)

This section presents the analyses for potential impacts related to geology, soils and land. Table 27 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 27 Geology, Soils and Land				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42? ii) Strong seismic ground shaking? iii) Seismic-related ground failure, including liquefaction? iv) Landslides? (CEQA VIa)	Impact 3.7-2	No	No	Yes
2. Result in substantial soil erosion or the loss of topsoil? (CEQA VIb)	Impact 3.7-1	No	No	Yes
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? (CEQA VIc)	Impact 3.7-1	No	No	Yes
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? (CEQA VI d)	Impact 3.7-1	No	No	Yes
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water? (CEQA VIe)	NA	NA	NA	NA
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
6. Compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)? (TRPA 1a)	Impact 3.7-4	No	No	NA
7. A change in the topography or ground surface relief features of site inconsistent with	Not Applicable	No	No	Yes

the natural surrounding conditions? (TRPA 1b)				
8. Unstable soil conditions during or after completion of the proposal? (TRPA 1c)	Impact 3.7-1	No	No	Yes
9. Changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet? (TRPA 1d)	Impact 3.7-1	No	No	Yes
10. The continuation of or increase in wind or water erosion of soils, either on or off the site? (TRPA 1e)	Impact 3.7-1	No	No	Yes
11. Changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake? (TRPA 1f)	Impact 3.7-1	No	No	Yes
12. Exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mud slides, ground failure, or similar hazards? (TRPA 1g)	Impact 3.7-2	No	No	Yes

DISCUSSION

Transportation projects included in the 2017 RTP/SCS would involve construction, disturbance of soils and in some instances, changes to topography. As explained in the Project Description of this IS/IEC, new projects in the 2017 plan include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The potential for soil erosion or to exposure to geologic hazards would be similar to that of the 2012 RTP/SCS as described below.

CEQA

1. **Would the Project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:**

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?.

ii) Strong seismic ground shaking?

iii) Seismic-related ground failure, including liquefaction?

iv) Landslides?

The potential for transportation projects to result in impacts related to seismic hazards and landslides was evaluated in Impact 3.7-2 of the 2012 RTP/SCS EIR/EIS. Because projects included in the 2017 RTP/SCS would result in a comparable level of hazard, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

2. **Would the Project result in substantial soil erosion or the loss of topsoil?**

The potential for transportation projects to result in soil erosion or the loss of topsoil was evaluated in Impact 3.7-1 of the 2012 RTP/SCS EIR/EIS. Because projects included in the 2017 RTP/SCS would result in a comparable level of hazard, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3. **Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

The potential for transportation projects to be located on or cause unstable soil conditions was evaluated in Impact 3.7-1 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would result in a comparable level of hazard, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. **Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?**

The potential for transportation projects to be located in locations with expansive soil was evaluated in Impact 3.7-1 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would result in a comparable level of hazard, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. **Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

The use of septic systems is not permitted in the Tahoe Region. There would be **no impact**.

TRPA

6. **Would the Project result in compaction or covering of the soil beyond the limits allowed in the land capability or Individual Parcel Evaluation System (IPES)?**

The location of projects under the IPES system was evaluated under Impact 3.7-4 of the 2012 RTP EIR/EIS. Because projects under the 2017 RTP/SCS would result in a comparable level of land coverage, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

7. **Would the Project result in a change in the topography or ground surface relief features of site inconsistent with the natural surrounding conditions?**

Transportation projects included in the 2017 RTP/SCS would be subject to site specific design and mitigation to ensure that they are consistent with the topography and natural surroundings to the greatest extent feasible. No further analysis is required. Impacts would be **less than significant**.

8. **Would the Project result in unstable soil conditions during or after completion of the proposal?**

The potential for transportation projects to result in unstable soil conditions was evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.7-1. Because projects included in the 2017 RTP/SCS would result in a comparable level of hazard, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

9. **Would the Project result in changes in the undisturbed soil or native geologic substructures or grading in excess of 5 feet?**

Grading impacts were evaluated in the 2012 RTP/SCS EIS/EIR Impact 3.7-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

10. **Would the Project result in the continuation of or increase in wind or water erosion of soils, either on or off the site?**

The potential for erosion related to wind or water was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.7-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

11. **Would the Project result in changes in deposition or erosion of beach sand, or changes in siltation, deposition or erosion, including natural littoral processes, which may modify the channel of a river or stream or the bed of a lake?**

The potential for transportation projects to result in river, stream, and lake deposition or erosion was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.7-1. Because projects included in the 2017 RTP/SCS would

be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

12. Will the Project result in exposure of people or property to geologic hazards such as earthquakes, landslides, backshore erosion, avalanches, mudslides, ground failure, or similar hazards?

The potential for transportation projects to result in impacts related to geologic hazards was evaluated in Impact 3.7-2 of the 2012 RTP/SCS EIS/EIR. Because projects under the 2017 RTP/SCS would result in a comparable level of hazard, and will require site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3.5.10 Hydrology and Water Quality

This section presents the analyses for potential impacts related to hydrology and water quality. Table 28 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 28 Hydrology and Water Quality				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project:				
1. Violate any water quality standards or waste discharge requirements? (CEQA IXa)	Impacts 3.8-1, 3.8-2, 3.8-3, 3.8-4	No	No	Yes
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? (CEQA IXb)	Impact 3.8-7	No	No	Yes
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? (CEQA IXc)	Impact 3.8-5	No	No	Yes
4. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? (CEQA IXd)	Impact 3.8-5	No	No	Yes
5. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? (CEQA IXe)	Impact 3.8-2	No	No	Yes
6. Otherwise substantially degrade water quality? (CEQA IXf)	Impacts 3.8-1, 3.8-2, 3.8-3, 3.8-4	No	No	Yes
7. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? (CEQA IXg)	Impact 3.8-6	No	No	Yes
8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows? (CEQA IXh)	Impact 3.8-6	No	No	Yes
9. Expose people or structures to a significant risk of loss, injury or death involving flooding,	Impact 3.8-6	No	No	Yes

including flooding as a result of the failure of a levee or dam? (CEQA IXi)				
10. Inundation by seiche, tsunami, or mudflow? (CEQA IXj)	Impact 3.8-6			
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in:				
11. Changes in currents, or the course or direction of water movements? (TRPA 3a)	Impact 3.8-5	No	No	Yes
12. Changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site? (TRPA 3b)	Impact 3.8-5	No	No	Yes
13. Alterations to the course or flow of 100-year flood waters? (TRPA 3c)	Impact 3.8-6	No	No	Yes
14. Change in the amount of surface water in any water body? (TRPA 3d)	Impact 3.8-2	No	No	Yes
15. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity? (TRPA 3e)	Impact 3.8-2	No	No	Yes
16. Alteration of the direction or rate of flow of ground water? (TRPA 3f)	Impact 3.8-7	No	No	Yes
17. Change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations? (TRPA 3g)	Impact 3.8-7	No	No	Yes
18. Substantial reduction in the amount of water otherwise available for public water supplies? (TRPA 3h)	Impact 3.8-7	No	No	Yes
19. Exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches? (TRPA 3i)	Impact 3.8-6	No	No	Yes
20. The potential discharge of contaminants to the groundwater or any alteration of groundwater quality? (TRPA 3j)	Impact 3.8-7	No	No	Yes
21. Is the Project located within 600 feet of a drinking water source? (TRPA 3k)	NA	No	No	N/A

DISCUSSION

As in the 2012 RTP/SCS, implementation of the 2017 RTP/SCS will help the Region meet the Lake Tahoe Maximum Daily Load Program (TMDL) Requirements by incorporating water quality improvements in transportation projects. Since roadway runoff from the urban uplands and atmospheric nitrogen deposition from vehicle emissions are major contributors to pollutant loading, this plan has an important role to play in achieving the TMDL. (*Statutory Framework, Chapter 2, 2017 RTP/SCS*).

As explained in the Project Description of this IS/IEC, new projects in the 2017 RTP/SCS include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways. The potential for

changes in the 2017 RTP/SCS to result in impacts related to water quality and hydrology are discussed below.

CEQA

1. Would the Project violate any water quality standards or waste discharge requirements?

The potential for transportation projects to violate water quality standards or waste discharge requirements were evaluated in Impact 3.8-1, 3.8-2, 3.8-3, and 3.8-4 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant** for water quality impacts related to construction and waterborne ferry operations, and **beneficial** for impacts related to waste and water discharge, TMDL attainment and lake clarity.

2. Would the Project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

The potential impacts related to groundwater supplies were evaluated in the 2012 RTP EIR/EIS Impact 3.8-7. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

3. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

The potential for transportation projects to alter drainage and result in erosion or siltation was evaluated in the 2012 RTP EIR/EIS Impact 3.8-5. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The potential for transportation projects to alter drainage and result in flooding was evaluated in the 2012 RTP EIR/EIS Impact 3.8-5. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

5. Would the Project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

The potential for transportation projects to contribute to runoff and impact stormwater drainage systems was evaluated in the 2012 RTP EIR/EIS Impact 3.8-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

6. Would the Project otherwise substantially degrade water quality?

The potential for transportation projects to degrade water quality was evaluated in Impact 3.8-1, 3.8-2, 3.8-3, and 3.8-4 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant** for water quality impacts related to construction and waterborne ferry operations, and **beneficial** for impacts related to waste and water discharge, TMDL attainment and lake clarity.

7. Would the Project place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

The potential for transportation projects to place housing within a 100-year flood hazard area was evaluated in Impact 3.8-6 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

8. Would the Project place within a 100-year flood hazard area structures which would impede or redirect flood flows?

The potential for transportation projects to place structures within a 100-year flood hazard area was evaluated in Impact 3.8-6 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

9. Would the Project expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The potential for transportation projects to expose people or structures to flooding due to failure of a levee or dam was evaluated in Impact 3.8-6 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

10. Would the Project cause inundation by seiche, tsunami, or mudflow?

The potential for transportation projects to result in impacts related to geologic hazards was evaluated in Impact 3.7-2 and Section 3.14 of the 2012 RTP EIR/EIS. Because projects under the 2017 RTP/SCS will be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

TRPA

11. Would the Project result in changes in currents, or the course or direction of water movements?

The potential for projects to affect water currents and littoral processes was evaluated in the 2012 RTP EIR/EIS Impact 3.8-5. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

12. Would the Project result in changes in absorption rates, drainage patterns, or the rate and amount of surface water runoff so that a 20 yr. 1 hr. storm runoff (approximately 1 inch per hour) cannot be contained on the site?

The potential for transportation projects to alter drainage and result in erosion or siltation was evaluated in the 2012 RTP EIR/EIS Impact 3.8-5. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

13. Would the Project result in alterations to the course or flow of 100-year floodwaters?

The potential for transportation projects to place structures within a 100-year flood hazard area was evaluated in Impact 3.8-6 of the 2012 RTP EIS/EIR. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

14. Would the Project result in change in the amount of surface water in any water body?

The potential for transportation projects to contribute to runoff and impact stormwater drainage systems was evaluated in the 2012 RTP EIR/EIS Impact 3.8-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

15. Would the Project result in discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity?

The potential for transportation projects to contribute to runoff and impact stormwater drainage systems was evaluated in the 2012 RTP EIR/EIS Impact 3.8-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

16. Would the Project result in alteration of the direction or rate of flow of ground water?

The potential impacts related to groundwater was evaluated in the 2012 RTP EIR/EIS Impact 3.8-7. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

17. Would the Project result in change in the quantity of groundwater, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations?

The potential impacts related to groundwater was evaluated in the 2012 RTP EIR/EIS Impact 3.8-7. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

18. Would the Project result in substantial reduction in the amount of water otherwise available for public water supplies?

Water used for transportation projects would be limited to that needed for construction and site specific improvements such as restrooms at trailheads. These projects are not expected to require an excess amount of water that would substantially reduce the public water supply. As the public water supply in the Tahoe Region is drawn primarily from groundwater, the potential for impacts related to groundwater was evaluated in the 2012 RTP EIS/EIR Impact 3.8-7. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

19. Would the Project result in exposure of people or property to water related hazards such as flooding and/or wave action from 100-year storm occurrence or seiches?

The potential for transportation projects to place structures within a 100-year flood hazard area was evaluated in Impact 3.8-6 of the 2012 RTP EIR/EIS. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

20. Will the Project result in potential discharge of contaminants to the groundwater or any alteration of groundwater quality?

The potential impacts related to groundwater was evaluated in the 2012 RTP EIR/EIS Impact 3.8-7. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

21. Is the Project located within 600 feet of a drinking water source?

All projects would be subject to the provisions for Source Water Protection described in of Chapter 60.3, of the TRPA Ordinance Code, which requires a 600-foot protection zone around all known drinking water sources. Impacts would be **less than significant**.

3.5.11 Recreation

This section presents the analyses for potential impacts to recreation. Table 29 identifies whether the impact was analyzed in the 2012 RTP/SCS EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 29 Recreation				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (CEQA XVa)	Impact 3.11-1	No	No	Yes
2. Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (CEQA XVa)	Impact 3.11-1	No	No	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
3. Create additional demand for recreation facilities? (TRPA 19a)	Impact 3.11-2	No	No	Yes
4. Create additional recreation capacity? TRPA 19b)	Impact 3.11-2	No	No	Yes
5. Have the potential to create conflicts between recreation uses, either existing or proposed? (TRPA 19c)	Impact 3.11-1	No	No	Yes
6. Result in a decrease or loss of public access to any lake, waterway, or public lands? (TRPA 19d)	Impact 3.11-3	No	No	Yes

Discussion

Projects included in the 2017 RTP/SCS would further result in improved capacity of the recreational system through more frequent transit, traffic management and information technology, as well as pedestrian and bicycle amenities that will enable residents and visitors to more easily access and connect to recreation locations and experiences.

As explained in the Project Description of this IS/IEC, new projects in the 2017 RTP/SCS include the Tahoe Valley Greenbelt and Viking Way to South Wye bike trail projects; trailhead improvements that include

parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized areas and road right of ways.

CEQA

1. **Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

Potential impacts related to use of recreational facilities was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

2. **Would the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

Potential impacts related to the need for construction or expansion of recreational facilities were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

TRPA

3. **Would the Project create additional demand for recreation facilities?**

Potential impacts related to demand for recreational facilities were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

4. **Would the Project create additional recreation capacity?**

This potential impact was evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-2. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

5. **Would the Project have the potential to create conflicts between recreation uses, either existing or proposed?**

Potential impacts related to recreational user conflicts were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-1. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **less than significant**.

6. **Would the Project result in a decrease or loss of public access to any lake, waterway, or public lands?**

Potential impacts related to loss of public access were evaluated in the 2012 RTP/SCS EIR/EIS Impact 3.11-3. Because projects included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required. Impacts would be **beneficial**.

3.5.12 Mandatory Findings of Significance

This section presents the analyses for mandatory findings of significance. Table 30 identifies whether the impact was analyzed in the 2012 RTP EIR/EIS, if any new circumstances would result in new impacts, whether there is new information requiring further analysis or verification, and if adopted mitigation will resolve any identified impacts.

Table 30 Mandatory Findings of Significance				
CEQA Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project				
1. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? (CEQA XVIIIa)	Impacts 3.10-1, 3.10-2, 3.10-3, 3.10-4, 3.15-1, 3.15-2, 3.15-5	No	No	Yes
2. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)? (CEQA XVIIIb)	Chapter 4.3	No	Yes	Yes
3. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? (CEQA XVIIIc)	Impacts in Chapters 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.11, 3.12, 3.13, 3.14, 3.15	No	Yes	Yes
TRPA Initial Environmental Checklist Item	Where Impact Was Analyzed in 2012 RTP/SCS EIR/EIS	Do Proposed Changes or Any New Circumstances Involve New Significant Impacts or Substantially More Severe Impacts?	Any New Information Requiring New Analysis or Verification?	Does Previously Adopted Mitigation Address/ Resolve Impacts?
Would the project result in				
4. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory? (TRPA 21a)	Impacts 3.10-1, 3.10-2, 3.10-3, 3.10-4, 3.7-4	No	No	Yes

5. Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time, while long-term impacts will endure well into the future.) (TRPA 21b)	Chapter 4.3	No	No	Yes
6. Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?) (TRPA 21c)	Chapter 4.3	No	No	Yes
7. Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly? (TRPA 21d)	Impacts in Chapters 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.11, 3.12, 3.13, 3.14, 3.15	No	No	Yes

Discussion

The 2017 RTP/SCS contains policies, programs and projects that would result in long term environmental gain and protection of environmental resources in the Tahoe Region. As discussed in previous sections of this document, changes in projects from the 2012 RTP/SCS may result in different site specific impacts that would be required to be mitigated to ensure protection of the environment. Projects that are new for the 2017 RTP/SCS include the Tahoe Valley Greenbelt, and Viking Way to South Wye bike trail projects; trailhead improvements that include parking management systems and increased transit access at Meeks Bay and Emerald Bay; and a roundabout in Meyers at the intersection of SR 89 and U.S. Highway 50, Pioneer Trail and U.S. Highway 50, and SR 267 and SR 28. Other projects include safety improvements such as additions of sidewalks and intersection upgrades generally within existing urbanized area and road right of ways. A summary of the potential environmental impacts discussed in this analysis, including those that are cumulative, are discussed below.

CEQA

1. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

The potential impacts related to biological resources were analyzed in the 2012 RTP/SCS EIR/EIS Impacts 3.10-1, 3.10-2, 3.10-3, 3.10-4 and Section 3.5.1 of this IS/IEC. Impacts related to cultural resources were analyzed in the 2012 RTP/SCS EIR/EIS Impacts 3.15-1, 3.15-2, 3.15-5 and Section 3.5.5 of this IS/IEC. Impacts were found to be **less than significant** and **beneficial**.

2. Does the Project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Cumulative impacts are discussed in Chapter 4-14 of the 2012 RTP/SCS EIR/EIS. The analysis found that the policies, projects and programs in the plan **would not result in cumulatively considerable impacts** for the following topic areas: Cultural Resources, Hazards and Public Safety, Public Services and Utilities, Population and Housing, Recreation, Biological Resources, Hydrology and Water Quality, Geology and Soils, Noise, Air Quality, Transportation, and Land Use. Because projects

included in the 2017 RTP/SCS would be similar in nature, scale and location, with site specific design and mitigation, no further analysis is required.

As described in Section 3.4.3 of this IS/IEC, because the nature of the greenhouse gas (GHG) emissions and the climate change issue is inherently cumulative, the impact discussions in that section serve as the cumulative impact analysis. Mobile source as well as operational emissions of GHG would be substantially reduced and therefore, the 2017 RTP/SCS **would not result in cumulatively considerable impacts.**

TRPA

3. Does the Project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

As described above, projects permitted through the 2017 RTP/SCS would require project-level environmental review and would be required to comply with all applicable TRPA, federal, state, county, and City regulations, including protections for human health and safety. Therefore, implementation of the plan would not create a substantial direct or indirect adverse effect on human beings. Thus, this impact is **less than significant.**

4. Does the Project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California or Nevada history or prehistory?

See the response to Question 1) above.

5. Does the Project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals?

See the response to Question 2) above.

6. Does the Project have impacts which are individually limited, but cumulatively considerable? (A project may impact on two or more separate resources where the impact on each resource is relatively small, but where the effect of the total of those impacts on the environmental is significant?)

See the response to Question 2) above.

7. Does the Project have environmental impacts which will cause substantial adverse effects on human being, either directly or indirectly?

See the response to Question 3) above.

3.6 CERTIFICATION [TRPA ONLY]

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Nick Haven, Long Range and Transportation Planning Manager
Tahoe Regional Planning Agency

Date

3.7 References

ARB. *See* California Air Resources Board.

California Air Resources Board. 2004 (July). *2004 Revision to the California State Implementation Plan for Carbon Monoxide-Maintenance Plan*. Available:
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