3.5 TRANSPORTATION

This section describes existing transportation conditions in the Project area, presents the regulations applicable to the Project, and evaluates the potential transportation impacts that could result from implementation of the Tahoe Cross-Country Lodge Replacement and Expansion Project. As discussed in Section 3.1, "Approach to the Environmental Analysis," this analysis is provided to fully document potentially significant transportation effects of the proposed Project and Alternative A in accordance with State CEQA Guidelines Section 15126.2. The evaluation herein is based on information contained in the *Tahoe XC Lodge Project Transportation Impact Analysis* (Transportation Impact Analysis) prepared by LSC Transportation Consultants, Inc. included as Appendix D to this document. The Traffic Impact Analysis in Appendix D includes a more comprehensive discussion of the transportation setting in the Project area (including historical crash data, driveway spacing, and results of speed surveys) and effects that were determined not to be potentially significant and excluded from the discussion herein.

The primary considerations raised during scoping that pertain to transportation included recommendations to:

- address project effects on traffic, access, and public and pedestrian safety;
- analyze a.m. and p.m. peak traffic volumes and consistency with the Placer County Tahoe Basin Area Plan (Area Plan) policies;
- consider the Placer County Neighborhood Traffic Management Program and related approval process;
- evaluate parking demand;
- consider the effect of a new driveway on Polaris Road and the combined traffic associated with the school and lodge; and
- analyze effects on emergency evacuation.

The methods of analysis used in this section are generally consistent with standard traffic engineering practices. Information on existing and forecasted transportation conditions is based on traffic, parking counts, and field observations conducted in 2015, 2016, and 2018; Caltrans traffic volumes; the Transportation Research Board's Highway Capacity Manual; the TRPA TransCAD transportation model; a review of existing and proposed facilities; and traffic forecasts from other projects in the Tahoe Basin. The analysis considers impacts during winter and summer seasons.

The proposed Project site and Alternative A site are located more than 0.5 mile from the closest transit stops located on State Route (SR) 28, near Old Mill Road and Fabian Way. The proposed Project site and Alternative A site are topographically separated from SR 28, meaning that access to the sites from transit stops on SR 28 would require a steep climb, which would limit transit ridership for site users. Because the Existing Lodge is not well-served by existing transit, it is reasonable to conclude that the proposed Project would not result in inadequate transit service to meet demand or adversely affect existing transit operations. Therefore, transit impacts are not evaluated further.

Local roadways providing access to the proposed Project site and Alternative A site do not include bike lanes or sidewalks, and no transit facilities are located in close proximity to the sites. Thus, neither the proposed Project nor Alternative A would alter or conflict with any bicycle, pedestrian, or transit facilities in the vicinity of either site. Additionally, the sites are located near an extensive network of unpaved trails; however, the project would not alter any of these unpaved trails. Therefore, the Project would not adversely affect any existing or planned public transit, bicycle, or pedestrian facilities. This issue is not discussed further.

The Project does not involve airports, rail lines, or waterborne facilities; nor would it alter travel demand to the extent that it would result in changes to existing air, rail, or waterborne travel patterns. Because the Project would not affect air, rail, or waterborne travel patterns, the effects on these transportation systems are not evaluated further.

The potential for the Project to interfere with implementation of an adopted emergency response plan or emergency evacuation plan is discussed in Section 3.2.3, "Hazards and Hazardous Materials."

Changing the pattern of ownership of parcels as part of the larger land exchange being contemplated by TCPUD and the California Tahoe Conservancy (Conservancy) by itself would have no impact related to transportation. The potential environmental effects from construction and operation of the proposed Project on a portion of APN 093-160-064, currently owned by the Conservancy, are assessed in this section and other resource sections in Chapter 3, "Environmental Setting, Environmental Impacts, and Mitigation Measures," and in Chapter 5, "Other CEQA-Mandated Sections," of this EIR. The purpose of the land exchange is to consolidate ownership and increase land management efficiencies for the agencies and no other physical changes are proposed for the affected parcels.

3.5.1 Regulatory Setting

TAHOE REGIONAL PLANNING AGENCY

Regional Plan

Chapter 3, "Transportation Element," of the Regional Plan provides goals and policies that are intended to establish a safe, efficient, and integrated transportation system that provides quality mobility options for all sectors of the population, supports the region's economic base, enhances quality of life, and maximizes opportunities for environmental benefits. The Transportation Element includes transportation goals, policies, and implementation measures that address multiple aspects of transportation planning and interact to create a successful multi-modal transportation system. TRPA's Goals and Policies sets standards for vehicle "level of service (LOS)." A more detailed definition of LOS is provided below. The TRPA Goals and Policies require that peak period traffic flow not exceed the following:

- LOS C on rural recreational/scenic roads;
- LOS D on rural developed area roads;
- LOS D on urban developed area roads;
- LOS D for signalized intersections; and
- LOS E may be acceptable during peak periods in urban areas, not to exceed 4 hours per day.

These vehicle LOS standards may be exceeded when provisions for multi-modal amenities and/or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the Project-generated traffic in relation to overall traffic conditions on affected roadways. While the Tahoe Regional Planning Compact looks to "reduce the dependency on the private automobile" there are currently no adopted requirements or standards regarding the quality of service of other travel modes (i.e.; transit, biking, or walking) that could potentially reduce the demand on the roadway system. TRPA has no standards specific to unsignalized intersections.

Linking Tahoe: Regional Transportation Plan and Sustainable Communities Strategy

In 2017, TRPA adopted the Linking Tahoe: Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS), which seeks to improve mobility and safety for the commuting public while at the same time delivering environmental improvements throughout the transportation network in the Tahoe region. The plan's horizon year extends to 2040 (TRPA 2017). Important directions of the plan are to reduce the overall environmental impact of transportation in the region, create walkable, vibrant communities, and provide real alternatives to driving. The RTP/SCS offers strategies to address the travel demands of residents, commuters, and the millions of people who visit Lake Tahoe each year. Goals and policies are included in the RTP/SCS that are consistent with regional and federal requirements that focus on a reduction in dependency on the automobile and give preference to projects that increase the capacity of the region's transportation system through public transportation projects and programs.

Thresholds

Two threshold standards pertaining to air quality are set forth in terms of Basin-wide vehicle miles traveled (VMT). These thresholds are applicable to transportation analyses. VMT is a computed value, which correlates to the extent of an area's reliance on the private automobile for trip making. 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.

Two air quality management threshold standards that relate to transportation facilities in the region: (1) the reduction in VMT by 10 percent from 1981 base year conditions to reduce nitrate deposition; and (2) the reduction in VMT by 10 percent from 1981 base year conditions to improve visibility. The VMT threshold is periodically updated whenever TRPA updates its transportation model. The most recent VMT threshold was calculated at 2,030,938 for a peak summer day, based on the 2014 model update. Based on the most recent modeling completed in support of the RTP/SCS, the existing VMT in the Tahoe Basin over the course of a peak summer weekday is approximately 1,937,070 (TRPA 2017).

Code of Ordinances

Changes in daily vehicle trip ends (DVTE) as a result of additional development and transferred development, and all changes in project operation are discussed in Section 65.2, "Traffic and Air Quality Mitigation Program," of the TRPA Code. Fees are assessed in accordance with TRPA's Mitigation Fee Schedule (TRPA 2018) on an individual project basis for projects that increase DVTE. The purpose of the fee program is to offset impacts from indirect sources of air pollution. Temporary activities are governed by TRPA Code Section 2.3.6, and construction projects are required to comply with TRPA's standard conditions of approval.

Placer County Tahoe Basin Area Plan

The Placer County Tahoe Basin Area Plan (Area Plan), a joint TRPA/Placer County plan, incorporates TRPA goals and regulations but also includes the following additional transportation policies relevant to the Project.

Transportation Network

- **Policy T-P-6:** Maintain consistency with Level of Service (LOS) and quality of service standards identified in the Regional Transportation Plan (RTP), with the exception of intersections and roadway segments within the Town Center boundaries where LOS F is acceptable during peak periods. The RTP allows for possible exceptions to the LOS standards outside the Town Center boundaries when provisions for multi-modal amenities and/or services (such as transit, bicycling and walking facilities) are incorporated and found to be consistent with Policy T-10.7 of the RTP.
- **Policy T-P-9:** New and/or modified development shall be assessed Traffic Mitigation Fees associated with the Placer County Tahoe Region's Capital Improvement Program. Fees shall be representative of the fair share portion of that development's impacts on the local and regional transportation system.
- **Policy T-P-12:** In an effort to reduce peak-period vehicle trips and improve LOS, future development project proposals which will employee between 20 and 100 employees and/or include tourist accommodation or recreational uses will be required to submit to Placer County a Transportation Demand Management Plan (TDM) upon Development Review.

Parking

- **Policy T-P-13:** Encourage shared-use parking facilities to more efficiently utilize parking lots.
- **Policy T-P-16:** Provide suitable parking facilities for recreational areas while encouraging major commercial with recreational and/or excursion activities to provide transit services and/or incentives to patrons, such as proximate bicycle parking facilities.

Pedestrian and Bicycle

- **Policy T-P-24:** Require installation of bicycle racks or secured lockers as a condition of approval for projects and encourage transit providers to offer bicycle racks on their buses.

- **Policy T-P-34:** Implement safety for pedestrian and bicycle routes and maximize visibility at bicycle, pedestrian, and vehicle conflict points through increased safety signage, sight distance and facility design.

The environmental document prepared for the Area Plan (i.e., the Placer County Tahoe Basin Area Plan and Tahoe City Lodge Project EIR/EIS [Area Plan EIR/EIS]) identified plan-level mitigation that would apply to all new construction located within the Area Plan boundaries. Placer County and TRPA developed mitigation measures to address transportation impacts of the Area Plan. Mitigation Measures 10-1c and 10-1d are shown below and would apply to the Project (Placer County and TRPA 2016):

> Mitigation Measure 10-1c: Payment of Traffic Mitigation Fees to Placer County
>
> Prior to issuance of any Placer County Building Permits, projects within the Area Plan shall be subject to the payment of established Placer County traffic impact fees that are in effect in this area, pursuant to applicable county Ordinances and Resolutions. Traffic mitigation fees shall be required and shall be paid to the Placer County Department of Public Works and Facilities subject to the County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code. The fees will be calculated using the information supplied. If the use or the square footage changes, then the fees will change. The actual fees paid will be those in effect at the time the payment occurs.
>
> Mitigation Measure 10-1d: Expand Requirements for Transportation Demand Management Plans
>
> To reduce peak-period vehicle trips and improve LOS, future development project proposals which will employ between 20 and 100 employees and/or include tourist accommodation or recreational uses will be required to submit to Placer County a Transportation Demand Management Plan (TDM) upon Development Review. The current threshold for preparation of a TDM or Employee Transportation Plan (TRPA Code Section 65.5.2.B) and compliance with the Placer County Trip Reduction Ordinance (Placer County Code Section 10.20) is 100 or more employees in a single location which applies to a very limited number of sites in the Plan area. This existing requirement also does not address trips that are generated from sources other than employee commutes, and in the Plan area, a large proportion of peak period trips are the result of tourist or visitor trips rather than employee trips.
>
> Development of the expanded requirements for TDM plans will consider trip sources and characteristics in the Plan area during peak periods. This mitigation measure will expand the requirements for TDM plans with criteria that would require some employers with fewer than 100 employees to prepare such plans and implement through project mitigation for LOS impacts.
>
> A menu of measures that could be included in TDM plans is provided in TRPA Code Section 65.5.3 and Placer County Code Section 10.20. These measures include but are not limited to:
>
> - Preferential carpool/vanpool parking;
> - Shuttle bus program;
> - Transit pass subsidies;
> - Paid parking; and
> - Direct contributions to transit service.

2019 Guidance for Assessment of Vehicle Miles Traveled Impacts of Projects in the Tahoe Basin

TRPA's memorandum titled *Guidance for Assessment of Vehicle Miles Traveled Impacts of Projects in the Tahoe Basin* establishes a consistent methodology for determining vehicle miles traveled (VMT) impacts of projects proposed in the Tahoe region (TRPA 2019). The guidance includes screening criteria used to determine whether a project needs to undergo an in-depth traffic and VMT analysis and specific guidance on how to conduct the VMT analysis for projects where such an analysis is warranted.

Projects that generate fewer than 100 daily vehicle trips, and that are not changing from one major use classification to another, are not required to complete a traffic or VMT analysis. In accordance with TRPA Code Section 65.2, projects that generate between 100 and 200 daily vehicle trips are required to complete a traffic analysis if the project is located within 300 feet of U.S. Highway 50 (U.S. 50) and a "maintenance" area. Because the Tahoe region has achieved its air quality goals and no longer has air quality maintenance areas, projects that generate between 100 and 200 vehicle trips are no longer required to complete a traffic analysis, though they are still subject to TRPA's air quality mitigation fee. All projects that would generate greater than 200 additional vehicle trips per day must complete a traffic analysis; the requirements for which are specified in TRPA Code Section 65.2.4. Projects that generate between 100 and 200 trips per day are required to complete a VMT analysis, but not a full traffic analysis that would consider level of service impacts, parking impacts, or traffic hazards (TRPA 2019:12).

The memorandum describes methods for conducting VMT analyses, using both a calculation-based off model approach (i.e., the applicant must show the steps involved in VMT calculations) and a model-based approach (using TRPA's TransCAD transportation model). Until refinements and validation of TRPA's model are complete, TRPA recommends that the model approach not be used as the sole method for evaluating project effects on VMT (TRPA 2019:12).

STATE

Caltrans Transportation Corridor Concept Report

Caltrans prepares a Transportation Corridor Concept Report for each highway in the state system that include a "20-Year Concept LOS" for each segment. Reflecting forecast conditions and the limited opportunities to expand capacity in the Tahoe region, the most recent Transportation Corridor Concept Report (2012) for SR 28 identifies the 20-year concept LOS as E. Although this report provides LOS standards for intersection and roadway operations, the standards set forth by TRPA typically govern over the state standards for projects located within the Tahoe Basin, but any projects affecting a state highway are also subject to Caltrans review. Because the LOS standards set forth by TRPA are more stringent, they are applied in this analysis.

Senate Bill 743

Senate Bill (SB) 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State 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 State 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 in CEQA* (December 2018) which provides guidance for VMT analysis. The Office of Administrative Law approved the updated State CEQA Guidelines and lead agencies will have an opt-in period until July 1, 2020 to implement the updated guidelines.

LOCAL

Placer County General Plan

The Circulation Element of the Placer County General Plan provides guidance to help achieve efficiency and economy in the transportation system, and to facilitate the planning required to maintain and expand the existing transportation network. Goal 3.A of the General Plan is to provide for the long range planning and development of the county's roadway system. To meet this goal, the county manages its roadway system to maintain a LOS C on all roadways except within 0.5 mile of state highways, where the LOS standard is LOS D. The LOS standard in the county's Congestion Management Plan (CMP) for signalized intersections located along state highways is "E." If the

worst movement on an unsignalized intersection in Placer County exceeds LOS standards, a "peak-hour" signal warrant analysis, consistent with the Manual of Uniform Traffic Control Devices (MUTCD), is required. If the intersection attains minimum signal warrant volumes, mitigation is required.

Placer County may allow exceptions to its LOS standards where it finds that the improvements or other measures required to achieve the LOS standards is unacceptable based on established criteria. Exceptions to the standards will only be allowed after all feasible measures and options are explored, including alternative forms of transportation. Where TRPA LOS standards are more stringent than county standards, the TRPA standards apply.

Placer County Neighborhood Traffic Management Program

The Placer County Department of Public Works (DPW) has a comprehensive program that addresses neighborhood traffic issues; the program includes a systematic approach to handling neighborhood traffic concerns, and applying the most appropriate traffic calming measures on a case-by-case basis. The Neighborhood Traffic Management Program (NTMP) engages community residents during the development of individual neighborhood traffic calming plans and determines neighborhood support for the plan through a neighborhood vote (Placer County Department of Public Works 2007).

The terms "local" and "collector" streets refer to the functional classification that denotes a specific level in the transportation network hierarchy and establishes the roadway capacity pursuant to Placer County standards. Local streets provide direct access to residential properties and facilitate short neighborhood trips; these streets typically include a 24- to 28-foot travel way and serve fewer than 75 residential units on a through street. Collector streets are secondary roads that connect motorists from surrounding local streets to arterial roadways and freeways and facilitate intermediate trip lengths; these streets typically include a 32- to 40-foot travel way and serve more than 75 residential units. The pavement width on neighborhood roadways that serve the proposed Project site and Alternative A site range from about 32 to 38 feet (see Appendix D). The NTMP recommends that during the development review process, County staff determine whether a project would result in excessive volumes of vehicles on residential streets causing an exceedance of roadway capacity. Where appropriate, developers should be required to incorporate traffic calming measures into their development plan. The NTMP identifies incorporating traffic calming measures to lessen neighborhood impacts when projected volumes on residential streets would exceed 2,500 vehicles per day (Placer County Department of Public Works 2007).

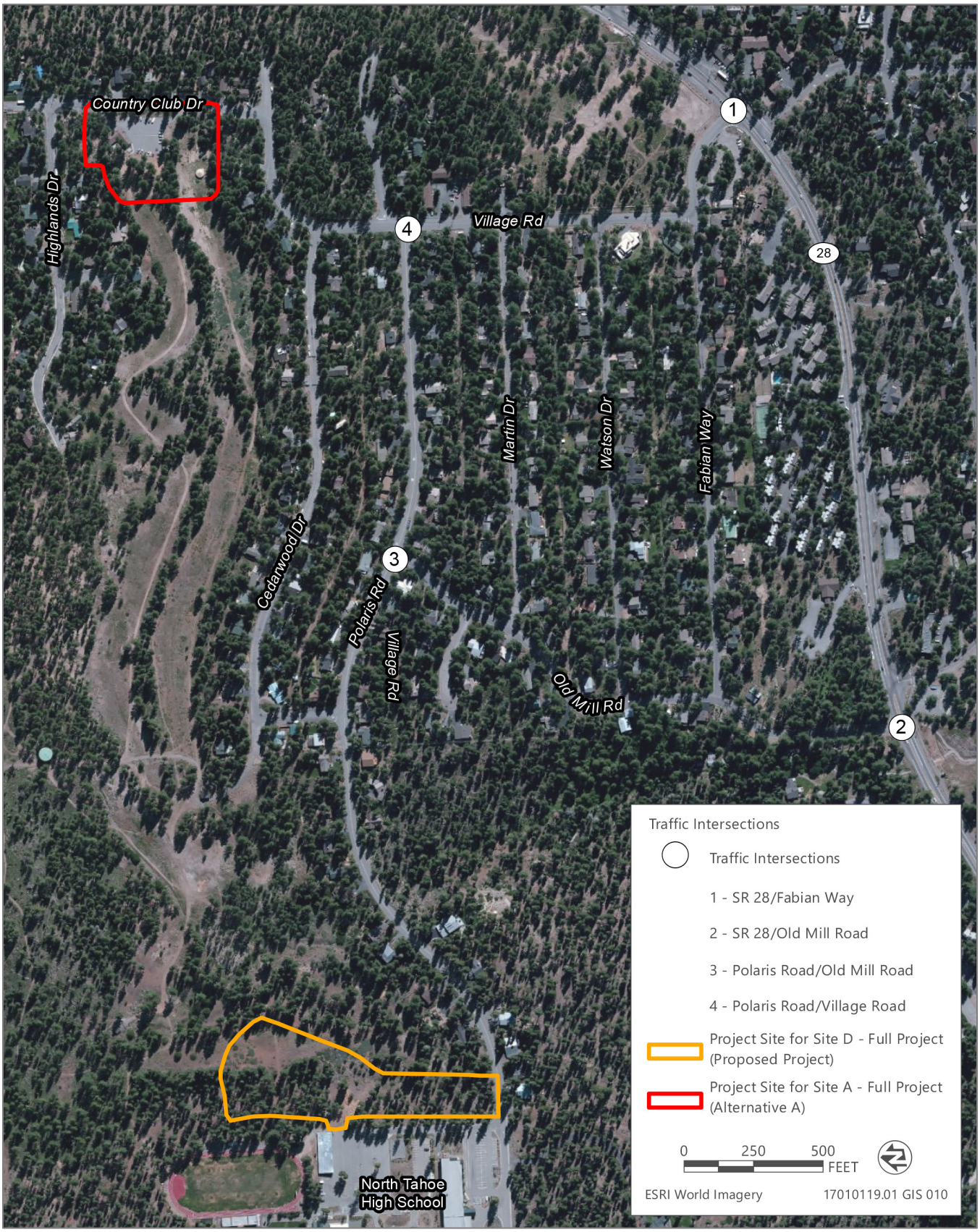
3.5.2 Environmental Setting

This section describes the existing environmental setting, which is the baseline scenario upon which Project-specific impacts are evaluated. The baseline for this study represents conditions based on data collection and field observations conducted in 2015, 2016, and 2018, as described herein. The environmental setting for transportation includes baseline descriptions for roadway, bicycle, and pedestrian facilities.

The existing Highlands Community Center is located on Country Club Drive and is accessed from SR 28 via Fabian Way and Village Road. TCCSEA provides winter cross-country ski and snowshoe opportunities, and is opened when snow conditions allow. It also operates as a trailhead for hiking and mountain biking in the summer months, though activity levels are generally higher in winter months.

EXISTING STUDY AREA AND ROADWAY NETWORK

A study area was developed based on collaboration between the EIR consultants and TCPUD and considered scoping comments. The following factors were considered when developing the study area: the Project's expected travel characteristics (including number of vehicle trips and directionality of those trips), primary travel routes to/from the proposed Project site and Alternative A site, anticipated parking demand, and other considerations. Figure 3.5-1 shows the extent of the study area, the proposed Project site, the Alternative A site, and intersections selected for analysis. The study area also includes bicycle and pedestrian facilities in the Project vicinity.



Source: Compiled by LSC in the Transportation Impact Analysis (see Appendix D)

Figure 3.5-1 Study Area

SR 28

SR 28 is the major roadway serving Lake Tahoe's North Shore. It provides a link between Incline Village, Nevada and Tahoe City. SR 28 is typically a bi-direction, two-lane facility. A center two-way left-turn lane is provided in Tahoe City, Tahoe Vista, and Kings Beach. Traffic volumes along SR 28 exhibit strong seasonal variation, with the highest traffic activity during the summer. Caltrans reports that the peak month Average Daily Traffic (ADT) on SR 28 in the Project vicinity is 14,500 vehicles per day based on data from a count location about one mile east of the proposed Project site and Alternative A site at Lardin Way in Carnelian Bay. The posted speed limited along SR 28 near the Project is 45 miles per hour (mph).

Local Roads

The majority of the roadways in the Project vicinity, including those listed below, are owned and maintained by Placer County.

Old Mill Road

Old Mill Road is a north/south running residential street off of SR 28, which connects Polaris Road to the north. Though it is possible to access the proposed Project site and Alternative A site via Old Mill Road, it is not the preferred or signed access route as it is both steeper and longer.

Fabian Way

Fabian Way is a residential street connecting SR 28 on the south and Village Road to the north, and extending west to Old Mill Road. Those traveling to and from the Existing Lodge use Fabian Way for a short distance (400 feet) between SR 28 and Village Road. This short segment of Fabian Way provides access to commercial uses.

Village Road

Village Road is a residential street connecting Fabian Way at the south and Country Club Drive to the north. It is the main access route to the Existing Lodge.

Polaris Road

Polaris Road is an east-west roadway serving primarily single-family homes. It also serves as the sole public access to the North Tahoe High School and North Tahoe Middle School at its western end. To the east, Polaris Road terminates about 630 feet east of Village Road. The western portion of Polaris Road carries approximately 1,400 daily vehicle trips on a school day.

EXISTING TRAFFIC VOLUMES

Winter Traffic Volumes

Traffic volume counts were collected at various locations within the study area. Intersection turning movements were counted during the winter at the following intersections:

- SR 28/Fabian Way (winter weekend/holiday included)
- SR 28/Old Mill Road (winter weekend/holiday included)
- Polaris Road/Old Mill Road
- Polaris Road/Village Way

The winter weekend/holiday intersection turning-movement counts were conducted on Thursday, December 31, 2015 (New Year's Eve day). The weekday (school day) intersection turning movement counts were conducted during the afternoon peak periods of school-related traffic activity on January 12, 13, 14, and 19, 2016. For detailed count data see Appendix D. It is reasonable and appropriate to use the traffic data collected in 2015/2016 for the purposes of evaluating transportation impacts of the Project, because based on a comparison of Tahoe Cross-Country Center (Tahoe XC) skier data from recent seasons (2015/2016, 2016/2017, and 2017/2018), as well as snowfall data over the past few seasons, the Tahoe XC visitation and related traffic volumes were highest in 2015/2016. (Note: The winter

p.m. peak-hour traffic volumes measured during these counts and the direction turning movements for each intersection are presented in Figure 2 of Appendix D.)

In addition, 24-hour roadway volume counts for were conducted at the following locations:

- Polaris Road, just east of the easternmost High School driveway (weekday)
- Village Road, just southwest of Country Club Drive (holiday)
- Country Club Drive, near the existing Highlands Community Center (holiday)

The roadway volumes used to calculate winter holiday trip generation were collected from Wednesday, December 30, 2015 through Tuesday, January 5, 2016. Weekday volumes were collected from Wednesday, January 13 through Tuesday, January 19, 2016. The purpose of the two data collection periods was to capture both typical conditions (during a school day) and peak ski traffic conditions. The holiday period generates the highest skier volumes, whereas the school traffic periods typically generate the highest existing traffic volumes in the neighborhood.

Summer Traffic Volumes

The summer intersection turning-movement counts were collected on Friday, August 10, 2018. (Note: the summer p.m. peak-hour traffic volumes are presented in Figure 3 of Appendix D.) Counts were conducted on a Friday because the highest daily traffic volumes in the Dollar Hill area during the summer typically occur on Fridays.

The roadway volumes used to calculate summer trip generation were collected at the same locations as the winter counts, from Thursday, August 9, 2018 to Monday, August 13, 2018. The data collection was conducted to ensure that both typical summer weekend conditions and summer weekday conditions were captured. The highest daily traffic volumes during the count period occurred on Friday, August 10 (the same day the intersection counts were conducted).

EXISTING INTERSECTION LEVEL OF SERVICE

The existing LOS at each study intersection is summarized in Table 3.5-1, which shows that all study intersections currently operate at a relatively good LOS (A or B) in the winter and summer under existing conditions.

Table 3.5-1 Existing Intersection Level of Service Summary

Intersection	Analysis Period	Existing Conditions	
		LOS	Delay (seconds)
Winter			
SR 28/Fabian Way	Weekday p.m. Weekend/Holiday p.m.	A A	9.7 9.9
SR 28/Old Mill Road	Weekday p.m. Weekend/Holiday p.m.	A B	9.8 10.1
Polaris Road/Old Mill Road	Weekday p.m.	A	8.1
Polaris Road/Village Drive	Weekday p.m.	A	8.9
Summer			
SR 28/Fabian Way	p.m.	A	9.3
SR 28/Old Mill Road	p.m.	B	10.1
Polaris Road/Old Mill Road	p.m.	A	7.1
Polaris Road/Village Drive	p.m.	A	8.9

Note: LOS = Level of Service

Source: Transportation Impact Analysis in Appendix D

EXISTING TRIP GENERATION

Existing trip generation is the evaluation of the number of vehicle-trips that would either have an origin or destination at the Existing Lodge on Country Club Drive. As a cross-country ski facility is not a standard land use found in the Institute of Transportation Engineers (ITE) Trip Generation manual, trip generation for this Project is based on the trips currently generated by the Existing Lodge, as well as the change in activities anticipated with the Schilling Lodge.

It should be noted that estimating the existing trip generation is complicated by the fact that some of the existing parking occurs along the shoulders of Country Club Drive and Village Road (per an agreement with Placer County), and that homes along these streets (and beyond) add to the traffic in the vicinity.

Winter Trip Generation at Existing Lodge

The winter roadway counts were used to identify the peak-hour traffic generated by the Existing Lodge. Two sets of roadway count volumes were collected, one on Village Road south of the Existing Lodge and one on Country Club Drive just north of the Existing Lodge. Subtracting the northern volumes from the southern volumes yields the number of trips that are generated by the Existing Lodge plus the trips generated by the nine homes located between the two roadway counters.

Based on this methodology, the Existing Lodge generates 34 inbound and 15 outbound trips during the winter weekday p.m. peak hour, while 24 inbound and 36 outbound trips are generated during the weekend p.m. peak hour. Over the course of an entire winter day, 372 total vehicle-trips are generated on a weekend day and 178 total vehicle-trips are generated on a weekday (see first row of data in Table 3.5-2). For additional details related to the winter trip generation estimates for the Existing Lodge see Appendix D.

Summer Trip Generation at Existing Lodge

The summer roadway counts were used to identify the peak-hour traffic generated by the Existing Lodge, applying the same method used for winter to adjust the roadway counts. The weekday and weekend p.m. peak-hour volumes at this location are generally similar, although the p.m. peak hour does not tend to occur at the same time each day. This study assumes the p.m. peak hour of site-generated traffic coincides with the p.m. peak hour of adjacent street traffic to yield conservatively high traffic volumes. The existing lodge generates 17 inbound and 20 outbound trips during the summer p.m. peak hour. Over the course of a busy summer day (weekday and weekend), this methodology yields about 370 total daily vehicle-trips (see first row of data in Table 3.5-5 later in this section). For additional details related to the summer trip generation estimates for the Existing Lodge see Appendix D.

EXISTING VEHICLE SPEEDS

As described in Appendix D, LSC Transportation Consultants, Inc. conducted speed surveys between March 26 and April 3, 2019 that measured existing vehicle speeds on Polaris Road and Village Road. Speed surveys were conducted on Polaris Road, near the high school, and on Village Road, near the Existing Lodge, during typical busy winter days, capturing both school-related traffic activity and cross-country skier traffic activity. The posted speed limit along both roadways is 25 mph.

The majority of speeds recorded on Polaris Road are above the speed limit. The average speed at a point east of the high school is approximately 26 mph (average of both directions), and the 85th-percentile speed (the speed that is only exceeded by 15 percent of the vehicles) is calculated to be approximately 30 mph. The 85th-percentile of the distribution of observed speeds is the most frequently used measure of the operating speed associated with a particular roadway location. The maximum recorded speed was 42 mph.

The recorded speeds on Village Road were generally lower than the speed limit, likely due to the curvature along Village Road and the close proximity to Country Club Drive, where most vehicles make a turn. The average observed speed was 18 mph, and the 85th-percentile speed (20 mph) is about 5 mph below the speed limit. The maximum recorded speed was 33 mph.

Table 3.5-2 Winter Trip Generation: Proposed Project

Description	Quantity	Vehicle Occupancy	Project Generated Vehicle Trips at Site Access - Weekday				Project Generated Vehicle Trips at Site Access - Weekend			
			Daily	p.m. Peak Hour In	p.m. Peak Hour Out	p.m. Peak Hour Total	Daily	p.m. Peak Hour In	p.m. Peak Hour Out	p.m. Peak Hour Total
Proposed Project Site										
Skier Activity - Proposed Project Site										
Existing Lodge Use			178	34	15	49	372	24	36	60
10% Increase in Visitation			18	3	2	5	37	2	4	6
Skier Activity Subtotal			*196*	*37*	*17*	*54*	*409*	*26*	*40*	*66*
Gatherings at Schilling Lodge										
Attendees	65	1.8	72	36	0	36	72	36	0	36
Staff/Service/Deliveries	2	1.1	4	2	0	2	4	2	0	2
Gatherings at Schilling Lodge Subtotal			*76*	*38*	*0*	*38*	*76*	*38*	*0*	*38*
Additional Employees at Schilling Lodge (Weekends Only)										
Staff	2	1.1	0	0	0	0	4	0	2	2
Total Proposed Project Trip Generation			**272**	**75**	**17**	**92**	**489**	**64**	**42**	**106**
Existing Site										
Remove Existing Lodge Use										
Existing Uses Relocated to Schilling Lodge			-178	-34	-15	-49	-372	-24	-36	-60
Potential Existing Lodge Continuing Use[1]										
Attendees	30	2.5	24	0	12	12	24	0	12	12
Staff/Service/Deliveries	4	1.0	8	0	0	0	8	0	0	0
Existing Lodge Subtotal			*32*	*0*	*12*	*12*	*32*	*0*	*12*	*12*
Net Impact at Existing Lodge			**-146**	**-34**	**-3**	**-37**	**-340**	**-24**	**-24**	**-48**
PROPOSED PROJECT NET IMPACT – WINTER TRIP GENERATION			***126***	***41***	***14***	***55***	***149***	***40***	***18***	***58***

Notes:

[1] The proposed Project proposes to retain the Existing Lodge, under TCPUD ownership to be used as secondary community space and other allowable uses as needed by TCPUD.

Source: Transportation Impact Analysis in Appendix D

PEDESTRIAN AND BICYCLE SYSTEM

TCPUD operates the Class 1 multi-purpose trail along the North Shore of Lake Tahoe from Tahoe City to Dollar Hill, including the 0.9-mile lakefront trail through the core of Tahoe City from Commons Beach to the State Park Campground.

The recently completed Dollar Creek shared-use path is located about 350 feet east of the Existing Lodge. This 2.2-mile paved path extends from SR 28 north to a point near the northern terminus of Country Club Drive and connects via crosswalk across SR 28 to the existing Class 1 multi-purpose trail system extending into downtown Tahoe City and beyond.

SR 28 between Tahoe City and Kings Beach also includes Class II (striped) bicycle lanes.

The proposed Project site and Alternative A site are also located near an extensive network of unpaved trails, including the trails owned by TCPUD on the proposed Project site and Alternative A site and other trails managed by the U.S. Forest Service, California State Parks, and the Conservancy.

Local roadways providing access to the proposed Project site and Alternative A site do not include sidewalks.

3.5.3 Environmental Impacts and Mitigation Measures

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

METHODS AND ASSUMPTIONS

The transportation methodology uses the anticipated travel characteristics of the Project, trip generation assumptions, and vehicle trip distribution, as described below. TCPUD and the applicant developed a set of reasonable assumptions about the types of programs, number of staff and attendees, and timing of the programs that could occur at the Schilling Lodge under the proposed Project and Alternative A based on existing operations and programs at the Existing Lodge. Additionally, the traffic analysis is based on data collected and modeled for a typical busy day at Tahoe XC. These assumptions form the basis of the transportation analysis completed for the Project.

Trip Generation

The Schilling Lodge is not expected to increase skier visitation to the site. Trip generation at a ski area or trailhead is typically a function of the skiable terrain, snow conditions, and skier capacity rather than lodge amenities. Because the proposed Project would not alter the terrain or skier capacity, the number of skiers expected to visit the site is expected to be the same as the number that currently travel to the Existing Lodge. While additional visitation is not expected for the aforementioned reasons, this analysis takes a conservative approach and assumes skier visitation during winter conditions would increase by 10 percent. This would also account for any increase resulting from events and gatherings held at the Schilling Lodge.

Reasonable assumptions about trip generation for a cross-country ski area or a trailhead were developed by LSC based on trip generation rates in the Institute of Transportation Engineers Trip Generation Manual. As standard trip generation rates are not provided for a cross-country ski lodge or community center, the trip generation of the Project is estimated based upon a "person-trip analysis." Multiplying the number of persons by the number of one-way person-trips per day (one entering and one exiting) and dividing by the average vehicle occupancy rate yields the number of vehicle trips generated at the site driveways.

The first step in the analysis of future transportation impacts is to prepare an estimate of the number of one-way vehicle-trips generated by the proposed Project. Trip generation is the evaluation of the number of vehicle-trips that would either have an origin or destination at the Project site. As a cross-country ski resort is not a standard land use

found in the Institute of Transportation Engineers (ITE) Trip Generation manual, trip generation is based on the existing trips currently generated by the Existing Lodge, as well as the change in activities anticipated with the Schilling Lodge.

Winter Trip Generation

Winter Trip Generation Associated with the Proposed Project

Existing Site

With the proposed Project, the functions of the Existing Lodge would be moved to a new lodge located at the proposed Project site, and the Existing Lodge would continue to be operated as a community center by TCPUD. On a typical busy winter day, a gathering of about 15 people could occur at the Existing Lodge with the proposed Project. However, a 30-person gathering is assumed at the Existing Lodge with the proposed Project in winter to remain conservative (conservatively high) with respect to winter trip generation. For purposes of trip generation, this gathering is assumed to let out during the p.m. peak hour. Compared to the existing background traffic levels on Country Club Drive (excluding lodge traffic), this gathering would generate an incremental increase in peak-hour traffic. Additionally, up to four persons (more often one to two), such as staff, service, and/or delivery trips, are assumed to be on the site over the course of the day. Large wedding events are not held at the Existing Lodge, and are not considered in this analysis.

Subtracting the Existing Lodge trips that would be removed from this site and adding the trips generated by the continuing Existing Lodge activities yields the Project "net impact" on the number of trips at the Existing Lodge driveways. As shown in the lower portion of Table 3.5-2, the proposed Project would result in a net reduction of approximately 146 daily vehicle trips at the Existing Lodge driveways over the course of a winter weekday, including a reduction of approximately 37 p.m. peak-hour trips. On a winter weekend, the net reduction would be approximately 340 daily trips and 48 p.m. peak-hour trips.

Proposed Project Site

With the proposed Project, the winter trip generation at the proposed Project site is summarized in the upper portion of Table 3.5-2, and is estimated based on the following assumptions (see Appendix D):

- Although the Schilling Lodge is not expected to increase the general skier visitation to Tahoe XC, general visitation is assumed to increase by 10 percent in winter months (in addition to the potential events and gatherings held at the Schilling Lodge), for purposes of this study. This is a conservatively high traffic increase, as trip generation of a ski area is typically a function of the skiable terrain (i.e., snow conditions) and skier capacity rather than lodge amenities. No expansion of the country-country ski trails are proposed and the average growth in skier visits over the last 10 years is essentially flat. However, skiing trends such as crowded and expensive downhill ski areas, increasing interest in human powered sports, and emphasis on family friendly activities are likely to lead to an increased skier visits to Tahoe XC. To insure an appropriately conservative analysis, the evaluation assumes that skier visitation at the proposed lodge site would increase by 10 percent over existing levels.
- Some existing trailhead users would continue to use the Existing Lodge to access the trails, and some would shift to the new location. However, for purposes of this analysis, all existing users are assumed to relocate to the new site, resulting in conservatively high traffic volume impacts at the new site and along Polaris Road and Old Mill Road.
- On a typical busy winter day (either weekend or weekday), a 65-person gathering (including event attendees, staff, performers, volunteers) is assumed could occur at the proposed lodge. This gathering is conservatively assumed to start/arrive during the p.m. peak hour. The average vehicle occupancy rate of event attendees is assumed to be 1.8 persons per vehicle.
- No increase in total number of staff at the Schilling Lodge is expected on winter weekdays; two additional staff are assumed on winter weekends.
- An average vehicle occupancy rate of 1.1 staff per vehicle is assumed, based on a review of employee occupancy rates assumed for other similar facilities (such as the Tahoe Donner Cross-Country Ski Center and the Tahoe City Golf Course).

For additional details related to the winter trip generation estimates for the proposed Project see Appendix D.

As shown in the middle portion of Table 3.5-2, the proposed Project would generate a total of approximately 272 daily vehicle trips on a winter weekday and 489 daily trips on a winter weekend day. During the p.m. peak hours, 92 vehicle trips (75 arriving and 17 departing) would occur during the weekday p.m. peak hour and 106 (64 arriving and 42 departing) vehicle trips would occur during the weekend p.m. peak hour.

Net Impact on Winter Trip Generation

As shown in Table 3.5-2, by adding the Project net impact at the Existing Lodge site to the trip generation at the proposed Project site yields an overall net increase of 126 daily vehicle trip ends (DVTE) on weekdays and 149 DVTEs on weekends/holidays associated with the proposed Project. The net increase in trips on regional roads during the winter weekday p.m. peak hour would be approximately 55 one-way vehicle trips, and the net increase during a winter weekend p.m. peak hour would be 58 vehicle trips.

Winter Trip Generation Associated with Alternative A

The winter trip generation associated with Alternative A, which would reconstruct and expand the lodge at the Existing Lodge site, is summarized in the upper portion of Table 3.5-3. As the Schilling Lodge implemented under Alternative A would have the same size and layout as the lodge associated with the proposed Project, the assumptions regarding activities at the Schilling Lodge at the Alternative A site are the same as for the proposed Project site. However, unlike the proposed Project, under Alternative A the Existing Lodge would not continue to be operated as a community center by TCPUD.

Table 3.5-3 Winter Trip Generation: Alternative A

Description	Quantity	Vehicle Occupancy	Project Generated Vehicle Trips at Site Access - Weekday				Project Generated Vehicle Trips at Site Access - Weekend			
				p.m. Peak Hour				p.m. Peak Hour		
			Daily	In	Out	Total	Daily	In	Out	Total
Alternative A Site										
Skier Activity - Schilling Lodge										
Existing Uses Relocated to Schilling Lodge			178	34	15	49	372	24	36	60
10% Increase in Visitation			18	3	2	5	37	2	4	6
Skier Activity Subtotal			*196*	*37*	*17*	*54*	*409*	*26*	*40*	*66*
Gatherings at Schilling Lodge										
Attendees	65	1.8	72	36	0	36	72	36	0	36
Staff/Services/Deliveries	2	1.1	4	2	0	2	4	2	0	2
Gatherings at Schilling Lodge Subtotal			*76*	*38*	*0*	*38*	*76*	*38*	*0*	*38*
Additional Employees at Schilling Lodge (Weekends Only)										
Staff	2	1.1	0	0	0	0	4	0	2	2
Total Alternative A Trip Generation			**272**	**75**	**17**	**92**	**489**	**64**	**42**	**106**
ALTERNATIVE A NET IMPACT – WINTER TRIP GENERATION			***94***	***41***	***2***	***43***	***117***	***40***	***6***	***46***

Source: Transportation Impact Analysis in Appendix D

As shown in the lower row of Table 3.5-3, Alternative A would result in a net increase of approximately 94 daily vehicle trips on a winter weekday and 117 daily trips on a winter weekend day. A net increase of 43 vehicle trips would occur during the weekday p.m. peak hour and 46 vehicle trips would occur during the weekend p.m. peak hour.

Summer Trip Generation

Summer Trip Generation Associated with the Proposed Project

Existing Site

With the proposed Project, the Existing Lodge site would continue to operate as a community center. The trip generation assumptions for the Community Center during the summer are different than in winter. On a typical busy summer day, a gathering of about 15 people may occur at the Community Center. For purposes of the traffic generation, this gathering is assumed to let out during the p.m. peak hour. Additionally, approximately 2 persons are assumed to be on the site over the course of the day, such as staff, service, and/or delivery trips. As with winter months, some existing trailhead users would continue to use the Existing Lodge to access the trails during the summer, and some would shift to the new location. However, for purposes of this analysis, all existing users are assumed to relocate to the new site, resulting in conservatively high traffic volume impacts at the new site and along Polaris Road and Old Mill Road. As shown in Table 3.5-4, the proposed Project would result in a net reduction of approximately 354 daily one-way vehicle trips at the Existing Lodge site driveways over the course of a summer day, including a reduction of approximately 31 p.m. peak-hour trips (46 entering and 14 exiting).

Table 3.5-4 Summer Trip Generation: Proposed Project

Description	Quantity	Vehicle Occupancy	Project Generated Vehicle Trips at Site Access			
			Daily	p.m. Peak Hour		
				In	Out	Total
Proposed Project Site						
Summer Visitation						
Existing Lodge Use	—	—	370	17	20	37
Gatherings at Schilling Lodge						
Attendees	65	1.8	72	36	0	36
Early Day Meeting	15	1.8	17	0	0	0
Gatherings at Schilling Lodge Subtotal			*89*	*36*	*0*	*36*
Bike Rental Customers	5	2.5	4	0	0	0
Lodge/Café/Rental Staff Employees	3	1.1	5	0	1	1
Youth Camp						
Participants	15	1.5	40	10	10	20
Staff	3	1.1	5	0	3	3
Youth Camp Subtotal			*45*	*10*	*13*	*23*
Total Proposed Project Trip Generation			**513**	**63**	**34**	**97**
Existing Site						
Existing Uses Relocated to Schilling Lodge			-370	-17	-20	-37
Potential Existing Lodge Use						
Attendees	15	2.5	12	0	6	6
Staff/Services/Deliveries	2	1.0	4	0	0	0
Existing Lodge Subtotal			*16*	*0*	*6*	*6*
Net Impact at Existing Lodge			**-354**	**-46**	**-14**	**-31**
PROPOSED PROJECT NET IMPACT – SUMMER TRIP GENERATION			***159***	***46***	***20***	***66***

Source: Transportation Impact Analysis in Appendix D

Proposed Project Site

With the proposed Project, the summer trip generation at the proposed Project site is summarized in the upper portion of Table 3.5-4, and is estimated based on the following assumptions (Appendix D):

- It is not specified whether the Project generates more traffic on summer weekends or weekdays. Rather, the "design day" for estimating the Tahoe XC site-generated traffic is assumed to coincide with a busy traffic day on adjacent roadways (such as a Friday in August) to yield conservatively high traffic volumes.
- No expansion of the trail system is proposed. There are other trailhead access locations nearby, such as the recently constructed trailhead parking lot on SR 28 opposite Dollar Drive. General visitation levels to the trailheads in summer are not expected to increase as a result of the Schilling Lodge.
- Some existing trailhead users would continue to use the Existing Lodge site, and some would shift to the new location. However, for purposes of this analysis, all existing users are assumed to relocate to the new site, which results in conservatively high traffic volume impacts at the new site and along Polaris Road and Old Mill Road. Additionally, a 65-person gathering is assumed to occur at the proposed lodge on a busy summer day (either weekend or weekday). This gathering event has the same trip generation assumptions in summer and winter.
- A 15-person meeting/gathering is also assumed to occur at the proposed lodge, earlier in the day.
- Trips associated with the bike rental operations are reflected in the "existing use" trips relocated from the Existing Lodge site. However, the Project proponent indicates that they expect bike rental operations at the Schilling Lodge to generate about five additional customers over the course of a busy day. Bike rental customers are assumed to have an average vehicle occupancy of 2.5 persons per vehicle.
- Three additional summer lodge/café/rental staff are assumed at the new site, above and beyond the existing staff that would be relocated from the Existing Lodge site.
- Junior mountain biking sessions and/or summer DEVO/Nordic dryland training activities are reflected in the existing use trips. The Project proponent confirmed that a junior mountain biking session did occur during the week of August 9-13, 2018 when the summer traffic counts were conducted. With the proposed lodge, these activities are not expected to occur on the same day.
- Summer youth camps could potentially occur at the proposed lodge; these camps are assumed to include 15 children and three staff on a typical busy day.
- Youth camp participants are assumed to have an average vehicle occupancy rate of 1.5 participants per vehicle, consistent with rates used for youth activities in other recent studies.

For additional details related to the summer trip generation estimates for the proposed Project see Appendix D.

As shown in Table 3.5-4, the proposed Project is estimated to generate approximately 513 daily vehicle trips at the proposed Project site driveway on a summer day, including 97 p.m. peak-hour trips (63 arriving and 34 departing).

Net Impact on Summer Trip Generation

As shown in Table 3.5-4, by adding the proposed Project net impact at the Existing Lodge site to the trip generation at the proposed lodge site yields an overall net increase of 159 daily one-way vehicle trips. The net increase in trips on regional roads during the summer p.m. peak hour would be approximately 66 one-way vehicle trips.

Summer Trip Generation Associated with Alternative A

The summer trip generation associated with Alternative A is summarized in the upper portion of Table 3.5-5. The assumptions regarding activities at the Schilling Lodge under Alternative A are the same as for the proposed Project. As the reconstructed lodge would have the same size, layout, and functions as the Schilling Lodge associated with the proposed Project, the assumptions regarding activities at the Schilling Lodge at the Alternative A site are the same as for the proposed Project site. As shown in the lower row of Table 3.5-5, Alternative A would result in a net increase of approximately 143 daily vehicle trips on a summer day, with a net increase of 60 vehicle trips (46 arriving and 14 departing) during the p.m. peak hour.

Table 3.5-5 Summer Trip Generation: Alternative A

Description	Quantity	Vehicle Occupancy	Project Generated Vehicle Trips at Site Access			
			Daily	p.m. Peak Hour		
				In	Out	Total
Alternative A Site						
Summer Visitation						
Existing Lodge Use	—	—	370	17	20	37
Gatherings at Schilling Lodge						
Attendees	65	1.8	72	36	0	36
Early Day Meeting	15	1.8	17	0	0	0
Gatherings at Schilling Lodge Subtotal			*89*	*36*	*0*	*36*
Bike Rental Customers	5	2.5	4	0	0	0
Lodge/Café/Rental Staff Employees	3	1.1	5	0	1	1
Youth Camp						
Participants	15	1.5	40	10	10	20
Staff	3	1.1	5	0	3	3
Youth Camp Subtotal			*45*	*10*	*13*	*23*
Total Alternative A Trip Generation			**513**	**63**	**34**	**97**
ALTERNATIVE A NET IMPACT- SUMMER TRIP GENERATION			***143***	***46***	***14***	***60***

Source: Transportation Impact Analysis in Appendix D

Trip Distribution and Assignment

The distribution of traffic arriving and departing from the proposed Project site and Alternative A site is based on existing traffic patterns, regional access patterns, and the location of the sites relative to SR 28 and commercial and residential properties. To be conservative, the analysis assumed that none of the trips generated by the Project included travel to/from homes within the Highlands area. The analysis assumes that 55 percent of the trips to and from the proposed Project site would access the site via SR 28 from the west and 45 percent of the trips would be from the east (see Appendix D).

The analysis assumes that the relocation of the lodge to the proposed Project site would cause a shift in travel patterns. Rather than using Fabian Way, Village Road, and County Club Drive, traffic traveling west on SR 28 would use Fabian Way, Village Road, and Polaris Road. The majority of traffic traveling east on SR 28 would likely use Old Mill Road to access the site. See Appendix D for additional details pertaining to the trip distribution and assignment.

Intersection Level of Service

Project impacts on intersection LOS for the study intersections were evaluated using the methodologies documented in the Highway Capacity Manual (HCM 6), as applied in the Highway Capacity Software (HCS 7). All study intersections were evaluated to determine existing and future cumulative operational conditions for the winter weekday p.m., winter weekend/holiday p.m. and summer p.m. peak hours. Note that the summer p.m. peak-hour volumes reflect a Friday in August, consistent with Placer County's standard design period. In addition, this study assumes the p.m. peak hour of the Existing Lodge-generated traffic coincides with the p.m. peak hour of adjacent street traffic, to yield conservatively high traffic volumes. Detailed LOS outputs can be found in Appendix D.

Parking Demand

The parking analysis evaluates the current demand of the Existing Lodge and determines the capacity needed at the proposed lodge. The peak parking demand is compared to the proposed parking supply for the proposed Project and Alternative A to determine the overall parking balance. The winter parking demand analysis is based on hourly parking lot volume counts conducted at the Existing Lodge site on December 31, 2015 and Friday, January 15, 2016. Parking counts at North Tahoe High School and North Tahoe Middle School were also conducted on January 15, 2016. Hourly parking lot volume counts for summer conditions were conducted at the Existing Lodge site and high school and middle school on August 18 and August 26, 2018. Additional details regarding the parking demand analysis are included in Section 6 of Appendix D.

Vehicle Miles Traveled Analysis

The updated State CEQA Guidelines have been formally adopted and indicate that VMT shall be the primary metric used to identify transportation impacts; however, local agencies have an opt-in period until July 1, 2020 to implement the updated guidelines. TRPA, Placer County, and TCPUD have yet to adopt VMT policies or thresholds addressing the intent of SB 743. TRPA is also in the process of updating and validating its transportation model and updating its VMT Threshold Standard, which is anticipated to be complete by late 2020.Therefore, the VMT analysis herein is included for TRPA analysis purposes only and is not meant to comply with State CEQA Guidelines Section 15064.3, Subdivision (b).

The VMT analysis is based on current TRPA interim guidance for assessing VMT impacts. TRPA's interim guidance recognizes that "while **the stated purpose for the VMT threshold has been achieved many times over through vehicle tailpipe nitrogen emission reduction, VMT remains an important performance measure in efforts to reduce greenhouse gases and effectuate TRPA and state policies."** Accordingly, when evaluating VMT impacts of a project, TRPA also considers the corresponding GHG emissions.

VMT Quantification

OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December 2018) states that lead agencies should not truncate any VMT analysis because of jurisdictional or other boundaries, for example, by failing to count the portion of a trip that falls outside the jurisdiction or by discounting the VMT from a trip that crosses a jurisdictional boundary (OPR 2018). Because TRPA's model, which includes accounting for travel to and from locations outside of the basin, is still being refined and validated, TRPA recommends that the model approach not be the sole method for evaluating Project effects on VMT (TRPA 2019:12).

Therefore, consistent with TRPA's current guidance, this analysis uses a calculation-based off model approach based on trip generation and trip distribution to various locations throughout the Tahoe Basin, including external access points. Project-generated VMT is estimated based upon the net increase in regional vehicle trips generated by the Project over the course of a busy summer day multiplied by the average trip distance.

SIGNIFICANCE CRITERIA

CEQA Criteria

Based on Appendix G of the State CEQA Guidelines, the Project would result in a potentially significant impact to transportation if it would:

- conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities; or
- substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

TRPA Criteria

"Transportation/Circulation" criteria from the TRPA Initial Environmental Checklist were used to evaluate the transportation impacts of the Project. Although TRPA does not require a detailed traffic analysis (other than an

analysis of VMT impacts) for projects, such as the proposed Project, that generate fewer than 200 trips per day (see the discussion under the header "2019 Guidance for Assessment of Vehicle Miles Traveled Impacts of Projects in the Tahoe Basin"), the analysis is included above under the header "Vehicle Miles Traveled Analysis" for the purposes of disclosing impacts and informing decisionmakers about the effects of the Project. Checklist items that are relevant to the Project have been included in the environmental analysis below. Impacts to transportation would be significant if the Project would:

- substantially impact existing highway systems or alter present patterns of circulations, defined here as:
  - cause a study intersection controlled by signal or roundabout to worsen from LOS A through D or less than 5 hours per day of LOS E to LOS F or to LOS E for 5 or more hours per day;
  - cause a study intersection not controlled by signal or roundabout to worsen from LOS A through E to LOS F, or to increase delay where LOS F currently exists; or
  - cause daily traffic levels along residential roadways to exceed 2,500 vehicles per day or exacerbate no-project levels exceeding this value.
- result in inadequate parking conditions;
- substantially increase traffic hazards to bicyclists and pedestrians, or substantially impact existing bicycle/pedestrian facilities;
- substantially increase hazards due to a design feature or incompatible uses; or
- result in an unmitigated increase in daily VMT.

ENVIRONMENTAL EFFECTS OF THE PROJECT

Impact 3.5-1: Potential to Cause Intersection Level of Service to Substantially Worsen

The proposed Project and Alternative A would add new trips to the roadway network and would incrementally increase traffic volumes at study intersections that provide access to Tahoe XC. Because the study intersections are anticipated to continue to operate at an acceptable LOS under existing plus project conditions with the increase in Project-related trips, the proposed Project and Alternative A would not substantially worsen the LOS of an intersection. Therefore, the proposed Project and Alternative A would have a **less-than-significant** impact on LOS.

Proposed Project

As described in Tables 3.5-2 and 3.5-4, the proposed Project would add an additional 126 daily trips to the roadway network during a typical busy day in the winter, and an additional 159 daily trips on a typical busy day in the summer. These additional trips on the roadway network would incrementally increase traffic volumes at study intersections that provide access to Tahoe XC.

As shown in Tables 3.5-6 and 3.5-7, the study intersections would continue to operate at an acceptable LOS with implementation of the proposed Project during winter and summer periods. Although implementation of the proposed Project could result in a slight increase in average delays during peak periods relative to existing conditions, all intersections would continue to operate at LOS A or B. The greatest increase in delay would occur at the SR 28/Fabian Way intersection, where Project-related traffic would increase the average delay on the southbound left-turn movement from Fabian Way onto SR 28 by up to 1.7 seconds per vehicle during peak periods. However, no LOS deficiencies are identified. Because the study intersections would continue to operate at an acceptable LOS under existing plus Project conditions with the increase in Project-related trips, the proposed Project would not substantially worsen the LOS of an intersection. Therefore, the proposed Project would have a **less-than-significant** impact on LOS.

Alternative A

As described in Tables 3.5-3 and 3.5-5, Alternative A would add an additional 94 daily trips to the roadway network during a typical busy day in the winter, and an additional 143 daily trips on a typical busy day in the summer. These additional trips would incrementally increase traffic volumes at study intersections that provide access to Tahoe XC.

As shown in Tables 3.5-6 and 3.5-7, the study intersections would continue to operate at an acceptable LOS with implementation of Alternative A during winter and summer periods. As with the proposed Project, implementation of Alternative A could result in a slight increase in average delays during peak periods relative to existing conditions. However, because the study intersections would continue to operate at an acceptable LOS under existing plus project conditions with the increase in trips associated with Alternative A, this alternative would not substantially worsen the LOS of an intersection. Therefore, Alternative A would have a **less-than-significant** impact on LOS.

Table 3.5-6 Winter Intersection Level of Service

Intersection	Analysis Period	Existing Conditions		Winter with Proposed Project		Winter with Alternative A	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Existing Conditions							
SR 28/Fabian Way	Weekday p.m.	A	9.7	A	9.5	A	10.0
SR 28/Old Mill Road	Weekday p.m.	A	9.8	A	9.9	A	9.8
Polaris Road/Old Mill Rd	Weekday p.m.	A	8.1	A	8.5	A	8.1
Polaris Road/Village Drive	Weekday p.m.	A	8.9	A	9.0	A	8.9
SR 28/Fabian Way	Weekend/Holiday p.m.	A	9.9	A	9.6	B	10.2
SR 28/Old Mill Road	Weekend/Holiday p.m.	B	10.1	A	10.7	B	10.1

Note: LOS = level of service

Source: Transportation Impact Analysis in Appendix D

Table 3.5-7 Summer Intersection Level of Service

Intersection	Analysis Period	Existing Conditions		Summer with Proposed Project		Summer with Alternative A	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Existing Conditions							
SR 28/Fabian Way	p.m.	A	9.3	B	11.0	A	9.7
SR 28/Old Mill Road	p.m.	B	10.1	B	10.7	B	10.2
Polaris Road/Old Mill Road	p.m.	A	7.1	A	7.7	A	7.1
Polaris Road/Village Drive	p.m.	A	8.9	A	9.5	A	9.5

Note: LOS = level of service

Source: Transportation Impact Analysis in Appendix D

Mitigation Measures

No mitigation is required for this impact.

Impact 3.5-2: Cause Traffic Volumes on a Residential Roadway to Exceed 2,500 Vehicles per Day

The proposed Project and Alternative A would not alter travel patterns or increase traffic volumes to the extent that the capacity of a residential roadway would be exceeded. Because Project-related traffic would not cause traffic volumes on residential roadways to exceed Placer County's 2,500 vehicles per day standard for residential roadways, this impact would be **less than significant** for the proposed Project and Alternative A.

LSC evaluated daily roadway volumes on residential roadways providing access to the Existing Lodge and proposed Project site to determine whether the Project would cause a residential roadway to exceed its design capacity and warrant implementation of traffic calming measures. Placer County Department of Public Works uses a standard of 2,500 vehicles per day (average daily traffic [ADT]) for residential streets when considering whether to implement traffic-calming devices and driveway treatments to lessen the impact (see Appendix D).

LSC evaluated traffic impacts on the following residential roadway segments:

- Village Road, near the Existing Lodge
- Old Mill Road, north of SR 28
- Polaris Road, between Village Road and Old Mill Road
- Polaris Road, just east of the high school

The existing and existing plus project winter and summer daily traffic volumes on these roadway segments are shown in Tables 3.5-8 and 3.5-9, respectively.

Proposed Project

The maximum traffic volumes associated with the proposed Project on a residential roadway would occur along the segment of Polaris Road just east of the high school on a winter weekday when school is in session. The estimated ADT at this location would be up to 1,642 ADT considering existing plus proposed Project traffic. Because proposed Project-related traffic would not cause traffic volumes on residential roadways to exceed Placer County's 2,500 vehicles per day standard for residential roadways, this impact would be **less than significant**.

Alternative A

Tables 3.5-8 and 3.5-9 show the winter and summer daily traffic volumes associated with Alternative A. As with the proposed Project, the maximum traffic volumes on a residential roadway would occur along the segment of Polaris Road just east of the high school on a winter weekday when school is in session. The estimated ADT at this location would be up to 1,370 ADT, consistent with existing conditions.

As described for the proposed Project above, because Project-related traffic associated with Alternative A would not cause traffic volumes on residential roadways to exceed Placer County's 2,500 vehicles per day standard for residential roadways, this impact would be **less than significant**.

Table 3.5-8 Daily Winter Roadway Volumes

Segment	Existing (ADT)	Winter with Project (ADT)		Net Change in Traffic Volumes from Existing Conditions (ADT)		Project Impact (Percent Change from Existing)	
		Proposed Project	Alternative A	Proposed Project	Alternative A	Proposed Project	Alternative A
Weekday							
Village Drive, near the Existing Lodge	499	353	593	-146	94	-29%	19%
Old Mill Road, north of SR 28	431	536	431	105	0	24%	0%
Polaris Road, Village Drive to Old Mill Road	728	895	728	167	0	23%	0%
Polaris Road, just east of school	1,370	1,642	1,370	272	0	20%	0%
Weekend/Holiday							
Village Drive, near the Existing Lodge	815	475	932	-340	117	-42%	14%
Old Mill Road, north of SR 28	91	279	91	188	0	207%	0%
Polaris Road, Village Drive to Old Mill Road	97	398	97	301	0	310%	0%
Polaris Road, just east of school	183	672	183	489	0	267%	0%

Note: ADT = Average Daily Traffic

Source: Transportation Impact Analysis in Appendix D

Table 3.5-9 Daily Summer Roadway Volumes

Segment	Existing (ADT)	Summer with Project (ADT)		Net Change in Traffic Volumes from Existing Conditions (ADT)		Project Impact (Percent Change from Existing)	
		Proposed Project	Alternative A	Proposed Project	Alternative A	Proposed Project	Alternative A
Weekday							
Village Drive, near the Existing Lodge	414	60	557	-354	143	-86%	35%
Old Mill Road, north of SR 28	580	862	580	282	0	49%	0%
Polaris Road, Village Drive to Old Mill Road	198	429	198	231	0	117%	0%
Polaris Road, just east of school	183	696	183	513	0	280%	0%

Note: ADT = Average Daily Traffic

Source: Transportation Impact Analysis in Appendix D

Mitigation Measures

No mitigation is required for this impact.

Impact 3.5-3: Substantially Increase Hazards Due to a Design Feature or Incompatible Uses

All Project-related transportation infrastructure (i.e., Project driveway) connecting to existing Placer County roadways would be constructed in accordance with applicable Placer County design and safety standards. Additionally, the Project design and improvement plans are subject to the Placer County design review and plan check processes, respectively. Thus, the Placer County design review and plan check procedures would ensure that that the Project design would comply with the Placer County design and safety standards. Therefore, this impact would be **less than significant** for the proposed Project and Alternative A.

Proposed Project

As shown in Figure 2-8 in Chapter 2, "Description of Proposed Project and Alternative Evaluated in Detail," the proposed Project site access driveway is proposed to be located on the north side of Polaris Road approximately 70 feet east of the high school driveway. Thus, as detailed in Appendix D, the access driveway location as proposed in Figure 2-8 would meet the Placer County minimum driveway spacing requirements.

Based on the sight distance analysis included in the Transportation Impact Assessment (see Appendix D), the following sight distances were measured at the proposed new driveway located on Polaris Road:

- Proposed driveway (proposed Project site) on Polaris Road, looking east – 250 feet
- Proposed driveway (proposed Project site) on Polaris Road, looking west – at least 330 feet

Stopping sight distance is the distance an oncoming driver on the major roadway needs to perceive an object in the travel lane (such as a turning vehicle), react to the object, and come to a safe stop. The stopping sight distance requirement for drivers approaching the proposed Project site along residential neighborhood streets is 150 feet if traveling the 25 mph design speed, or 200 feet if traveling 30 mph. Assuming that traffic along Polaris Road would be traveling at a speed of 30 mph (see discussion under the header "Existing Vehicle Speeds" earlier in this section), the minimum stopping sight distance for approaching vehicles is 200 feet. As detailed in the Transportation Impact Assessment (Appendix D) and listed above, the stopping sight distance for drivers approaching the proposed driveway on Polaris Road is at least 200 feet in either direction; thus, the proposed Project driveway meets the minimum stopping sight distance requirements.

The corner sight distance requirements are based on the Caltrans Highway Design Manual as referenced in Placer County Standard Drawing Plate 116 (Placer County 2016), which specifies corner sight distances of 275 feet based upon a design speed of 25 mph, and 330 feet based upon a design speed of 30 mph. Based on the assumed speed of traffic along Polaris Road (i.e., 30 mph), the minimum corner sight distance is 330 feet. As shown in the analysis presented in the Transportation Impact Assessment (Appendix D) and the sight distances listed above, the driveway corner sight distance looking west would meet the minimum corner sight distance requirement of 330 feet. However, due to the horizontal curvature and existing embankments on the northern side of Polaris Road, the sight distance looking east would be approximately 250 feet; and thus, would not meet the minimum corner sight distance standard. However, the Placer County corner sight distance standards indicate that where restrictive conditions do not allow compliance with the specified sight distance requirements, a reduction of the corner sight distance to no less than the minimum stopping sight distance as outlined in the Caltrans Highway Design Manual may be approved by Placer County (Placer County 2016). If such a reduction in corner sight distance were approved by the county, the stopping sight distance requirement of 200 feet for the driveway looking east would be met.

At this time, the proposed Project site design is conceptual in nature and more detailed engineering and design has not yet been completed. The proposed Project, as shown in Figure 2-8, or any future iteration of the site plan and the associated engineering and design would be subject to the Placer County design review and plan check processes; and thus, would be required to demonstrate compliance with all applicable Placer County design and safety standards for Project-related roadway improvements or changes to existing Placer County roadways. Therefore, this impact would be **less than significant**.

Alternative A

As shown in Figure 2-9, the Alternative A access driveways are proposed to remain in the same locations as the existing access driveways for the Existing Lodge. As detailed in Appendix D, the locations of the access driveways as shown in Figure 2-9 would meet the Placer County minimum driveway spacing requirements.

Based on the sight distance analysis included in the Transportation Impact Assessment (Appendix D), the following sight distances were measured at the Existing Lodge driveways located on Country Club Drive:

- Existing northern driveway on Country Club Drive, looking north – at least 330 feet,
- Existing northern driveway on Country Club Drive, looking south – at least 330 feet,
- Existing southern driveway on Country Club Drive, looking north – 250 feet, and
- Existing southern driveway on Country Club Drive, looking south – 190 feet.

The stopping sight distance for drivers approaching the Existing Lodge driveways on Country Club Drive is at least 200 feet from either direction. Assuming that traffic along Country Club Drive would be traveling at a speed of 25 mph, the minimum stopping sight distance value for approaching vehicles is 150 feet. Therefore, the minimum requirement is met at both driveways and in both directions and adequate stopping sight distance is provided.

The stopping sight distance requirement for drivers approaching the site along residential neighborhood streets is 150 feet assuming a 25 mph design speed, or 200 feet assuming 30 mph. Assuming the traffic speed of 25 mph along Country Club Drive, the minimum corner sight distance requirement is 275 feet. The corner sight distance at the northern driveway meets the minimum corner sight distance requirement in either direction. However, as listed above the corner sight distance at the southern driveway does not meet the minimum corner sight distance requirement of 275 feet in either direction. The Transportation Impact Assessment determined that the corner sight distance in both directions is limited by existing trees and vegetation.

However, as detailed above for the proposed Project, Placer County may approve a reduced corner sight distance requirement. Additionally, at this time the site design for Alternative A is conceptual in nature and detailed engineering and design has not been completed. Alternative A, as shown in Figure 2-9 or any future iteration of the site plan and the associated engineering and design is subject to the Placer County design review and plan check processes; and thus, would be required to demonstrate compliance with all applicable Placer County design and safety standards for Project-related roadway improvements or changes to existing Placer County roadways. Therefore, this impact would be **less than significant**.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.5-4: Potential to Result in Inadequate Parking Conditions

Implementation of the proposed Project or Alternative A would result in the potential for a maximum of seven peak winter days on which residential street parking may need to be utilized by lodge patrons. Additionally, residential overflow parking may be required on as many as nine additional days per year on which large special events or premier events would be held. However, provisions to minimize the use of residential parking, such as carpooling, would be incorporated into event planning and implemented. Given that overflow residential parking already occurs during large events at the Highlands Community Center, and that the existing parking lot cannot accommodate current demand on peak winter days, which already totals more than seven days per year, implementation of the proposed Project and Alternative A would result in an improvement relative to existing conditions in the neighborhood as a whole. Therefore, this impact would be **beneficial** for the proposed Project and Alternative A.

Proposed Project

The proposed Project proposes to accommodate parking needs on site for regular recreation use, including needs for patrons, staff, and school groups, without the need for overflow parking on neighborhood streets that is typical under current busy winter conditions at the existing Highlands Community Center site. With implementation of the

proposed Project, the Schilling Lodge would include a 100-space parking lot, which would include four disabled access spaces and two bus parking spaces (Table 3.5-10). Given that there are 46 marked parking spaces in the existing parking lot at the Highlands Community Center, the proposed Project would create 54 additional parking spaces relative to existing conditions for lodge and skiing-related uses, and would thereby reduce the potential for conflicts with neighborhood parking and potential user confusion associated with wintertime parking along roadways, and would improve visitor safety and quality of experience. The 46 spaces at the existing Highlands Community Center would continue to be used for Community Center-only uses and some trail access.

Table 3.5-10 Parking Infrastructure

Item	Description	Existing Conditions	Proposed Project[2]	Alternative A
Parking	Proposed parking would meet the typical need and avoid overflow street parking in the neighborhood	46 total spaces (approx. 16,820 sq. ft.)[1]	100 total parking spaces (59,799 sq. ft.)	100 total parking spaces (49,446 sq. ft.)
		2 disabled parking spaces	4 disabled parking spaces	4 disabled parking spaces
		0	2 bus parking spaces	2 bus parking spaces

Notes: sq. ft. = square feet

[1] During the parking surveys conducted for the Transportation Impact Analysis, 51 cars were observed to be parked in the parking lot.

[2] Under the proposed Project, because the 46 parking spaces at the Highlands Community Center would be retained, the total amount of parking spaces that would be available at the Schilling Lodge and the Highlands Community Center would be 146 parking spaces.

Source: Compiled by TCCSEA in 2018

The applicant is in the process of pursuing a shared-parking agreement with the Tahoe Truckee Unified School district to allow Tahoe XC and North Tahoe High School to share their respective parking areas during high-use events, consistent with Policy T-P-13 of the Area Plan. The parking lot at North Tahoe High School has a total of 215 parking spaces. To accommodate the shared parking arrangement between the two sites, a connection between the school property and the proposed Project site would be constructed, replete with a locking gate for safety during school hours. Under the agreement, visitors to Tahoe XC would only use school parking areas outside of school hours (for example during weekend events such as the Great Ski Race or the Great Trail Race).

Event Parking Impacts

Tahoe XC hosts numerous events throughout the year, which can be categorized into three different types, based on attendance (and associated parking needs). Implementation of the proposed Project would allow for continuation of these events, which include premier or other large special events, community events, and private events (details about these different types of events are included in the "Special Events" discussion in Section 2.5.1, "Project Characteristics"). Large and premier events would continue in the same annual number and with the same frequency as under existing conditions, while more community and private events would be encouraged through implementation of the proposed Project, as described below.

Tahoe XC hosts to several large annual athletic events, which are generally limited to two or three per season and not more than seven per year. These events can draw an attendance of up to approximately 250 people, including participants, organizers, volunteers, and spectators. In addition to these large athletic events, up to two premier events (e.g., the Great Ski Race) would occur at the site each year, which can draw an attendance of up to about 500 people. The premier events already occur at the Existing Lodge, and no new premiere events would occur as a result of Project implementation.

Parking for both large and premier events would be within the Schilling Lodge parking lot and at the school under the specific agreement described above. Event planning for Tahoe XC must make provisions to avoid substantial overflow parking into the surrounding neighborhood. To this end, carpooling incentives would be incorporated into special event planning and operation and overflow parking on nearby residential streets would not occur during such events.

Community events and activities include small group activities (e.g., community potluck, non-profit fundraiser, Boy Scout pinewood derby), small meetings, and community gatherings. These smaller group activities could occur either in the Schilling Lodge or in the nearby outdoor spaces that serve to foster community interactions. Up to two small meetings could occur per month (up to 24 per year) with an estimated 15–20 people in attendance at each meeting. Currently, 12 of these types of small meetings take place per year at the Highlands Community Center. Up to 33 community gatherings could occur per year with an estimated 50–80 people in attendance. Currently, five of these types of community gatherings already occur. These activities would not be expected to generate parking needs in excess of onsite availability.

Facilities at the Schilling Lodge could be rented for private meetings (up to 12 per year) and private events or gatherings (up to 34 per year). Private meetings could have up to 15–20 people in attendance and private gatherings could have up to 50–80 people in attendance. Up to three other private events that could occur each year at the lodge include running and biking day camps. These other private events could accommodate up to 50 attendees. Parking demand would not exceed what could be provided onsite, and carpooling would be encouraged as part of the rental agreement for private events.

Winter Parking Impacts

To establish parking demand, parking lot volume counts were conducted at the Existing Lodge parking lot and at the North Tahoe High School parking lot on two occasions during the 2015/16 winter, reflecting a peak day and a normal weekday. Based on the data collected, and incorporating a 10 percent increase in visitation associated with the proposed Project, the maximum parking demand associated with proposed Project implementation would be 139 cars on the busiest day of the winter season (Appendix D).

The proposed Project parking lot would accommodate parking demand on 94 percent of the days during the winter season, which translates to only seven days per year on which offsite parking would be required (Appendix D). The maximum number of cars that would need to park off site on overflow days is estimated to be 39 (139 cars on the busiest day minus the 100 available spaces in the proposed parking lot). Under a shared-used agreement with the Tahoe Truckee Unified School, the high school parking lot would provide more than adequate overflow parking on non-school days, provided that there would be no special events at the high school on the seven days on which overflow parking would be required. If special events at the high school (e.g., a basketball tournament) coincide with peak skiing days, there would be the potential for overflow parking from the proposed Project to spillover onto nearby residential streets. Therefore, there would be a maximum of seven days per year on which overflow parking may occur on residential streets as a result of the proposed Project. Affected streets would be different from the current pattern of residential street overflow parking as a result of the new lodge location. Nevertheless, overflow parking from cross-country ski activities and events already takes place on local residential streets under existing conditions on more than seven days per year; therefore, implementation of the proposed Project would result in an improvement over existing conditions in the neighborhood as a whole.

Notwithstanding the fact that the high school parking lot would not be used as overflow parking during school hours, there would be no demand for high school parking spaces by Schilling Lodge patrons on the busiest weekday ski day. Adequate parking would be available in the Schilling Lodge parking lot on school days without the potential for spill-over parking on nearby residential streets, provided that special events would not be held during school hours at the Schilling Lodge. Additionally, if special events were to be held at the high school during the school day, the parking demand generated by Schilling Lodge patrons would be satisfied by the onsite Schilling Lodge parking lot.

Summer Parking Impacts

To establish summertime parking demand, parking lot volume counts were conducted at the Existing Lodge parking lot and at the North Tahoe High School parking lot on two occasions during the 2015/16 summer season, reflecting a typical weekend day and an event day at the high school.

Based on the data collected from the parking lot volume counts, the proposed Project parking lot would yield an excess of 38 parking spaces on a typical summer weekend day (Appendix D). On a summer day during a single large event, during which normal lodge uses would simultaneously take place, there would be a parking shortfall between the North Tahoe High School and Schilling Lodge parking lots of 13 spaces. This scenario reasonably assumes that

there would not be large events held at the high school and Schilling Lodge simultaneously. As described above, during large events, planning must make provisions to avoid substantial overflow parking into the surrounding neighborhood. To this end, carpooling incentives would be incorporated into special event planning and operation to curb the amount of overflow parking required on local neighborhood streets.

Highlands Community Center Parking Impacts

Absent cross-country ski uses, continuing use of the Highlands Community Center would result in a surplus of approximately 30 parking spaces at the Community Center during peak use (Appendix D). As such, there would be no impact related to parking at the Highlands Community Center.

Impact Summary

Implementation of the proposed Project would result in the potential for a maximum of seven peak winter days during which residential street parking may need to be utilized. Additionally, residential overflow parking may be required on as many as nine additional days per year during which large special events or premier events would be held. However, provisions to minimize the use of residential parking, such as carpooling, would be incorporated into event planning and implemented. Given that overflow residential parking already occurs during large events at the Highlands Community Center, and that the existing parking lot cannot accommodate existing demand on peak skier days, which already total more than seven per year, implementation of the proposed Project would result in an improvement to existing conditions in the neighborhood as a whole, and therefore result in a **beneficial** impact related to parking.

Alternative A

Winter Parking Impacts

If the Schilling Lodge is constructed at the existing site under Alternative A, the parking supply would accommodate the parking demand on 95 percent of the winter days, with seven winter days per season of off-site parking along local residential streets. The maximum number of cars that would need to park off site on a peak day is estimated to be 39. Under existing conditions, overflow parking from cross-country ski activities and events already takes place on local residential streets on more than seven days per year; therefore, Alternative A would result in an improvement over existing conditions.

Summer Parking Impacts

With implementation of Alternative A, there would be an excess of a minimum of 21 spaces on a typical summer weekend day, during which peak use occurs in the late afternoon (Appendix D). This reflects the maximum potential use of the parking lot at the Alternative A site during the summer on non-event days.

Impact Summary

Implementation of Alternative A would result in the potential for a maximum of seven peak winter days during which residential street parking may need to be utilized. Additionally, residential overflow parking may be required on as many as nine additional days per year during which large special events or premier events would be held. However, provisions to minimize the use of residential parking, such as carpooling, would be incorporated into event planning and implemented. Given that overflow residential parking already occurs during large events at the Highlands Community Center, and that the existing parking lot cannot accommodate existing demand on peak skier days, which already total more than seven per year, implementation of Alternative A would result in an improvement to existing conditions in the neighborhood as a whole, and therefore result in a **beneficial** impact related to parking.

Mitigation Measures

No mitigation is required for this impact.

Impact 3.5-5: Construction-Related Impacts on Traffic

Construction of the proposed Project or Alternative A may require restricting or redirecting pedestrian, bicycle, and vehicular movements on local roadways to accommodate construction activities and modifications to existing infrastructure. Such restrictions could include lane closures, lane narrowing, and detours; and therefore, could result in temporarily degraded roadways operations. Additionally, the addition of heavy vehicles to the local roadway network in the surrounding residential neighborhood devoid of onstreet bicycle and pedestrian facilities could potentially lead to a short-term temporary increase in traffic hazards. For these reasons, construction traffic impacts would be **potentially significant**.

Proposed Project

The duration of construction, number of trucks, truck routing, number of employees, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time. Construction may include disruptions to the transportation network near the site, including the possibility of temporary lane closures, street closures, and the restriction and/or redirection of pedestrian, bicycle, and vehicular movements at locations around the site. Access to all nearby parcels will be maintained; however, the aforementioned effect of Project construction of the study area roadway network could result in degraded roadway operating conditions.

Heavy vehicles would access the site using the surrounding residential roadways network and may need to be staged for construction. The local roadways providing access to the proposed Project site do not include sidewalks or bicycle lanes; thus, the addition of an unknown number of heavy vehicles to the roadway could potentially result in a substantial increase in conflict points and traffic hazards to bicycles and pedestrians traveling along these roadways.

Construction traffic impacts would be localized and temporary; however, during construction of the Project, traffic operations could be degraded and the use of the local roadway network in the residential area surrounding the proposed Project site by heavy vehicles could result in a short-term temporary increase in traffic hazards. Therefore, construction traffic impacts are considered **potentially significant**.

Alternative A

Construction details and impacts related to the Schilling Lodge under Alternative A would be similar to that of the proposed Project. Construction of Alternative A may include disruptions to the transportation network near the site, including the possibility of temporary lane closures, street closures, and the restriction and/or redirection of pedestrian, bicycle, and vehicular movements at locations around the site. Additionally, heavy vehicles would access the site using the surrounding residential roadways network; and thus, due to the lack of bicycle and pedestrian facilities the addition of heavy vehicles to the roadway could potentially result in a substantial increase in traffic hazards. Therefore, although construction traffic impacts would be localized and temporary, impacts related to construction traffic are considered **potentially significant**.

Mitigation Measures

Mitigation Measure 3.5-5: Prepare and Implement a Temporary Traffic Control Plan

This mitigation measure would apply to the proposed Project and Alternative A.

Before the beginning of construction or issuance of a building permit, the applicant and/or its construction contractor shall prepare a temporary traffic control (TTC) plan to the satisfaction of the Placer County Public Works Department.

At a minimum, the plan shall include and/or show:

- a vicinity map including all streets within the work zone properly labeled with names, posted speed limits, and a north arrow;
- a description of construction work hours and work days;
- a description of the proposed work zone;

- a description of detours and/or lane closures (pedestrians, bicyclists, vehicular), no parking zones, and parking restrictions;
- a description of signalized and non-signalized intersections impacted by the work;
- a description of construction phasing and staging;
- a description of anticipated construction truck activity, including: number and size of trucks per day, expected arrival/departure times, truck circulation patterns;
- a restriction on the operation of heavy vehicles along the roadway network in the residential neighborhood surrounding the Project site to hours that do not conflict with the primary arrival and departures times of the students of the nearby high school;
- a description of maximum speed limits for heavy vehicles; and
- a description of signage and notification procedures.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-5 would require the applicant or its construction contractor to prepare and implement a TTC plan to the satisfaction of the Placer County Public Works Department that minimizes construction-related traffic impacts. Thus, Mitigation Measure 3.5-5 would reduce the temporary impact to the degree feasible. Additionally, construction traffic impacts would be localized and temporary. For these reasons, construction traffic impacts of the Project would be reduced to a **less-than-significant** level.

Impact 3.5-6: Result in an Unmitigated Increase in Daily VMT

The proposed Project and Alternative A would both result in increases in daily VMT. Therefore, implementation of the proposed Project or Alternative A would result in a VMT impact, which would be **significant**.

The effect of the proposed Project and Alternative A on VMT depends on the origin and destination of vehicles traveling to and from the respective sites. Project-generated VMT within the Tahoe Basin was determined based on Project trip generation and distribution to and from the various portions of the Tahoe Basin. The change in VMT resulting from implementation of the Project is estimated based upon the net increase in regional vehicle trips generated by the Project multiplied by the average trip distance to each area. The calculated VMT are presented in Table 3.5-11.

As shown in Table 3.5-11, the proposed Project and Alternative A are estimated to generate an increase of approximately 1,140 VMT and 973 VMT, respectively, over the course of a peak summer day relative to existing conditions.

Proposed Project

The proposed Project is estimated to generate approximately 1,140 VMT over the course of a peak day relative to existing conditions. Unmitigated operational emissions of GHGs generated by automobile travel to and from the proposed Project site were modeled and shown in Section 3.7, "Greenhouse Gas Emissions and Climate Change," to demonstrate the net difference in operational activity between baseline conditions and the proposed Project. The Project would result in an increase in daily VMT to the proposed Project site; and thus, as detailed in Section 3.7, "Greenhouse Gas Emissions and Climate Change," would not be consistent with the regional goal of reducing VMT. Therefore, implementation of the proposed Project would result in an increase in VMT; and thus, this impact would be **significant**.

Table 3.5-11 Vehicle Miles Traveled – Summary

Origin/Destination	Trip Distribution		Daily One-Way Vehicle Trips			
			Proposed Project			Alternative A
	Existing Site	Proposed Project Site	Net Impact at Existing Site	Impact at Proposed Project Site	Overall Project Net Impact	Net Impact
Homewood/Tahoma	17%	17%	-60	87	27	24
Sunnyside	11%	11%	-39	56	17	16
Eastern Tahoe City	11%	11%	-39	56	17	16
Dollar Point/Lake Forest	8%	8%	-28	41	13	11
Carnelian Bay	11%	11%	-39	56	17	16
Tahoe Vista	18%	18%	-64	94	30	26
Kings Beach/Crystal Bay	7%	7%	-25	36	11	10
Incline Village/East Shore	9%	9%	-32	46	14	13
Squaw/Alpine	8%	8%	-28	41	13	11
Total	**100%**	**100%**	**-354**	**513**	**159**	**143**
Origin/Destination	**Trip Length (Miles)**		**Impact on Daily Vehicles Miles Traveled**			
	Existing Site	Proposed Project Site	Existing Site	Proposed Project Site	Overall Project Net Impact	Alternative A
Homewood/Tahoma	11.7	11.5	-702	1,001	299	281
Sunnyside	5.3	5.5	-207	308	101	85
Eastern Tahoe City	2.9	2.7	-113	151	38	46
Dollar Point/Lake Forest	1.3	1.1	-36	45	9	14
Carnelian Bay	3.9	4.3	-152	241	89	62
Tahoe Vista	5.7	6.1	-365	573	209	148
Kings Beach/Crystal Bay	8.2	8.6	-205	310	105	82
Incline Village/East Shore	14.4	14.8	-461	681	220	187
Squaw/Alpine[1]	6.1	5.9	-171	242	71	67
Total			**-2,412**	**3,551**	**1,140**	**973**
PROJECT NET IMPACT ON VMT					**1,140**	**973**

[1] Distances shown represent the distance traveled in the Tahoe Basin.

Source: Transportation Impact Analysis in Appendix D

Alternative A

As shown in Table 3.5-11, Alternative A is estimated to generate approximately 973 VMT over the course of a peak day relative to existing conditions. As detailed in Section 3.7, "Greenhouse Gas Emissions and Climate Change," Alternative A would result in an increase in VMT less than that of the proposed Project; thus, unmitigated operational emissions of GHGs generated by automobile travel to and from the Alternative A site were not modeled. However, Alternative A would still result in an increase in VMT; thus, as detailed in Section 3.7, "Greenhouse Gas Emissions and Climate Change," would not be consistent with the regional goal of reducing VMT. Therefore, implementation of the Alternative A would result in an increase in VMT and this impact would be **significant**.

Mitigation Measures

Mitigation Measure 3.5-6a: Prepare and Implement a Transportation Demand Management Plan

This mitigation measure would apply to the proposed Project and Alternative A.

The applicant shall submit to Placer County a Transportation Demand Management Plan (TDM) as part of the development review process. A menu of measures that could be included in TDM plans is provided in TRPA Code Section 65.5.3 and Placer County Code Section 10.20. These measures include:

- Preferential carpool/vanpool parking;
- Shuttle bus program;
- Transit pass subsidies;
- Paid parking; and
- Direct contributions to transit service.

Mitigation Measure 3.5-6b: Incorporate Design Features and Purchase and Retire Carbon Offsets to Reduce Project-Related Greenhouse Gas Emissions to Zero

This mitigation measure would apply to the proposed Project and Alternative A.

The applicant shall implement Mitigation Measure 3.7-1 identified in Section 3.7, "Greenhouse Gas Emissions and Climate Change." The applicant shall implement measures to reduce all GHG emissions associated with construction and operation of the Project to zero. More detail about measures to reduce construction-related GHGs, operational GHGs, and the purchase of carbon offsets are provided in Section 3.7.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-6a would require the applicant to prepare and implement a TDM plan to reduce project-generated daily VMT to the maximum degree feasible. Additionally, implementation of Mitigation Measure 3.5-6b requires the applicant to implement Mitigation Measure 3.7-1 detailed in Section 3.7, "Greenhouse Gas Emissions and Climate Change," which requires the proposed Project and Alternative A to fully mitigate GHG emissions. Therefore, the TDM plan would reduce VMT to the extent feasible and all remaining GHG emissions would be reduced to zero. For these reasons, the proposed Project and Alternative A would not result in an unmitigated increase in daily VMT and this impact would be reduced to **less than significant**.

CUMULATIVE IMPACTS

The transportation study considers potential future developments and forecasted changes in traffic on major roadways in the community around the proposed Project site and Alternative A site. The future cumulative background traffic volumes used in the transportation analysis were adjusted based on the following considerations:

- Increased through traffic on SR 28 in the winter is based on the projected growth in traffic included in the Draft EIR/EIS for the Squaw Valley/Alpine Meadows Base-to-Base Gondola Project (Placer County and U.S. Forest Service 2018). The estimated increase in through traffic volumes on SR 28 in Tahoe City is approximately 19.3 percent in the winter p.m. peak hour. This growth is applied to the existing winter through volumes on SR 28 in the site vicinity.
- Increased through traffic on SR 28 in the summer is based on the growth in traffic indicated in the Area Plan EIR/EIS. The estimated increase in through traffic volumes on SR 28 in the site vicinity is approximately 13.8 percent in summer.
- The potential Dollar Creek Crossing project is located in the northeast corner of the SR 28/Fabian Way intersection. As this project is in the early planning stages, the specific details regarding the proposed land uses and site access were not available at the time of completion of the traffic modeling. Thus, a preliminary estimate

of 169 new multi-family residential units was assumed to be constructed, with 50 percent of the vehicle trips to and from the site accessing the property via a driveway on SR 28 and the other 50 percent assumed to access the site via a potential new driveway on Fabian Way. Standard Institute of Transportation Engineers (ITE) trip generation rates were used to estimate the trip generation for the 169 units. As of May 2019, the Dollar Creek Crossing project proponents indicated that the project could include up to 214 residential units, which would almost entirely be multi-family residential units and a few single-family residential units. The difference between the modeled number of residential units and the most recent available greater number of residential units presented in May 2019, is not anticipated to result in a substantial change in the cumulative traffic analysis such that there would be a change in the impact conclusions discussed below.

- To estimate growth in traffic on the side streets in the study area, the growth in land use at buildout of the Area Plan (based on TRPA TransCAD Travel Demand Model land use files) was reviewed. Based on this review, the following future development is assumed:
  - Development of four additional homes in the Highlands neighborhood (on the north side of SR 28, between Old Mill Road and Village Road).
  - Development of seven additional homes in the Lake Forest neighborhood (on the south side of SR 28, accessed via Lake Forest Road).
  - Development of 18 additional homes in Dollar Point (on the south side of SR 28, with access assumed via Dollar Drive and Lakewood Drive). The trip generation of the additional homes is estimated using standard ITE trip rates for single-family homes.
- The approved Dollar Creek Forest Health and Biomass Project is expected to occur in 2019 and 2020. As the traffic associated with this project would be temporary, no additional traffic is assumed under future cumulative conditions.
- Finally, the North Tahoe Middle School/North Tahoe High School Facilities Program (i.e., plans to expand the band room, construct a greenhouse, and implement other improvements to the outdoor quad areas) is in the early planning stages. However, based on the nature of the potential improvements, this project would not be expected to generate a notable change in traffic levels or parking demand, once constructed.

The growth in traffic volumes associated with the items listed above was applied to the winter and summer volumes for the existing year scenarios to determine future cumulative scenario volumes (with and without the Project for the proposed Project and Alternative A). (Note: The cumulative scenario winter volumes are presented in Figures 7 through 9 in Appendix D).

As shown in Tables 3.5-12 and 3.5-13, the study intersections would continue to operate at an acceptable LOS with implementation of the proposed Project and Alternative A during winter and summer periods under cumulative plus Project conditions. Although implementation of the proposed Project and Alternative A could result in a slight increase in average delays during peak periods relative to cumulative no project conditions, all intersections would continue to operate at LOS A or B. Because the study intersections would continue to operate at an acceptable LOS under cumulative plus project conditions with the increase in Project-related trips from the proposed Project and Alternative A, the proposed Project and Alternative A **would not have a considerable contribution** to any significant cumulative impact related to traffic operations.

Table 3.5-12 Cumulative Winter Intersection Level of Service

Intersection	Analysis Period	Cumulative No Project Conditions		Winter with Proposed Project		Winter with Alternative A	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Cumulative Conditions							
SR 28/Fabian Way	Weekday p.m.	B	10.4	B	10.1	B	10.8
SR 28/Old Mill Road	Weekday p.m.	B	10.3	B	10.4	B	10.3
Polaris Road/Old Mill Road	Weekday p.m.	A	8.1	A	8.5	A	8.1
Polaris Road/Village Drive	Weekday p.m.	A	8.9	A	9.0	A	8.9
SR 28/Fabian Way	Weekend/Holiday p.m.	B	11.2	B	10.8	B	11.7
SR 28/Old Mill Road	Weekend/Holiday p.m.	B	10.8	B	11.5	B	10.9

Note: LOS = level of service

Source: Transportation Impact Analysis in Appendix D

Table 3.5-13 Cumulative Summer Intersection Level of Service

Intersection	Analysis Period[1]	Cumulative No Project Conditions		Summer with Proposed Project		Summer with Alternative A	
		LOS	Delay (sec)	LOS	Delay (sec)	LOS	Delay (sec)
Cumulative Conditions							
SR 28/Fabian Way	p.m.	B	10.3	B	12.0	B	10.9
SR 28/Old Mill Road	p.m.	B	10.6	B	11.3	B	10.8
Polaris Road/Old Mill Road	p.m.	A	7.1	A	7.7	A	7.1
Polaris Road/Village Drive	p.m.	A	8.9	A	9.5	A	9.5

Note: LOS = level of service

[1] The summer PM peak-hour volumes reflect a Friday in August, consistent with Placer County's standard design period.

Source: Transportation Impact Analysis in Appendix D

This page intentionally left blank.