

3.15 TRANSPORTATION

This section describes the existing transportation system in the program area, identifies applicable regulatory requirements, and evaluates impacts to bicycle, pedestrian, and transit facilities, roadway hazards and obstructions, emergency access, and the generation of vehicle miles traveled (VMT) resulting from later treatment activities under the proposed program.

Later treatment activities under the proposed program could require reconstruction or grading of existing forest roads, but no new temporary or permanent road construction would occur. Additionally, later treatment activities would not alter the physical public roadway network surrounding treatment sites. Therefore, implementation of treatment activities would not adversely affect any existing or planned public transit, bicycle, or pedestrian facilities. Additionally, because of the temporary nature of the treatment activities at individual locations, the rural character of much of the transportation network in and around where treatment activities could occur, and the anticipated dispersion of the individual treatment sites within the program area, the later treatment activities under the proposed program would not generate substantial pedestrian, bicycle, or transit demand. Thus, the proposed program would not conflict with a program, plan, ordinance or policy addressing pedestrian, bicycle, and transit facilities.

Later treatment activities under the proposed program would not locate any new development or land uses within the program area that would require installation of emergency access routes, or alter any existing roadways/emergency access routes along the physical transportation network open to the public surrounding treatment sites. As described above, the implementation of treatment activities analyzed under the proposed program could require the improvement of existing forest roads; however, any such activities would serve to improve emergency access to the individual forest management and fuel reduction sites. Additionally, prescribed understory burns would include between two and ten fire engines onsite during treatment activities; thus, emergency fire suppression services to ensure safety during prescribed understory burning would be available onsite during such treatments. Therefore, later treatment activities under the proposed program would not result in a degradation of emergency access and on-site emergency services would be provided during prescribed understory burns to ensure that such activities would not result in inadequate emergency access.

Section 15064.3 was added to the State CEQA Guidelines effective December 28, 2018 as part of a comprehensive guidelines update. The section addresses the determination of significance for transportation impacts, which requires that the analysis be based on VMT instead of a congestion metric. Pursuant to State CEQA Guidelines Section 15064.3(c), and because later treatment activities analyzed under the proposed program would occur after the date on which VMT is required to be considered, VMT is the primary metric used to identify transportation impacts, and level of service (LOS) is not analyzed herein. Therefore, TRPA, state, and local LOS based standards and thresholds are not analyzed or addressed in this PTEIR.

No comments received on the notice of preparation were related to transportation.

3.15.1 Regulatory Setting

FEDERAL

Federal Highway Administration

The Federal Highway Administration (FHWA), an agency of the U.S. Department of Transportation, provides stewardship over the construction and preservation of the nation's highways, bridges, and tunnels. FHWA also conducts research and provides technical assistance to state and local agencies to improve safety, mobility, and livability and to encourage innovation in these areas. FHWA also provides regulation and guidance related to work zone safety, mobility, and temporary traffic control device implementation. FHWA regulation and guidance related to work zone safety, mobility, and temporary traffic control device implementation is relevant because it informs the standard project requirements of later treatment activities addressed within this PTEIR.

Tahoe Regional Planning Agency

Regional Transportation Plan

The Tahoe Metropolitan Planning Organization (TMPO) and TRPA jointly developed the *Lake Tahoe Regional Transportation Plan and Sustainable Communities Strategy: Mobility 2035* (TRPA 2012) (2012 RTP/SCS) as Lake Tahoe's blueprint for a regional transportation system that enhances the quality of life in the Tahoe region, promotes sustainability, and offers improved mobility options for people and goods. Important objectives of the 2012 RTP/SCS are to reduce the overall environmental impact of transportation in the region, create walkable and vibrant communities, and provide real alternatives to driving. The 2012 RTP/SCS included an SCS, in accordance with California Senate Bill 375, statutes of 2008 (Sustainable Communities and Climate Protection Act). The 2012 RTP/SCS presents 14 goals consistent with regional and federal requirements that focus on reducing dependency on the automobile and giving preference to projects that increase the capacity of the region's transportation system through public transportation projects and programs.

The 2012 RTP/SCS was updated in 2017, tiering from the 2012 RTP/SCS EIS through an expanded checklist. The 2017 RTP/SCS, *Linking Tahoe: Regional Transportation Plan and Sustainable Communities Strategy* (TRPA 2017) builds on the 2012 RTP/SCS, focusing on providing frequent and prioritized multi-modal connections between town centers and neighborhoods and easy and convenient access to high demand recreation sites. The 2017 RTP/SCS contains new goals and policies that draw from stakeholder feedback, detailed goals in the 2015 Intelligent Transportation Systems Strategic Plan, and the 2016 Active Transportation Plan. The 2017 RTP/SCS envisions a first-class transportation system that prioritizes bicycling, walking, and transit, and serves residents and visitors while contributing to the environmental and socioeconomic health of the region (TRPA 2017). The plan offers strategies to jump start innovation through electric vehicle infrastructure, address the routine travel demands of residents and commuters, and the recreational travel demands of visitors that during peak periods stress and cause congestion on Lake Tahoe's transportation system (TRPA 2017). Strategies detailed within the 2017 RTP/SCS focus on projects and programs that dynamically meet the needs of all roadway users by:

- ▶ offering better travel mode options;
- ▶ creating incentives that spread out the times, places, and ways people travel to improve traffic flow;
- ▶ providing environmentally innovative infrastructure;
- ▶ improving safe and equitable access to the places people want to go; and
- ▶ prioritizing funding for projects that fulfill TRPA objectives in transit, active transportation, transportation demand management, and other programs and directly support identified TRPA transportation performance outcomes.

Thresholds

TRPA has adopted threshold standards pertaining to air quality that are expressed in terms of regionwide VMT. These thresholds are also applicable to transportation analyses. VMT is a computed value, which correlates to the volume of traffic, the length of vehicle trips, and the extent of an area's reliance on the private automobile for travel. The TRPA TransCAD Travel Demand Model provides a forecast of the number of trips made on the highway network and the distance between trip origins and destinations for each trip purpose. Total VMT is the sum of all these trip lengths.

The adopted air quality management TRPA threshold standard that relates to traffic and transportation facilities in the region calls for reducing VMT in the basin by 10 percent of the 1981 base year values.

The VMT threshold is periodically updated whenever TRPA updates its transportation model. The most recent VMT threshold was calculated at 2,030,938 VMT for a peak summer day. TRPA is working on potential updates to the VMT threshold but nothing formal has been proposed. Additional background on VMT, an overview of TRPA's transportation model and threshold updates, details on the VMT threshold, and a discussion of the use of the VMT threshold as a significance criterion in an EIR is provided on pages 3.1-2 through 3.1-7 of the Placer County Tahoe Basin Area Plan and Tahoe City Lodge Project Final EIR/EIS (California State Clearinghouse #2014072039; Placer County and TRPA 2017) and is incorporated by reference into this PTEIR. The Placer County Tahoe Basin Area Plan and Tahoe City Lodge Project Final EIR/EIS is available online at <https://www.trpa.org/document/projects-plans/>.

Because the plan area for the Placer County Tahoe Basin Area Plan overlaps with all portions of the program area that fall within Placer County and TRPA's regulations related to VMT apply to the Area Plan and the proposed program, the background information included in the Final EIR/EIS is relevant to the proposed program.

Over the last decade, VMT has declined by roughly nine percent within the region, (2017). Based on the most recent modeling completed in support of the Regional Transportation Plan, existing VMT in the Tahoe region over the course of a peak summer weekday is approximately 1,937,070, indicating that the region is currently in attainment (TRPA 2016).

Code of Ordinances

Chapter 4, "Required Findings," of the TRPA Code of Ordinances includes mandatory findings and sets forth procedures describing how TRPA shall make the required findings. Section 4.4, "Threshold-Related Findings," of the Code of Ordinances requires the following findings:

- A. The project is consistent with and will not adversely affect implementation of the Regional Plan, including all applicable Goals and Policies, plan area statements and maps, the Code, and other TRPA plans and programs.
- B. The project will not cause the environmental threshold carrying capacities to be exceeded.

Chapter 50, "Allocation of Development," of the TRPA Code of Ordinances sets forth the requirements for regulating the rate and timing of growth within the region. Section 50.4, "Allocation of Commodities and Development Rights Accounting," of the Code of Ordinances includes LOS and VMT monitoring requirements.

Chapter 65, "Air Quality/Transportation," of the TRPA Code of Ordinances addresses how to protect air quality; and thus, attain and maintain applicable standards and thresholds, including limits on direct sources of air pollution, and new and modified stationary source review; and establishment of programs to maintain and improve air quality, including a traffic and air quality mitigation program, a rental car mitigation program, and an employer-based trip reduction program. Additionally, Section 65.2, "Traffic and Air Quality Mitigation Program," of the Code of Ordinances includes standards for new or transferred development in which requirements related to transportation are detailed.

However, these commodity allocations and air quality/transportation programs are designed to address land use development projects and do not apply to temporary construction projects, which treatment activities are generally consistent with in terms of the temporary nature of activities, trip generation characteristics, and types of vehicles and equipment required.

STATE

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining the state highway system and ramp interchange intersections. Caltrans is also responsible for highway, bridge, and rail transportation planning, construction, and maintenance.

Environmental planning for transportation improvement projects involving California state highways follow the procedures set forth in the agency's Standard Environmental Reference and Section V of Guidance for Compliance Environmental Handbook. This guidance is intended for transportation-specific improvement projects where Caltrans operates as the CEQA lead agency but can also be used by other agencies, including local agencies, for ideas supplemental to their own procedures.

Caltrans provides guidance to local agencies on assessing the performance of rural roadways to enhance safety, mobility, accessibility, and productivity under continued use. Caltrans requires transportation permits for the movement of vehicles or loads exceeding the limitations on the size and weight contained in Division 15, Chapter 5, Article 1, Section 35551, of the California Vehicle Code. Treatment activities would require the short-term use of state and locally managed roadways; and thus, Caltrans guidance and standards specifically related to the performance of rural state roadways and vehicle size and weight limitations would apply to later treatment activities analyzed under the proposed program.

California Manual on Uniform Traffic Control Devices

This *California Manual on Uniform Traffic Control Devices* (California MUTCD) is published by the California Department of Transportation (Caltrans) and provides uniform standards and specifications for all official traffic control devices in California. Temporary traffic control (TTC) applies when the normal function of the roadway, or a private road open to public travel, is suspended and is intended to provide for the reasonably safe and effective movement of road users through or around TTC zones while reasonably protecting road users, workers, responders to traffic incidents, and equipment. TTC planning provides for continuity of the movement of motor vehicle, bicycle, and pedestrian traffic (including accessible passage); transit operations; and access to property and utilities. TTC plans should be prepared by persons knowledgeable about the fundamental principles of TTC and work activities to be performed, and the design, selection, and placement of TTC devices for a TTC plan should be based on engineering judgment (Caltrans 2014). California MUTCD TTC standards and specifications would apply to TTC or other related plans developed as part of, or in response to later treatment activities analyzed under the proposed program.

Transportation Management Plan Guidelines

The Caltrans *Transportation Management Plan Guidelines (2015)* identify the processes, roles, and responsibilities for preparing and implementing Transportation Management Plans (TMPs), as well as useful strategies for reducing congestion and managing work zone traffic impacts. TMP strategies are required for all planned construction, maintenance, and encroachment permit activities within Caltrans right-of-way and requires a Caltrans encroachment permit. A TMP encompasses activities that are implemented to minimize traffic delays that may result from lane restrictions or closures in a work zone. TMP strategies are designed to improve mobility, as well as safety for the traveling public and highway workers. TMP strategies would be required if treatment activities would require a Caltrans encroachment permit. Additionally, TMP guidance informs the standard project requirements of the proposed program addressed within this PTEIR.

Senate Bill 743 (Statutes of 2013)

Senate Bill (SB) 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

OPR published its proposal for the comprehensive updates to the CEQA Guidelines in November 2017 which included proposed updates related to analyzing transportation impacts pursuant to Senate Bill 743. These updates indicated that vehicle miles traveled (VMT) be the primary metric used to identify transportation impacts. In December of 2018, OPR published the most recent version of the Technical Advisory on Evaluating Transportation Impacts (December 2018) which provides guidance for VMT analysis. The Office of Administrative Law approved the updated CEQA Guidelines and lead agencies have an opt-in period until July 1, 2020 to implement the updated guidelines.

As noted in the updated guidelines, agencies are directed to choose metrics that are appropriate for their jurisdiction to evaluate the potential impacts of a project in terms of VMT. The guidance provided thus far relative to VMT significance criteria is focused on residential, office, and retail uses which would not apply to the rural and temporary transportation uses that would occur with later treatment activities under the proposed program. Additionally, as stated above, lead agencies have until July 1, 2020 to implement the updated guidelines.

3.15.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. The environmental setting for transportation includes baseline descriptions for roadway, bicycle, pedestrian, and transit facilities.

PROGRAM AREA

The program area covers an estimated 17,490 acres of public and private land throughout the California side of the Tahoe Basin. Fuel reduction activities would occur in the City of South Lake Tahoe and in unincorporated areas of El Dorado and Placer Counties including, but not limited to: Meyers, Cascade properties near Cascade Lake, Tahoma, Homewood, Alpine Peaks, Tahoe City, Dollar Point, Carnelian Bay, Tahoe Vista, and Kings Beach. Planned Lake Tahoe Community Wildfire Protection Plan (CWPP) Projects encompass 11,640 acres of the program area (see Figures 2-1 through 2-7). Community Fuel Reduction Areas primarily made up of smaller-acreage parcels that are publicly- or privately-owned account for 5,850 acres of the program area. Implementation of treatment activities would require the short-term use of state and locally managed roadways.

ROADWAY SYSTEM

The four basic types of roadways in the program area include state routes, arterials, collectors, and local/neighborhood streets.

State Highways

Most vehicular travel in the Tahoe region occurs on state highways including U.S. Route (US) 50, State Route (SR) 28, SR 89, SR 207, SR 267, and SR 431. Most highways are two-lane facilities; however, portions of US 50, SR 28, and SR 89 have wider cross-sections such as four-lane roadways with center two-way left turn lanes.

Arterials

Arterial roadways carry moderate to high traffic volumes to and from local and collector roads to other arterials and highways. Although access to adjacent parcels is more limited from arterials than from collector and local streets, arterial roadways also provide direct access to properties, particularly in commercial areas.

Collectors

Collector roadways serve as transition facilities, distributing traffic from arterials and highways to their ultimate destination, and collecting traffic from local roadways to roads higher in the street classification hierarchy, such as arterials and state highways. Collector roads serve a dual function by providing access to properties on the roadway and moving moderate traffic volumes for medium length trips.

Local/Neighborhood Streets

Local roadways are intended to serve as access roads to adjacent properties only. They provide connections to higher order roadways, carry little if any through traffic, and generally have low traffic volumes.

TRANSIT SYSTEM

Transit service within the program area is provided by a mix of public and private transit services. Tahoe Transportation District (TTD) and Tahoe Truckee Area Regional Transit (TART) are the regional transit providers. These two transit providers operate year-round and seasonal services on the north, east, south and west shores. They also provide commute services to nearby areas such as Truckee to the north, and Carson Valley to the east. Washoe Regional Transportation Commission, the Town of Truckee, State Departments of Transportation, and private entities such as ski resorts also partner with transit providers to offer transit service through cost sharing agreements, formula funding allotments, and private shuttles and taxi services (TRPA 2017).

TART connects the north and west shores of Tahoe to the Town of Truckee year-round and runs a free night shuttle service during summer. TTD provides year-round service throughout the south shore and connects to the neighboring communities of Gardnerville and Minden. The TTD also connects parts of the west and east shores during the summer with the Emerald Bay Trolley and the East Shore Express. Some local buses also provide connections to trailheads, such as at Spooner Summit. Though many parts of the lake are served with transit, year-around connections from north to south do not exist.

TART and TTD supply on-demand services to qualified individuals with special needs who are unable to independently use the fixed-route transit system. Location-specific shuttle service is provided by private companies and public/private partnerships. Many major ski resorts also provide shuttle services. Additionally, some private shuttle companies focus on the needs of the recreational hiker and biker by providing point-to-point pick-up and drop-off. Private providers include Flume Trail Bikes and Over the Edge Tahoe (TRPA 2017).

BICYCLE AND PEDESTRIAN SYSTEM

The current network in the Tahoe Basin includes 58 miles of shared-use path, 45 miles of bicycle lanes, 24 miles of sidewalks, and four enhanced crosswalks that include a pedestrian active beacon or rapid flashing beacon (TRPA 2018). The United States Forest Service also operates and maintains 350 miles of National Forest System Trails and 250 miles of National Forest System Roads (TRPA 2017).

The region has over 80 miles in separated class-I shared-use paths and sidewalks. These routes are well-connected in some areas and have gaps in others. Caltrans and local jurisdictions have constructed sidewalks along the state highway system through town centers and more are planned. Local jurisdictions are connecting Class-I shared-use paths around the lake, providing links across communities and to neighboring areas (TRPA 2017).

PAST AND CURRENT TREATMENT ACTIVITIES AND WILDFIRE

Treatments occur within the program area that result in temporary increases in traffic. There is no detailed data regarding the total trips or VMT for current treatment activities. Treatment crews typically originate from the region of the treatment site. Existing treatment activities typically require a small number of trips per day on an individual basis, considering that treatment activities are generally consistent with construction activities in terms of the temporary nature of activities, trip generation characteristics, and types of vehicles and equipment required.

Wildfire can require emergency response in the form of personnel and equipment. In cases where a wildfire exceeds the capacity of local CAL FIRE and local units, emergency resources may be diverted to a wildfire from elsewhere in the state or some cases, elsewhere in the country or internationally. Additional VMT results from this wildfire response. During wildfire, the main goal is containment and reducing impacts to human life and property; efficient travel and VMT minimization are not prioritized.

3.15.3 Environmental Impacts and Mitigation Measures

This section describes the analysis techniques, assumptions, and results used to identify potential significant impacts of the proposed program on the transportation system. Transportation impacts are described and assessed, and mitigation measures are recommended for impacts identified as significant or potentially significant.

METHODOLOGY

The analysis of transportation impacts related to later treatment activities under the proposed program includes qualitative analysis of bicycle, pedestrian, and transit facilities, hazards, emergency access, and VMT. The analysis is based on details of typical treatment activities, the equipment utilized for treatments, and methods for transporting the equipment, materials, and by-products. Significance determinations account for the influence of relevant SPRs (i.e., TMPs), which are incorporated into treatment prescriptions and project design and listed below.

- ▶ **SPR TRAN-1 Implement Traffic Control during Treatments:** Before initiating treatment activities the project proponent will work with the agency(ies) that have jurisdiction over affected roadways to determine if a Traffic Management Plan (TMP) is needed. A TMP will be needed if traffic generated by the treatment activity would result in obstructions, hazards, or delays exceeding applicable jurisdictional standards along access routes for individual treatment activities. If needed, a TMP will be prepared to provide measures to reduce potential traffic obstructions, hazards, and service level degradation along affected roadway facilities. The scope of the TMP will

depend on the type, intensity, and duration of the specific treatment activities under the Tahoe PTEIR. Measures included in the TMP could include construction signage to provide motorists with notification and information when approaching or traveling along the affected roadway facilities, flaggers for lane closures to provide temporary traffic control along affected roadway facilities, treatment schedule restrictions to avoid time periods of peak vehicle traffic, haul-trip, delivery, and/or commute time restrictions that would be implemented to avoid peak traffic days and times along affected roadway facilities. If the TMP identifies impacts on transportation facilities outside of the jurisdiction of the project proponent, the TMP will be submitted to the agency with jurisdiction over the affected roadways before commencement of treatment activities.

- ▶ **SPR TRAN-2 Smoke Management and Effects on Traffic:** Smoke generated during prescribed burn operations could potentially affect driver visibility and traffic operations along nearby roadways. Direct smoke impacts to roadway visibility and indirect impacts related to driver distraction will be considered during the planning phase of burning operations. Smoke impacts and smoke management practices specific to traffic operations during prescribed fire operations will be identified and addressed within the TMP. The TMP will include measures to monitor smoke dispersion onto public roadways, and traffic control operations will be initiated in the event burning operations could affect traffic safety along any roadways. This SPR applies only to prescribed burn treatment activities and all treatment methods.
- ▶ **SPR TRAN-3 Reconstruction or Grading of Existing Forest Roads:** During the reconstruction or grading of existing forest roads, the project proponent shall strive to maintain the existing roadway alignment. If the existing roadway alignment is diverged from, the new roadway alignment shall be constructed in accordance with all applicable geometric and safety design standards. The project proponent shall work with the agency(ies) with jurisdiction over these affected roadways to determine the standards to which any newly aligned roadway shall be constructed.

Methodology for Determining VMT Threshold of Significance

Section 15064.3 of the State CEQA Guidelines became effective December 28, 2018 as part of a comprehensive guidelines update. The section addresses the determination of significance for transportation impacts, which requires that the analysis be based on VMT instead of a congestion metric (such as LOS). The change in the focus of transportation analysis is the result of legislation (SB 743, Statutes of 2013) and is intended to change the focus from congestion to, among other things, reduction in greenhouse gas emissions, encouraging mixed use development, and other factors. Pursuant to State CEQA Guidelines Section 15064.3(c), this change in analysis may be implemented now and is mandated to be addressed beginning July 1, 2020. Because the later treatment activities analyzed under the proposed program will occur after the date on which VMT is required to be considered, it is included in the analysis in this PTEIR.

SB 743 requirements are most applicable to travel related to urban land uses, such as residential or commercial development projects; however, requirements are not limited to those types of projects. State CEQA Guidelines Section 15064.3(b) identifies criteria for analyzing the transportation impacts of a project, including land use projects (Section 15064.3(b)(1)) and transportation projects (Section 15064.3(b)(2)). Treatment activities analyzed under the proposed program are not land use or transportation projects, so neither of these sections apply. However, State CEQA Guidelines Section 15064.3(b)(1) notes that projects that would decrease VMT from existing conditions should be presumed to have a less-than-significant effect. State CEQA Guidelines Section 15064.3(b)(3) (Qualitative Analysis) explains that there may be conditions under which a qualitative rather than quantitative analysis of VMT is appropriate. This section states that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may qualitatively analyze VMT generated by a project. Additionally, this section notes that for many projects, a qualitative analysis of construction traffic may be appropriate. Section 15064.3(b)(4), Methodology, explains that the lead agency has discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards such as CEQA Guidelines Section 15151 (standards of adequacy for EIR analyses).

Later treatment activities analyzed under the proposed program would occur on developed and undeveloped landscapes. Treatment activities would typically require a small number of trips per day on an individual basis, considering that they are generally consistent with construction activities in terms of the temporary nature of

activities, trip generation characteristics, and types of vehicles and equipment required. The Technical Advisory on Evaluating Transportation Impacts (OPR 2018) notes that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact, absent substantial evidence indicating otherwise (OPR 2018). Later treatment activities analyzed under the proposed program are likely to generate fewer than 110 trips per day, recognizing that would accommodate up to 50 vehicles bringing crews and equipment to a treatment site in a day (i.e., 100 trips commuting to and from a treatment site each day, plus a few additional incidental trips during the day). Therefore, using OPR guidance, individual treatment activities that would generate fewer than 110 trips per day would result in a less-than-significant VMT impact.

The change in VMT considered in this PTEIR would not only be for individual treatment activities, but also for the combined implementation of the multiple later treatment activities under the proposed program as a whole. Individual treatment activities would contribute to the total annual change in VMT attributable to the program as a whole. The VMT generated by the total annual program would need to be compared to a different threshold than 110 trips per day, because it comprises many individual treatment activities carried out each year with locations throughout the program area. The Technical Advisory describes no scenario analogous to the overall program, i.e., where a natural resources management program is proposed to consist of an array of individual, in-field activities on different sites over a broad geography. Inherently, managing trip length is not feasible for such a natural resources management program scenario, because of the variability in location of individual activities, broad geography of the program, and special skill set of treatment workers. Nor is it feasible to reduce VMT by requiring worker carpooling because workers would often need to drive separate vehicles to transport equipment (e.g., chippers, chainsaws) to treatment sites. For the purposes of this PTEIR, the VMT of later treatment activities are estimated based on project-specific data and assumptions on the number and length of worker trips and haul trips under discrete treatment project types (i.e., manual treatments, mechanical treatments, prescribed burning), the frequency of treatments, and the number of new treatment activities that could occur concurrently under the proposed program. Therefore, a quantitative analysis using project-specific data and assumptions provides the most applicable approach for analyzing the change in VMT resulting from later treatment activities under the proposed program.

This PTEIR does not rely on the TRPA peak day VMT Threshold value of 2,030,938 VMT, as this threshold is intended as a threshold for air quality and nitrogen deposition into Lake Tahoe. It was not formulated with the same intent as SB 743 and is not directly tied the state's long-term greenhouse gas emissions reduction target; and therefore, does not address Section 15064.3 of the State CEQA Guidelines. Thus, this PTEIR relies on fundamental CEQA principles for defining the threshold of significance for VMT. The statutory and regulatory definition of "significant effect on the environment" provides the fundamental principle applicable to thresholds of significance. A significant effect on the environment is defined in CEQA as a "substantial or potentially substantial adverse change in the environment." (PRC Section 21068). For purposes of PRC Section 21100, governing actions for proposed state projects, subpart (a) limits significant effects on the environment to "substantial or potentially substantial adverse changes in physical conditions..." This definition of significant effect on the environment is repeated in Sections 15002(g) in Article 1, General, under Section 15002, General Concepts, and 15382 in Article 20, Definitions. Based on these provisions, this PTEIR considers whether an adverse change in physical conditions would occur. In the case of VMT, an adverse change would be an increase in VMT, because statutory environmental policy seeks to decrease VMT. Thus, taking into consideration the fundamental CEQA principals for defining thresholds of significance, the four criteria detailed in Section 15064.3(b) of the State CEQA Guidelines for analyzing the transportation impacts and their applicability to the proposed program, state policy, and the recommendations of the Technical Advisory, a threshold of no net increase in VMT is used in this PTEIR to determine significance of the implementation of the proposed program. A relative increase in VMT under the proposed program within the program area, as compared to existing conditions, is determined to result in a significant effect on the environment (see listing under "Thresholds of Significance," below). It should be noted that this threshold is more conservative than the existing TRPA Air Quality Threshold, which requires that VMT for the Tahoe region does not exceed the value of 2,030,938 VMT; and thus, allows for projects to increase VMT up to that static threshold. This threshold is also consistent with recent TRPA guidance for the assessment of VMT impacts of projects in the Tahoe Basin (TRPA 2019).

THRESHOLDS OF SIGNIFICANCE

Based on Appendix G of the State CEQA Guidelines, an impact on transportation and traffic would be significant if implementation of later treatment activities under the Tahoe PTEIR would:

- ▶ substantially increase hazards due to a geometric design features or incompatible uses;
- ▶ result in inadequate emergency access; or
- ▶ conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision(b).

IMPACTS AND MITIGATION MEASURES

Impact 3.15-1: Substantially Increase Hazards due to a Design Feature or Incompatible Uses

Implementation of the proposed program would not require the construction or alteration of any public roadways, and qualifying treatment activities under the proposed program would adhere to SPRs that manage and minimize potential hazards due to smoke generated during prescribe burns. The project proponent would prepare and implement a TMP to avoid and minimize temporary transportation hazards due to incompatible uses operating along program area roadways. Therefore, later treatment activities would not substantially increase hazards because of a design feature or incompatible uses. This impact would be **less than significant**.

Agencies with the responsibility for roadway design and operation within the program area (i.e., Caltrans, El Dorado County, Placer County, and the City of South Lake Tahoe) all have adopted and enforce roadway design standards. These standards address a variety of roadway elements, including safety and hazards. The use and enforcement of these design standards prevents the development of transportation infrastructure that would substantially increase hazards because of a design feature. The later treatment activities analyzed under the proposed program would not require the construction, re-design, or alteration of any public roadways, and treatments activities would not occur within any public roadway right-of-way. However, later treatment activities analyzed under the proposed program could require reconstruction or grading of existing forest roads, but no new temporary or permanent road construction would occur. As detailed in SPR TRANS-3, any forest road reconstruction necessitating a divergence from the existing roadway alignment shall be constructed in accordance with all applicable geometric and safety design standards. Thus, the later treatment activities under the proposed program would not substantially increase hazards because of a design feature.

The later treatment activities under the proposed program would be temporary in nature; and thus, would not result in long-term operational increases in vehicular traffic along roadways surrounding treatment sites. However, later treatment activities would temporarily increase vehicular traffic along roadways used to access treatment areas. Treatment-related traffic would include heavy-duty vehicle trips to haul equipment, materials, and trips associated with the workers commuting to and from the treatment areas. The number of haul trips and worker trips to and from the treatment sites would vary based on the size of the area being treated, the type of treatment being implemented, and the duration of the treatment activities. Additionally, the forest biomass produced and removed during treatments would be disposed of through processing of sawlogs into lumber, burning, biomass energy generation, firewood, on-site decomposition, and other purposes. This would result in additional haul truck trips to biomass, biomass energy, and sawmill as far away as 155 miles from where later treatment activities could occur. Due to the variability of the scale, location, and duration of treatment activities that could be implemented under the proposed program, the number of trucks, truck routing, number of employees, employee parking, truck idling, lane closures, and a variety of other treatment-related activities are unknown at this time.

However, it is known that the hauling of heavy-duty equipment to and from the individual treatment sites would be necessary for some of the treatment activities. In some of the more remote areas of the program area, the circulation network includes heavily trafficked roadways, roadway facilities with limited lane and shoulder widths, curvilinear alignment, low design speeds, and roadways that pass through mountainous terrain. In these areas, the hauling of heavy machinery (e.g., bulldozers, excavators) and operation of large trucks occurring along heavily trafficked

roadways with limited lane width, little or no roadway shoulders, and curvilinear alignment, could potentially result in transportation hazards along the roadway network because of incompatible uses. Additionally, pile burning and prescribed understory burn operations would produce smoke and could potentially affect visibility along nearby roadways such that a transportation hazard could occur.

Due to the nature of the program area roadway network, the vehicle trip types generated by later treatment activities, and the potential for roadway visibility to be affected by pile burning and prescribed understory burns, temporary roadway obstructions and hazards could occur if project-generated traffic is not appropriately planned and managed.

SPR TRAN-2 requires the project proponent to monitor prescribed burn operations and the associated smoke dispersion. Traffic control operations would be initiated if burning operations begin to affect traffic safety along any roadways. SPR TRAN-1 also requires that if deemed necessary by the project proponent, a TMP will be prepared before initiating later treatment activities if traffic generated by the treatment activity would result in obstructions or hazards exceeding applicable jurisdictional standards along access routes for individual treatments. The TMP will include measures to avoid and minimize traffic obstructions and hazards along affected roadway facilities, as needed. The scope of the TMP will depend on the type, intensity, and duration of the specific treatment activities under the proposed program.

Measures included in the TMP could include notification of treatments; temporary traffic control signage; flaggers for lane closures; and delivery, hauling, and worker commute schedule restrictions. These measures would promote safe and efficient transportation circulation during implementation of later treatment activities under the proposed program and would address and plan for any potential transportation hazards resulting from the operation of incompatible vehicles on roadways not designed to accommodate these vehicle classes.

Implementation of later treatment activities under the proposed program would not require the construction, re-design, or alteration of any public roadways. Additionally, each later treatment activity under the proposed program would be required to comply with and implement the SPRs identified above that manage and minimize potential hazards because of smoke associated with prescribe burns, and the operation of incompatible uses along the roadway network during later treatment activities. Additionally, project-generated effects related to transportation hazards would be localized and temporary, and the project proponent would prepare and implement a TMP to reduce any temporary transportation effects to the degree feasible. Therefore, later treatment activities would not substantially increase hazards due to a design feature or incompatible use. This impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.15-2: Conflict or be Inconsistent with CEQA Guidelines Section 15064.3, Subdivision (b) Regarding Vehicle Miles Traveled

Under the proposed program, the scale of treatment activities would increase to treat approximately 850 acres per year within Planned CWPP Projects plus an estimated average of 400 acres per year within the Community Fuel Reduction Area. With the increase in treatment acreage, the daily VMT generated by treatment activities in comparison to existing conditions is anticipated to increase by approximately 8,061 VMT because more individual treatment projects would be implemented. A key goal of the proposed program is to reduce the risk of catastrophic wildfires. Reducing the risk of catastrophic wildfires would result in a reduction in fire suppression activity and trips, which would be reasonably expected to decrease VMT over the long term, compared to conditions without the proposed program. However, it is not feasible to predict changes in wildfire occurrence sufficiently to quantify potential changes in fire response VMT. Thus, to meet CEQA's mandate of good faith disclosure and to not risk understating potential future impacts in light of the uncertainties, this impact would be **potentially significant**, because VMT generated by later treatment activities under the proposed program would increase in comparison to existing conditions, notwithstanding the potential VMT-reducing effects of reduced wildfire response.

Under existing conditions, treatment activities are implemented within the program area by fire agencies and agencies with land management responsibilities. These treatment activities generate a baseline amount of VMT from heavy-duty vehicle trips to haul equipment and materials, and trips associated with the workers commuting to and from the treatment areas. Additionally, some of the forest biomass produced by mechanical and manual treatments is currently hauled by truck to processing facilities.

Under the proposed program, the scale of the later treatment activities would increase by approximately 747 acres per year to treat a total of approximately 1,250 acres per year, including 850 acres within Planned CWPP Projects and 400 acres within Community Fuel Reduction Area. With the increase in treatment acreage, the VMT generated would increase in comparison to existing conditions. The VMT would vary based on the location, size of the area being treated, the type of treatment being implemented, and the duration of the treatment activities. However, based on project-specific data and assumptions, an estimate of the daily VMT associated with the increase in treatment activities under the proposed program was calculated and is shown in Table 3.15-1, below. As detailed in Section 2.4.7, "Access and Hauling," the hauling of forest products to biomass facilities and sawmills could occur concurrently with mechanical treatment activities. The locations of the potential biomass facilities and sawmills to which forest products could be hauled, and their approximate distance from the center of the program area were identified and disclosed in Section 2.4.7, "Access and Hauling," and are listed below.

- ▶ Cabin Creek biomass energy facility in Truckee, California (27 miles), if it is opened;
- ▶ American Renewable Power biomass facility in Loyalton, California (62 miles);
- ▶ Sierra Pacific Industries biomass and sawmill facility in Quincy, California (100 miles);
- ▶ Sierra Pacific Industries biomass and sawmill facility in Lincoln, California (110 miles); or
- ▶ Greenleaf Honey Lake biomass energy facility in Wendel, CA (155 miles).

For the purposes this analysis, the conservative approach of assuming the identified biomass and sawmill facility and biomass energy facility furthest from the program area (i.e., 110 miles and 155 miles, respectively) would be where the forest products would be hauled to. For detailed calculations and assumptions see Appendix D.

Table 3.15-1 Daily VMT of New Treatment Activities under the Proposed Program

Treatment Type	Workers Number of Workers	Workers Vehicle Trips ²	Workers Average Trip Length ³	Workers VMT	Hauling Trips ⁴	Hauling Average Trip Length ⁵	Hauling VMT	Maximum Concurrent Treatments	Total VMT
Manual Treatment	10	20	17.24	345	0	0	0	3	1,034
Mechanical Treatment	10	20	17.24	345	20	Varies	2,740	2	6,170
Pile Burning ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Prescribed Understory Burning	25	50	17.15	858	0	0	0	1	858
Total Daily VMT of Maximum Concurrent Treatments									8,061

Note: N/A = not applicable.

¹ Pile burning typically occurs in the late fall, winter or early spring; thus, would not occur concurrently with other treatment activities, which are generally conducted from late spring through early fall.

² Assumed that individual workers will generate two trips per day; one trip to the treatment site and one trip from the treatment site.

³ Based on CalEEMod default trip length and an additional 5 miles of travel on unpaved roads for 29 percent of treatment sites.

⁴ Maximum of 8 daily trips to a sawmill and 12 trips to a biofuel energy facility.

⁵ Approximately 110 miles to a sawmill and 155 miles to a biomass energy facility.

Source: Compiled by Ascent Environmental in 2019, see Appendix G for detailed calculations

As shown in Table 3.15-1, because the greater proposed scale of treatment activities and associated trips implementation of the proposed program would increase VMT above current conditions by approximately 8,061. However, it should be noted that individual treatment activities under the proposed program are likely to generate fewer than 110 trips per day, which is generally assumed to cause a less-than-significant transportation impact for specific later activities, as described in the Technical Advisory on Evaluating Transportation Impacts (OPR 2018).

A primary objective of the program is to reduce the risk of catastrophic wildfires. Wildfires require an immediate response from emergency personnel and mobilization of equipment. During wildfires that exceed the containment capacity of local resources, personnel from throughout the state (and occasionally nationally and internationally) are dispatched to assist in firefighting. The reduction of VMT is not a primary consideration during wildfires. Rather, protecting human life and property is prioritized. The movement of personnel associated with containment of wildfires results in a surge of VMT associated with vehicle travel. While implementation of treatment activities under the program cannot ensure that wildfires would not occur, implementation of the proposed program is designed to reduce wildfire occurrence and severity, which would reduce the surge in VMT resulting from increased trip generation and trip lengths associated with response to such events.

When VMT attributable to wildfire response is considered with the VMT from later treatment activities, it is conceivable that implementation of the proposed program could result in a net decrease in total VMT. This could compensate for the comparatively smaller increase in VMT attributable to increased scale of treatments activities, but predicting this outcome with certainty is not feasible.

In summary, because of an intended decrease in the occurrence and severity of wildfires following achievement of the proposed treatment acreage targets under the proposed program, implementation of the proposed program could result in a net reduction in VMT in the long term because wildfire response travel could be reduced, resulting in a less-than-significant impact. However, because of the increase in treatment acreage under the proposed program, VMT associated with treatment activities would increase in comparison to the existing condition. Additionally, there is uncertainty in predicting future wildfire occurrence and intensity; thus, recognizing uncertainty in future predictions, to meet CEQA's mandate of good faith disclosure (*California Native Plant Society v. City of Santa Cruz, supra*, 177 Cal.App.4th at p. 979) and to not risk understating potential future impacts in light of the uncertainties, this impact related to VMT would be **potentially significant**.

Mitigation Measures

Vehicular travel associated with implementation of later treatment activities under the proposed program would primarily originate from near where individual treatment activities would occur. Due to the rural nature of the majority of the program area and the required equipment and number of employees (i.e., the primary trip generators associated with treatment activities) associated with each later treatment activity, it would not be feasible to reduce VMT generated under the proposed program beyond current practices of encouraging workers to carpool and/or use public transportation and the current practice of employing local crews and equipment as available and feasible. Additionally, there are a limited number of facilities where forest biomass produced by mechanical and manual treatments could be hauled to, operational constraints (capacity, hours of operation, processing services offered) exist at some facilities, and the cost of hauling would reasonably result in sawlogs and biomass taken to the closest available facility. Therefore, there is no feasible mitigation available.

Significance after Mitigation

As stated above under the pre-mitigation significance determination, to meet CEQA's mandate of good faith disclosure and to not risk understating potential future impacts in light of uncertainties related to wildfire, this PTEIR classifies this VMT impact as **potentially significant and unavoidable**, even though the probability of a net VMT reduction could be reasonably expected to occur in the long term with the intended reduction in wildfire occurrence and severity, and individual later treatment activities under the proposed program would likely be less than significant pursuant to the thresholds identified in OPR's Technical Advisory on Evaluating Transportation Impacts. Even though the intended outcome would be less than significant, the "potentially significant and unavoidable" determination is necessary under CEQA to disclose in good faith the potential effects related to VMT generated by the proposed program as a whole.